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# The University of Nottingham

Sutton Bonington Arboretum A guided walk

# Sutton Bonington Arboretum

Development was commenced by Professor Harry Smith. The initial impetus for the development came from National Tree Planting Year 1973 (with its slogan of "Plant a Tree in '73"). Professor Smith's initial tree plantings were based on unusual plants sourced from Hillier's Garden Centre.

The Tree Council was founded in 1974 to keep up the momentum of new plantings across the Nation and Professor Smith responded by expanding the plantings that year. In 1976 the UK experienced a severe drought and many of the plants were lost. The collections of Birches and Lilacs were donated but no record now exists of the original donors.

 Juniperus Hibernica (Irish Yew)
Sorbus Cashmeriana, commonly known as 'Kashmir Rowan' (front cover)



▲ Abies grandis (2)

#### Morus alba

The white mulberry has berry like fruits, whitish at first changing to reddish pink. The fruit tends to be insipid but edible. Silk worm cultivation began in China 4000 years ago with the mulberry providing a source of food. 17th Century King Charles decreed that mulberry trees were to be widely planted in order to set up a silk industry. Morus nigra was planted by mistake and is not a host to silk worm. In Greek legend the berries of the white mulberry turned red when its roots were bathed by the blood of the lovers Pyramis and Thisbe, who killed themselves.

## Abies grandis

"Giant Fir" is fast growing and not really a garden tree where it will quickly outgrow it's environment, a native of western North America, was introduced by David Douglas in 1830, leaves scented of tangerines. Cones are produced at top of the tree and break up. Douglas was gored to death by a wild cow when he fell into a trap on Hawaii – he was only 35.

### Betula pendula (group)

Silver Birch – a native to the British Isles – with its distinctive white bark it is very commonly occurring through out the UK and Europe. Is often one of the first trees to colonise derelict building sites and cleared land and for which characteristic it is planted as a pioneer or nurse crop. Often seen in Autumn with the Red Fly Agaric Fungi growing around its base.

# Acer campestre

Field Maple is the only maple native to the UK. It is widely found throughout Europe, West Asia, North Africa, Australia and North America.



A Betula pendula (3)

#### ¥ Acer campestre (4)





#### Eucalyptus pauciflora niphophilia

Alpine Snow Gum is a beautiful evergreen tree with large leathery grey-green leaves. The patchwork-like flaking grey, green and cream bark of mature specimens provides year round appeal. Very hardy and fast growing and aromatic in hot sun.

### 6 Chamaecyparis lawsoniana erecta viridis

Chamaecyparis lawsoniana Erecta Viridis is a tall, evergreen, columnar tree with erect branches bearing flat, upright sprays of deepgreen foliage. Can be seen in the left of the image below behind the Eucalyptus.

▲ Juniperus squamata meyerii (7)



▲ Liriodendron tulipifera variegata (8)





#### Juniperus squamata meyerii

The Flaky or Himalayan Juniper is a native from Eastern Afghanistan across Asia to China. A shrub (rarely a small tree) reaching 2–10m tall (rarely 15m), with flaky brown bark, and a prostrate to irregularly conical crown. Often strongly glaucous blue-green in colour.

#### Liriodendron tulipifera variegata

Magnolia family, North America, will make 35m, valuable timber tree, source of white wood used for canoe making. Said to be good as a honey tree.



▼ Pinus nigra maritima (9)

▲ Salix babylonica (10)

#### Pinus nigra maritima

Corsican Pine is a native of Corsica and southern Italy. This 2 needle pine forms a tall broad headed tree with a very straight clear stem making it an ideal timber tree.

## **1** Salix babylonica

The Babylon or Peking willow is native to China to the dry areas of Northern China it is dioecious, with the male and female catkins on separate trees. Most Weeping Willows outside China are hybrids between this cultivar, and either White Willow (Salix alba) or Crack Willow (Salix fragilis).

