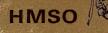
Forestry Commission Booklet No. 38

Common Trees



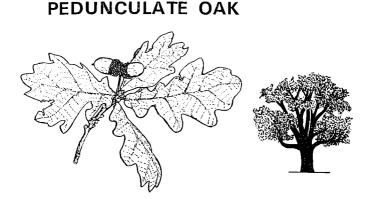


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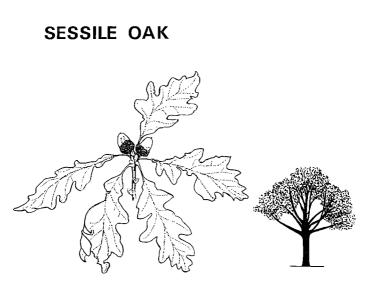
Front cover : Beech (above), Scots pine (below).

Acknowledgements

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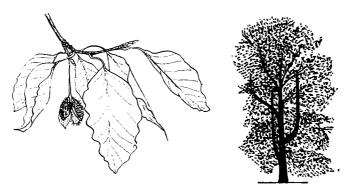


Found from North Africa through Europe to the Black Sea, this tree is the oak of the countryside on heavy soil, and is often called the English oak. It is rarely 30 m tall, but the tallest is 37 m. There are many old trees more than 3 m in diameter of bole, a few of which are over 400 years old. The irregularly lobed leaves, about 8 cm long, are soon very dull and often carry numerous galls of various shapes. The acorns grow on a stalk 2–3 cm long, and are about $1\frac{1}{2}$ cm long themselves.



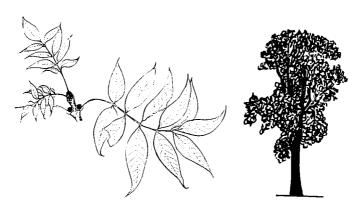
Also called Durmast oak, this tree occurs across most of Europe. In Britain it is the countryside oak of the hills of the west and north. Several are over 32 m tall and one is 41 m. A few have boles 3 m in diameter. The leaves, also irregularly lobed, are bigger (about 10–12 cm), more glossy and thriving than in Pedunculate oak, and differ also in their longer stalk, whereas the acorns $(1\frac{1}{2} \text{ cm long})$ have *no* stalk.





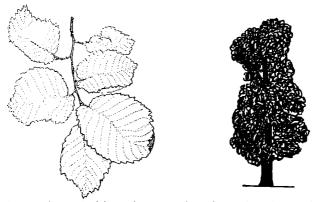
A tree native to England and across Europe, the beech is characteristic of chalk downlands but grows equally well on light soils elsewhere. It can reach 40 m in height but it seldom lives longer than 200 years and so does not exceed 2 m in diameter of bole. The bark is smooth and a fine silvery grey. Note simple leaf, about 6 cm long, and the 2 cm long husk holding two nuts, each 1 cm long.

ASH

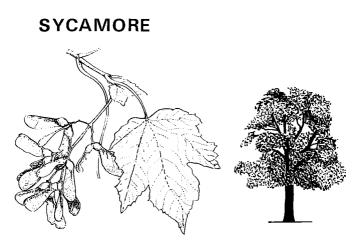


The ash is a native tree all over Britain, most common on chalky soils and on limestone. It is frequently 30 m tall and can reach 45 m but it is not long-lived and is rarely 1.5 m in diameter of bole. The flowers open in tight-purple bunches on the shoots, long before the leaves unfold. The bark is grey and evenly ridged. The fruits have a single wing and are eaten by bullfinches. The leaves, 15–20 cm long overall, are compound, having many leaflets. Buds are opposite, except at tip, hard, and black.

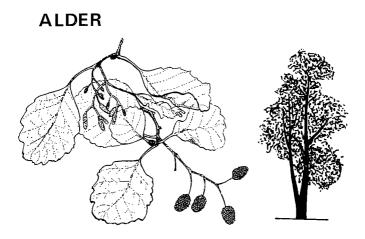
ENGLISH ELM



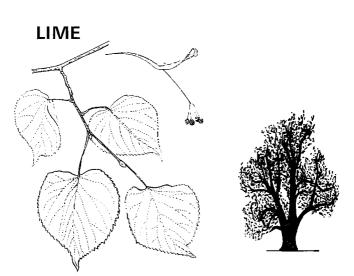
This tree is probably unknown elsewhere than in England but was brought here during the Bronze Age. It is found in lowland valleys but not west of Dartmoor nor north of York. The tallest are about 37 m tall and the oldest, about 300 years old, are 2 m through the bole. The flowers are dark red, close to the twigs and open in February. Dutch elm disease has killed vast numbers of these elms in many districts. The oval leaves, around 5 cm long, have toothed edges and rough, hairy upper surfaces.



