

NOTTINGHAM ARBORETUM TREE TRAIL

1 Ginkgo biloba (Ginkgoaceae)

Maidenhair Tree. Remarkable and unique in very many respects, a living fossil dating back nearly 200 million years and at one time of worldwide distribution. Introduced from China and first grown from seed in Britain in 1754. This Lakeside tree is a female, in late autumn producing a few of its characteristically foul-smelling fruits, once eaten by dinosaurs!

2 Alnus glutinosa 'Laciniata' (Betulaceae)

Cut-leaf Alder. Though nearing its end, still a notable specimen, for its rarity, maximum size and age, most likely dating back to the Arboretum's establishment. The species is native to Britain and has many valuable attributes both ecologically and for timber uses. This particular foliage variant originated in France sometime before 1819.

(3) Pinus nigra subsp. nigra (Pinaceae)

Austrian Pine. Southern Europe, introduced 1835. Large, unmissable, dominant trees in the lower parts of the Arboretum, blackish foliage with needles in pairs. A popular choice in Victorian gardens and for shelter-belts, closely related to the Corsican Pine (*Pinus nigra* subsp. *laricio*) grown for timber in forestry plantations.

4) Ficus carica (Moraceae)

Common Fig. Mediterranean, self-fertile clones grown in Britain since the early 16th century. The fig may have been the first crop ever cultivated by man, being grown by Stone Age farmers in the Middle East over 11,000 years ago.

(5) Ulmus glabra 'Camperdownii' (Ulmaceae)

Camperdown or Weeping Elm. A natural mutant of the native Wych Elm, with an intriguingly convoluted branch structure and umbrella shape, found near Camperdown House, Dundee, Scotland, about 1835, introduced to cultivation around 1850. Now grafted onto an Elm standard, as here, and notable for having survived the ravages of Dutch Elm Disease.

(6) Koelreuteria paniculata (Sapindaceae)

Golden Rain Tree, Pride of India. China, Korea, Japan, introduced 1763. Strikingly large and decorative pinnate leaves unfold red and pink at first, plumes of yellow flowers arise in August, followed by curiously inflated seed-pods.

7 Pinus wallichiana (Pinaceae)

Blue or Western Himalayan Pine. Himalaya, introduced about 1823 and much-planted in Victorian times. Long, slender, hanging needles in groups of five, a fast-growing tree, several can be found in the Arboretum, planted from the 1960s onwards. Formerly called the Bhutan Pine, a name now reserved for another, closely related, species, *Pinus bhutanica*.

(8) Seguoia sempervirens (Cupressaceae)

Coast Redwood. California, USA, introduced 1843. Currently, the world's tallest living tree is in California's Redwood National Park - in September 2006 it measured 115.2 metres (378 feet) - but this conifer does not grow to such immense heights here.

(9) Davidia involucrata (Cornaceae)

Dove Tree, Ghost Tree, Handkerchief Tree. China, introduced 1901. Fascinating history, stunning flowers in May, with two large, white, unequal-sized bracts waving in any breeze, followed by globular, stalked fruits. This is the common, hardier version, var. *vilmoriniana*, with smooth rather than downy undersides to the leaves.

(10) **Platanus x hispanica** (Platanaceae)

London Plane. Hybrid *P. occidentalis* (North America) x *P. orientalis* (south-eastern Europe), first recorded in Britain about 1663, now a very familiar urban tree. This specimen probably dates from the Arboretum's foundation, when it would have been valued for its tolerance of atmospheric pollution, and is still growing strongly. London Plane is less well known for its high-quality timber, called lacewood.

(11) Fagus sylvatica Atropurpurea Group (Fagaceae)

Purple Beech, Copper Beech. A natural variant of our Common Beech. Among several in the Arboretum, ungrafted specimens would have been raised from randomly occurring purple seedlings, whereas grafted ones have been propagated from specially selected (named) clones.

(12) Aesculus flava (Hippocastanaceae)

Yellow Buckeye. South-eastern USA, introduced 1764. In late spring produces upright spikes of pale yellow, tubular flowers. The elegant palmate leaves colour orange-red in autumn. Usually grafted onto Horse Chestnut rootstock, but not obviously so in this case.