#### ▲ x Cupressocyparis leylandii (11)

#### 1 x Cupressocyparis leylandii

The result of a series of intergeneric hybrids between Chamaecyparis nootkatensis and Cupressus macrocarpa. It is the fastest growing conifer in the UK – 15m in 16 years. Very tolerant and produces an excellent specimen given space. Is of major horticultural importance, particularly in Britain where it arose about 100 years ago. C.J. Leyland, a sea captain, whom commanded a ship known as the I.S.S. Enterprise, grew some of the first hybrids on his property, Haggerston Castle, in Northumbria, in 1888. It accounts for 99.5% of the UK suburban hedge plant market, despite being far too vigorous for this purpose, growing at 0.5–0.8m per year to 35m or more if not trimmed frequently.





### ▲ Eucalyptus gunnii (12)

#### Eucalyptus gunnii

A native tree of Tasmania, noted for exceptional cold tolerance for a eucalypt (to -14°C, exceptionally -20°C for brief periods) and is now commonly planted as an ornamental tree across the British Isles and some parts of western Europe. Fast-growing, it will produce a tree up to 37m tall when mature, with growth rates of up to 1.5m (rarely 2m) per year. The bark is often persistent for several metres as a thin, grey stocking, or shedding all over to leave a smooth, yellowish, patchy surface, weathering to white-, green- or pink-grey.

#### Platycladus orientalis

Also known as Chinese Arborvitae or Biota, Platycladus is a distinct genus of evergreen coniferous tree in the cypress family Cupressaceae containing only the one species. It is native to northwestern China and widely naturalised elsewhere in Asia east to Korea and Japan, south to northern India, and west to northern Iran.

▼ Parrotia persica (15)

#### B Parrotia persica

Persian ironwood, related to Hamamelis, large shrub, small tree, flaky bark on old plants, excellent crimson autumn colour, insignificant red flowers in early spring, stamens only, Northern Iran cultivated since 1840.

Juniperus communis hibernica

meats, etc and gin.

A form of the common juniper, this one, the Irish juniper, is very upright. Cultivated from 1838. Juniper berries are used for flavouring,

#### ▼ Juniperus (14)



#### **16** Cupressus macnabiana

Named after James McNab (1810-1878), Curator of the Edinburgh Botanic Garden. Native to Northern California; it is an evergreen shrub or small tree, 3-12m (rarely to 17m) tall, with a spreading crown that is often broader than it is tall. The foliage is produced in dense, short flat sprays (unlike most other California cypresses, which do not have flattened sprays), bright glaucous gray-green in colour, with a strong spicy-resinous scent.



▲ Pinus coulteri (17)

# Pinus coulteri

This 3 needle pine ranges from 10-24m (30-80 ft) tall and is native to southern California (United States) and northern Baja California (Mexico). Coulter Pines produce the largest cones of any pine tree species and people are actually advised to wear hardhats when working in Coulter Pine groves.

#### **18** Pinus holfordiana

This very attractive five needle pine arose in Westonbirt Arboretum in 1904 and is a hybrid between Mexican White Pine (Pinus ayacahuite var veitchii) and Himalayan Pine (Pinus wallichiana). The name derives from George Lindsey Holford, the son of Robert Stayner Holford the Founder of Westonbirt Arboretum.

#### Xanthocyparis nootkatensis

Alaska yellow-cedar or Nootka cypress is native in USA, Canada: Pacific Coast area from S and SE Alaska to extreme north west California; Trees to 40m. The hybrid of this species with Cupressus macrocarpa is Leyland cypress which is of major horticultural importance, particularly in Britain where it arose about 100 years ago.



▼ Xanthocyparis nootkatensis (19)





▲ **Trees from left to right** – Chamaecyparis nootkatensis, Cupressus sempervirens, Chamaecyparis lawsoniana Allumii (blue-grey tree in background between Leyland Cypress and Cupressus sempervirens), x Cupressocyparis leylandii, Chamaecyparis lawsoniana Lutea

vears old.

**20** Cupressus sempervirens

Cupressus sempervirens, the Mediterranean

Cypress (also known as Italian, Tuscan, or Graveyard Cypress, or Pencil Pine) is a species of cypress native to the eastern Mediterranean region. It is a medium-sized evergreen tree to 35m (115 ft) tall. It is very long-lived,



**2** Chamaecyparis lawsoniana fraseri

with some trees reported to be over 1,000

Native to North America, this medium sized tree is similar to Allumii but differs in its greener foliage and neater base. First appeared in cultivation in 1893. The image to the left shows Chamaecyparis lawsoniana Lutea framed between 2 Chamaecyparis lawsoniana 'Fraseri'. If you look carefully you can just see Chamaecyparis lawsoniana Allumii behind the specimen on the left.