Native from northern France to the Black Sea, this tree may have been brought to Britain by the Romans. It can reach 35 m and two are $2 \cdot 3$ m in diameter. It can live for about 400 years. Young trees can grow very fast; over 2 m in a year. The flowers have no petals and are borne on long catkins. Each fruit consists of two paired, winged seeds, the length of one seed and its wing being $2\frac{1}{2}$ cm. This tree is a maple, and the leaves on young trees are deeply lobed and up to 20 cm across, being set in pairs on long red stalks.



The alder is a native tree found in all parts beside streams and ponds. It can be 27 m tall and one is $1 \cdot 2$ m through the bole. The male flowers are catkins (left) which turn yellow in March; the female flowers (also left) become green, and globular, then open as woody cone-like objects (right) about 1 cm long. The leaves are about 6 cm long and remain green until they fall very late in the autumn.

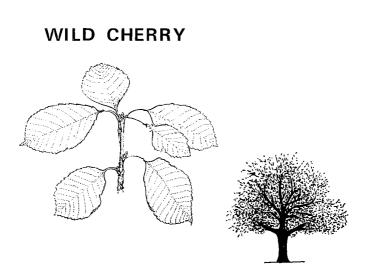


The common lime is a hybrid tree whose parents are two different limes native to Britain and it has been known for nearly 400 years. It is usually the tallest leaf-tree in a district and one 46 m tall is the tallest leaf-tree we have. This lime grows many sucker-shoots around its base and up the bole. The sweetly scented pale yellow flowers open in June. Leaves, 7 cm long, are heart-shaped. Note seeds with bract on main stalk, 6 cm long overall.

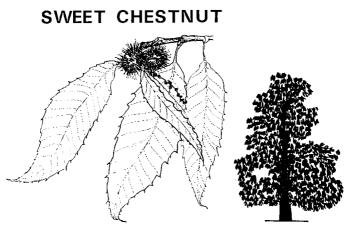




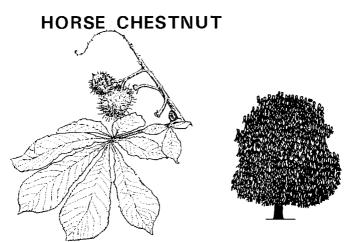
Silver birch is native to dry heaths and hillsides in Britain and northern Europe. It can be 27 m tall and over 1 m in diameter of bole. It grows very fast when young, up to 1 m a year, but in England it fails early and dies when about 80 years old, although it can live to nearly 200 years in Scotland. Leaves, on whip-like twigs, are 3–5 cm long. Male catkins expand with the leaves. Smaller female catkins expand later to fruit catkins (above), around 2 cm long. The seed is much eaten by redpolls.



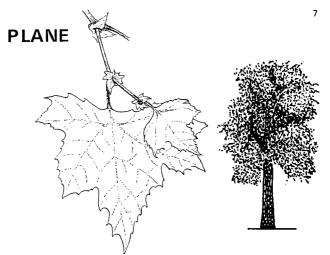
This tree is also called the gean and is native to all Britain. It is commonly seen on the edges of woods on chalk downs and can be 25 m tall and 1.5 m through the bole. In late May it is densely covered in white flowers followed by black cherries, 1 cm diameter. In autumn the foliage becomes bright red. The leaves have little red lumps near the end of the stalk and are 10–12 cm long.



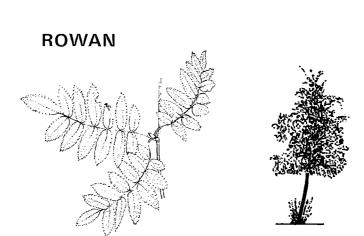
Sweet chestnut is a tree from southern Europe, first brought here by the Romans. It has reached 36 m in height but seldoms exceeds 27 m. It grows rapidly and lives a long time so there are many boles 3 m in diameter. With age, the fissures in the bark become spiralled. The glossy, dark, tooth-edged oval leaves, 15–20 cm long, set off the bunches of long whitish-yellow male catkins in June. The nuts form from female flowers at the base of small, late catkins that also bear male flowers. Up to three nuts ripen in a spiny husk, 4 cm long.



A tree from Greece, grown here since 1616, this tree has reached 38 m in height and over 2 m in diameter of bole. It never fails to bear a mass of flowers, some of which mature into conkers, within spiny husks 4 cm long. The big leaf-buds are dark red-brown, shiny and sticky. There are always a few trees on which the leaves unfold in March a month earlier than others. In autumn the leaves of some trees turn scarlet, early, others turn golden later. Each large compound leaf has several spreading leaflets, up to 10 cm long.