(13) Acer griseum (Aceraceae)

Paperbark Maple. China, introduced 1901. Attractive trifoliate leaves turn orange and red in autumn and the tree is eye-catching all year round for its mahogany-coloured, peeling bark. Slow-growing and an ideal tree for small gardens.

(14) Picea breweriana (Pinaceae)

Brewer's Weeping Spruce. Rare and very localised in the wild, in mountain areas of north-western USA, introduced 1897. The pendulous habit and flexible branches are designed to minimise snow damage. Slow-growing and becomes more impressively drooping with age.

(15) Quercus rubra (Fagaceae)

Red Oak. Eastern North America, introduced 1724. Fast-growing, both a timber and ornamental tree, with large leaves. The bark is smooth and grey, like that of Beech. The autumn colour in our climate is often a disappointing coffee-brown rather than a true red.

(16) Cedrus atlantica Glauca Group (Pinaceae)

Blue Atlas Cedar. Atlas Mountains, Algeria, Morocco. The species was introduced around 1840, this bluish, more commonly grown natural variant was first found in a valley in Algeria in 1845. Potentially a very big tree.

17) Liriodendron tulipifera (Magnoliaceae)

Tulip Tree. Eastern North America, introduced around 1650. Botanically a primitive species, with uniquely shaped leaves that turn butter-yellow in autumn. Flowers appear in mid-summer and, though rather hard to find, they resemble tulips, coloured green, yellow and orange. This tree is said to have been planted in 1943.

(18) Acer saccharinum (Aceraceae)

Silver Maple. Eastern North America, introduced 1725. The fastest growing American maple, with deeply divided leaves. Not to be confused with the Sugar Maple (Acer saccharum), tapped for maple syrup, but this species is valuable for the decorative timber known as bird's-eye maple. In autumn, the silver undersides of the yellow and red leaves add to the mosaic effect when they carpet the ground.

(19) **Styphnolobium japonicum** (Papilionaceae)

Pagoda Tree, Scholar's Tree. China, Korea, introduced 1753, widely planted in Japan, hence the scientific name. A legume tree, with splendid white, pea-like flowers, in early autumn, after hot summers.

This tree can be compared to the superficially similar *Robinia*, an example of which is conveniently nearby for comparison.

20 Acer platanoides 'Globosum' (Aceraceae)

Mop-head Maple. Produced in Belgium 1873. One of twenty or so ornamental maples in the Arboretum's varied collection of Acer trees, many of which are planted around the Bandstand area. This is an uncommon, stunted growth form grafted onto a Norway Maple standard.

(21) Crataegus heterophylla (Rosaceae)

Armenian Hawthorn, Various-leaved Hawthorn. Southern Europe to China, cultivated in Britain since the early 19th century, but now very rare. This specimen was designated a Champion Tree in 2004, being rated as one of the largest of its kind in the country. A small tree species, arguably once native to Britain or of hybrid origin. Flushes early, leaf fall very late, flowers and fruits abundantly.

(Cupressaceae)

Japanese Red Cedar. Japan, China, introduced 1842. Not a true cedar but a large, fast-growing, timber tree, the Asiatic equivalent of the American redwoods. Many smaller, ornamental varieties have been developed especially for garden use.

23 Carpinus betulus (Corylaceae)

Common Hornbeam. Like Beech, the Hornbeam strictly speaking is native in Britain only in the ancient woodlands of southern England, and usually planted where it occurs in this part of the country. Distinctive for its fluted trunk and dangling nut clusters. Examples on the Main Lawn are the upright form favoured as a street tree, *C. betulus* 'Fastigiata'.

(24) Metasequoia glyptostroboides (Cupressaceae)

Dawn Redwood. A living relic of a fossil group once thought to be extinct, sensationally discovered in 1941, introduced to Britain in 1948, from south-eastern China. A deciduous conifer, colouring golden in autumn. This tree shows the irregularly fluted stem typical of plants grown from seed before the 1980s when improved stocks first became available.