Chamaecyparis lawsoniana allumii

A popular and commonly planted cultivar which first appeared in 1891. It has a dense columnar growth habit and blue green foliage. 10 ft. (3m) high in 10 years. Extremely attractive in the spring with the contrasting grey foliage and red male flowers.



▲ Juniperus chinensis aurea (24)

#### 23 Chamaecyparis lawsoniana lutea

Golden Lawson Cypress – a beautiful pyramidal tree with bright golden foliage held in flattened sprays. Encountered in virtually every garden in the cold and humid climates of Europe and America. Considered to be the parent of many other golden cultivars. First appeared around 1870.

#### **24** Juniperus chinensis aurea

Golden Chinese Juniper is a shrub or tree, very variable in shape, reaching 1-20m tall. It is native to northeast Asia, in China, Mongolia, Japan, Korea and the southeast of Russia



▲ Fraseri (21)



▲ Taxus baccata (25)

▼ Acer griseum (26)

# 25 Taxus baccata

Yew – a native tree of potentially very old age with some estimated as much as 4,000 years old. Has been found in fossil records 160 million years ago. Traditionally believed planted in graveyards to ward off evil spirits, it was probably already there before churches were built. Trees are either male or female with the males bearing the pollen and the females carrying the red fleshy fruits. In recent years its been suggested that, 'taxol', a chemical found in the bark of the Yew, may have cancer fighting properties.

# 20 Acer griseum

A fairly small tree generally the Paperbark maple with its flaky cinnamon bark has trifoliate leaves which give gorgeous autumn colour. Native to China, introduced by Ernest Wilson 1901.

#### **2** Calocedrus decurrens

Used to be Libocedrus (Incense cedar), not the source of incense which is Boswellia. Tall narrow conifer from western North America, the timber is good for pencils (doesn't splinter) and coffins (resistant to decay). Introduced 1853.

#### Pinus nigra nigra (also 31)

Austrian Pine – a native of Austria, northern and central Italy, Crimea and the Balkan Peninsula. Leaves in bundles of two. Another tree commonly planted for timber.







▲ Betula jacquemontii (30)

# ▲ Picea omorika (32)

# Pinus jeffreyii

Jeffrey pine, ultimately a large imposing tree, black/purple/grey bark, leaves in 3's, but spire-like crown. Intro Douglas California, introduced 1852 or P. ponderosa.

# Betula utilis jacquemontii

Himalayan Birch (to 40' or 12m). A remarkable tree in winter when the peeling, paper-thin, dazzling white bark is outstandingly beautiful. Upright habit with mid-green leaves which turn golden-yellow in autumn. Yellow-brown catkins in spring.



# ▲ Aesculus flava (33)

# Picea omorika

Aesculus flava

O Picea englemanii

Serbian spruce, tall graceful tree, drooping branches, good in industrial and polluted city areas. Ornamental, timber and paper. Native of Yugoslavia and introduced 1889.

Yellow Buckeye is a species of buckeye native to the Ohio Valley and Appalachian Mountains of the eastern United States. It is a medium-

sized deciduous tree growing to 20-35m tall.

34 35 36 Viburnum rhytidopyllum

Large fast growing, creamy white flowers,

fruits red to black, needs second plant for

pollination, good chalk plant, central and

western China, introduced by Ernest Wilson.

Engelmann Spruce is native to western North

America, it is a narrow crowned medium-sized

to large evergreen tree growing to 25-40m

tall, but has been known to reach 65m tall,

and with a trunk diameter of only 1.5m.

# ▼ Viburnam rhytidopyllum (34-36)



# ▲ Picea englemanii (37)

# Image: Pinus nigra nigra – See item 28.

▼ Clerodendron trichotomum 'Fargesii' (38)





▲ Sequoiadendron (39)

#### Clerodendron trichotomum 'Fargesii'

Verbenaceae, white fragrant flowers, followed by very striking bright blue berries contrasted by the red calyx, leaves smell of burnt milk, China and Japan, by Abbe Farges in 1898.