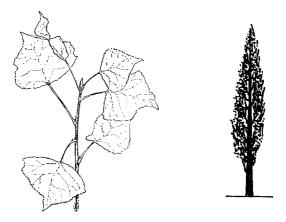


The London plane is a hybrid between a plane from America and one from Asia Minor, and was first planted in England in about 1680. It is very commonly planted in cities and is able to grow fast where few trees could live at all. The biggest trees are in gardens in southern England where two are 44 m tall. One dating from 1680 is nearly 3 m through the bole. The fruit are spiny balls, hanging 3–5 on one stalk and each about 2 cm in diameter. The bright green lobed leaves, borne singly, can be 20 cm across.



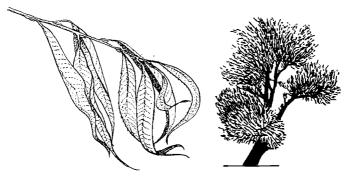
Often called the Mountain ash, but no relation to the ash, rowan is a native, found higher up Scottish mountains than any other tree. It is common in gardens and as a street tree. It can grow to 18 m tall and 1 m through the bole. The bark is silvery grey and the flowers, in big, flat heads, are creamy-white, heavily scented. The fruits turn yellow and bright red very quickly in late July and are then eaten by blackbirds, starlings and thrushes. Note compound leaf, with many tooth-edged leaflets, about 10 cm long.

LOMBARDY POPLAR

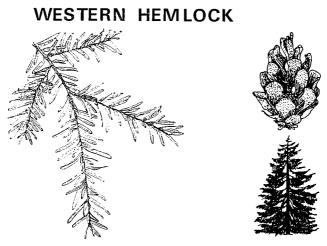


Lombardy poplar was first introduced in 1758, being brought to Essex from northern Italy. It is an upright form of Black poplar, quite unlike other poplars in growing like this. Its long-stalked, triangular to oval, leaves are 4 cm long. Lombardy poplar is common in big valleys, especially along the Thames and Severn rivers. It is usually much less tall than it looks and none has been found more than 36 m tall, but it may become 20 m tall in 20 years. The usual, narrow form is a male tree only, with red catkins in April. A few broad, bushy trees are females with curved green catkins and woolly seeds.

WHITE WILLOW

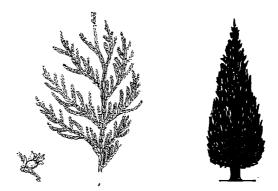


This native tree is fairly common by lowland rivers where its tall crown and grey leaves show from afar. It can be 25 m tall. Young trees have pointed tops and grow very fast. The slender leaves are about 6 cm long, usually curved, blue-grey close to and paler beneath, with very short hairs. The flower catkins are slender and curved, those on female trees bearing woolly white fruit early in the summer.

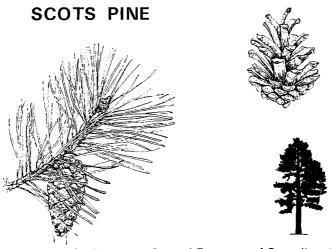


This tree grows in western America from Alaska to northern California and was introduced in 1853. It grows very rapidly on almost any soil and has reached 47 m in height. The tree is always straight but the top shoot hangs in a graceful arch. It can grow well in shade and so may be seen planted beneath other trees. The underside of each leaf is bright white. The cone is only 1 cm long. Note uneven lengths of leaves, $\frac{1}{2}$ to $1\frac{1}{2}$ cm long.

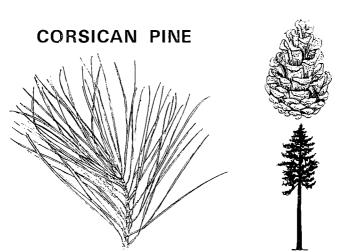
WESTERN RED CEDAR



This tree grows from southern Alaska to northern California and was introduced in 1854. Very common as a hedge, garden and park tree, it is also planted on a small scale as a forest tree. In cool, damp areas, growth is as much as one metre a year and a few trees are over 35 m tall. The compact foliage is glossy bright green and readily yields a fruity scent. The cones are slender, leathery, only 2 cm tall and often abundant. The tip of the tree is erect, and the Western red cedar thus differs from Lawson cypress in this, as well as in its foliage and cones.

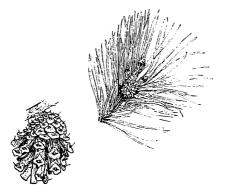


Found from Spain across Central Europe and Scandinavia, through Russia to east Siberia, Scots pine is also native to central and northern Scotland. It was reintroduced to southern England after 1680 and is now wild in many sandy areas. It can grow to 37 m tall and 1.4 m diameter of bole. The lower bark may be blackish, brown or reddish, while the bark of the upper parts is pink or orange-brown. The bluish-green needles are set in pairs, and may be 7 cm long; but on old trees they are only 3–4 cm long. Cones are shown closed (left) and open (top right); average length 4 cm.