(25) Taxodium distichum (Cupressaceae)

Swamp Cypress. Southern USA, dominant in Florida's Everglades, introduced around 1640. Thrives where wet but copes just as well with dry soils too, as here. Deciduous conifer, with alternately arranged leaves, a feature which helps to distinguish it from the similar *Metasequoia* nearby, with oppositely paired leaves.

(26) Tilia x europaea (Tiliaceae)

Common Lime. Hybrid *T. cordata* (Small-leaved Lime) x *T. platyphyllos* (Broad-leaved Lime), both native species, but the hybrid may have arisen elsewhere in Europe and been introduced to Britain centuries ago. Now a familiar avenue tree as used here, the row along the Waverley Road boundary would be of similar age, probably planted in the early 1900s.

27) Robinia pseudoacacia (Papilionaceae)

False Acacia, Black Locust. Eastern USA, introduced early 17th century, one of the first North American trees to reach Europe. Has a long and colourful history, multiple uses and ecological value. Numerous plants, some from sucker regeneration, are present in the Arboretum. The golden-yellow cultivar 'Frisia', raised in Holland in 1935, is a popular garden tree, though prone to suffer dieback.

(28) Ulmus 'Sapporo Autumn Gold' (Ulmaceae)

Hybrid *U. japonica* (Japanese Elm) x *U. pumila* (Siberian Elm). Selected in America from plants grown from seed sent from Japan in 1958, and later proved to have a good resistance to Dutch Elm Disease. Commercially available by the early 1980s, when these two fast-growing trees would have been planted.

(29) Quercus robur f. fastigiata (Fagaceae)

Cypress Oak. A natural variant of our so-called Common, Pedunculate or English Oak. It is often raised from seed and so quite variable in form, tending to spread with age, but this example still largely retains the typical columnar shape.

(30) Aesculus indica (Hippocastanaceae)

Indian Horse Chestnut. North-western Himalaya, introduced 1851. Noteworthy for the red-bronze emerging foliage in spring, handsome leaves with stalked leaflets and tall spikes of multicoloured flowers in mid-summer. Old-fashioned, imported tea chests (as once utilised for packing cases) were made from this timber.

(31) Paulownia tomentosa (Scrophulariaceae)

Foxglove Tree. Northern China, introduced from Japan 1834. Huge, heart-shaped, soft woolly leaves. One of the most beautiful of flowering trees, a spectacle in late spring when tall spikes of scented, mauve-blue flowers appear before the leaves emerge.

32) Quercus x hispanica 'Lucombeana' (Fagaceae)

Lucombe Oak. Produced in Exeter, Devon, about 1762. Hybrid *Q. cerris* (Turkey Oak) x *Q. suber* (Cork Oak), both southern European species. This big, evergreen oak appears not to be grafted, so has presumably been raised from seed, in which case it is not strictly nameable as the distinct variety 'Lucombeana', but of that general type nonetheless.

33 Catalpa x erubescens (Bignoniaceae)

Hybrid Bean Tree. This cross of the North American Indian Bean Tree (C. bignonioides) and the Chinese Yellow Catalpa (C. ovata), was first raised in America in 1874 and came to Britain in 1891. More vigorous than its parents and with larger leaves but similarly leafs out very late, sometimes not until June. It produces spikes of fragrant white flowers in late summer and long, bean-like pods.

(34) Prunus serrula (Rosaceae)

Tibetan Cherry. Western China, introduced 1908. A small tree noted for its uniquely attractive bark, glossy red-brown and peeling between horizontal corky bands. Its flowers are rather insignificant, tiny and creamy white, among the new leaves in spring.

35 Cercidiphyllum japonicum (Cercidiphyllaceae)

Katsura. China, Japan, introduced 1881. A tree of obscure botanical origins with a primitive wood structure. Dainty, rounded leaves in opposite pairs, turning yellow then orange-brown in autumn when they emit a delightfully elusive caramel scent. Male and female flowers are borne on separate trees.

36 Pterocarya fraxinifolia (Juglandaceae)

Caucasian Wingnut. Caucasus to northern Iran, introduced 1810. Related to the walnuts, botanically interesting for a number of primitive features. Large, pinnate leaves, and fully mature trees have female catkins that develop into long strings of winged fruit.

Acknowledgments:
Keith Prowting and Graham Piearce.