#### **139** Sequoiadenron giganteum

Wellingtonia or Giant Sequoia is a native of California, introduced to the UK in 1853 it is acknowledged as the largest living thing. One of these trees in California is the world's largest living organism, with a basal diameter of over 9 metres. Some big trees are named. The 'General Sherman tree' height 81m, girth 24m. Also some of the oldest with ages estimated at 3,200 years. (Bristle cone possibly older at 5000+). Discovered by William Lobb in 1853.



#### ▲ Cedrus atlantica glauca (40)

#### Cedrus atlantica glauca

A native of Algeria and Morocco, (of the Atlas Mountains) the blue form is the more commonly grown variety, forms a very majestic large parkland tree. Often seen in small gardens which they quickly outgrow.

	Sutton Bonington Arboretum Tree Walk				e Walk
	ID	Genus	Species	Common Name	Family
	1	Morus	alba	White Mulberry	Moraceae
	2	Abies	grandis	Grand Fir	Pinaceae
	3	Betula	pendula	Silver Birch	Betulaceae
	4	Acer	campestre	Field Maple	Sapindaceae
	5	Eucalyptus	pauciflora	Alpine Snow Gum	Myrtaceae
	6	Chamaecyparis	lawsoniana		Cupressaceae
	7	Juniperus	squamata	Meyer Juniper	Cupressaceae
	8	Liriodendron	tulipifera	Variegated Tulip Tree	Magnoliaceae
	9	Salix	babylonica	Weeping Willow	Salicaceae
	10	Pinus	nigra	Corsican Pine	Pinaceae
	11	X Cupressocyparis	leylandii	Leyland Cypress	Cupressaceae
1817 (27)	12	Eucalyptus	gunnii	Cider Gum	Myrtaceae
	13	Platycladus	orientalis	Chinese Arbor Vitae	Cupressaceae
	14	Juniperus	communis	Irish Juniper	Cupressaceae
14 13	15	Parrotia	persica	Persian Ironwood	Hamamelidaceae
	16	Cupressus	macnabiana	McNab's Cypress	Cupressaceae
3)	17	Pinus	coulteri	Big Cone Pine	Pinaceae
	18	Pinus	x holfordiana	Holford Pine	Pinaceae
30	19	Xanthocyparis	nootkatensis	Nootka Cypress	Cupressaceae
	20	Cupressus	sempervirens	Italian Cypress	Cupressaceae
	21	Chamaecyparis	lawsoniana		Cupressaceae
33	22	Chamaecyparis	lawsoniana		Cupressaceae
34 33	23	Chamaecyparis	lawsoniana	Golden Lawson Cypress	Cupressaceae
35 36	24	Juniperus	chinensis	Young's Golden Juniper	Cupressaceae
37	25	Taxus	baccata	Yew	Тахасеае
	26	Acer	griseum	Paperback Maple	Sapindaceae
9	27	Calocedrus	decurrens	Incense Cedar	Cupressaceae
10 39	28	Pinus	nigra	Austrian Pine	Pinaceae
40	29	Pinus	jeffreyi	Jeffrey Pine	Pinaceae
8	30	Betula	utilis	Himalayan Birch	Betulaceae
67 1	31	Pinus	nigra	Austrian Pine	Pinaceae
	32	Picea	omorika	Serbian Spruce	Pinaceae
	33	Aesculus	flava	Sweet Buckeye	Hippocastanaceae
	34	Viburnum	rhytidophyllum	Leatherleaf Viburnum	Caprifoliceae
	35	Viburnum	rhytidophyllum	Leatherleaf Viburnum	Caprifoliceae
召 4 3	36	Viburnum	rhytidophyllum	Leatherleaf Viburnum	Caprifoliceae
	37	Picea	engelmanii	Engelmann's Spruce	Pinaceae
	38	Clerodendrum	trichotomum	Farges harlequin glory bower	Verbenaceae
Entrance	39	Sequoiadendron	giganteum	Giant Sequoia/Wellingtonia	Cupressaceae
	40	Cedrus	atlantica	Blue Atlas Cedar	Pinaceae

This guide was prepared by Martin Lloyd, Desmond O'Grady and Rod Taylor.

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