First sent from Corsica in 1759, this pine is widely planted on sandy heaths and low on peaty hills. It has reached 44 m in height and 1.5 m in diameter of bole. The dark but open crown has short, level branches. Young trees have 15 cm long, grey green twisted needles set in pairs on pale brown shoots. Cones are larger than those of Scots pine and usually oblique; average length 6 cm.

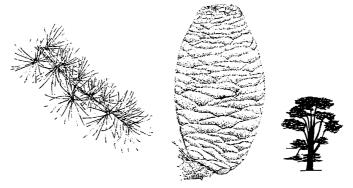
LODGEPOLE PINE





This tree comes in three distinguishable forms which together are found over much of the Rocky Mountains of Western North America. It has been known here since 1832 and has grown to 30 m. It is planted across large tracts of the highest and poorest plantable land, because even there it can grow very quickly. The cone spends one year as a small brown-pink spiny globe, then enlarges the next year to the bright brown, short-spined cone, 4 cm long. Needles, set in pairs, are 4 cm long, and deep green or bright green.

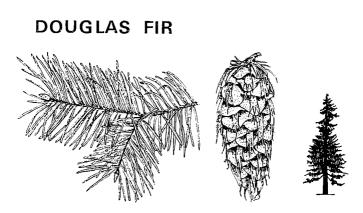
CEDAR OF LEBANON



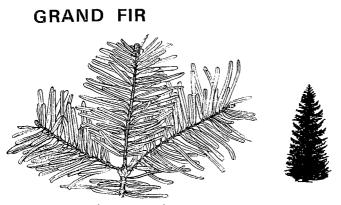
This tree is native to Mount Lebanon and to a mountainrange in South-east Turkey. First brought here in 1638 but not commonly planted until 1760, it grows very fast. Few exceed 30 m in height, but one is 40 m and many are more than 6 m in girth. Cedars flower in October when the male flowers, 5 cm long, stand above the foliage, as curved cylinders, shedding pollen, but the female is only 1 cm long and bright green. It takes nearly three years before the 8 cm cone is ripe and falls to pieces, releasing winged seeds. Tough, dark green needles, $2\frac{1}{2}$ cm long, grow in tufts on short shoots, with solitary ones near twig tips.



The biggest tree in the world is a wellingtonia called "General Sherman", 82 m tall and 22 m in girth, nearly 4,000 years old. It grows in one of the groves on the western flanks of the Sierra Nevada in California, to which this tree is restricted. Introduced in 1853, the wellingtonia is now very common and its conic tops show above all other trees in almost any view in the lowlands, growing in parks, gardens, avenues and churchyards. A few are well over 40 m tall and all the older trees exceed 6 m in girth. The bark is pale orange-brown to red brown, thick and spongy. The foliage is in hard cords which have a scent of aniseed when crushed. The cone, 4 cm long, is frequent.



This tree grows from northern British Columbia to mid California and, in slightly different form, east and south to Mexico. David Douglas first sent seed from Oregon in 1827. It is now very common in forests, spinneys and large gardens everywhere. It grows very fast and most of the trees in Britain more than 45 m tall are Douglas firs. Until 1971 the tallest tree in Britain was a Douglas fir 55 m tall. The foliage is soft, fragrant with a sweet fruity smell, and dense, hanging in dark masses from big old trees; needles average 2 cm long. Cones, 8 cm long, are freely borne, developing from crimson and green female flowers, and are unique in their three-pronged bracts.

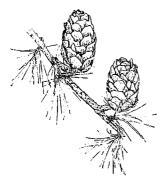


Found scattered among other trees in forests from British Columbia to North California, this tree was introduced in 1833. It grows with great rapidity in cool damp areas and one, now the tallest tree in Britain, is 56 m tall though only 84 years old. The leaves are leathery, rich green and up to 5 cm long, laid flat each side of the shoot. The upright cones, 7 cm long, are rarely seen as they are borne only near the tops of tall trees and break up when ripe. There are many small young plantations of this tree in forests. (A cone of the related Noble fir is shown on the back cover; this is larger, 20 cm long, and has pointed bracts.)



Found in nature only in a small area of mountains on the Oregon-California boundary, this tree was introduced in 1854. It is now abundant in all parks, gardens and churchyards in town and country. It has given an extraordinary variety of forms from seed raised here, these include upright, weeping, blue, golden, feathery, dwarf and other forms. In the typical form, scale-like leaves are pressed closely to the twigs. It grows steadily but seldom fast, and many are now over 30 m tall. Male flowers are abundant and dark pink as they ripen. Female flowers, also numerous, are slate-coloured and ripen into small woody cones (seen above) only 1 cm long. In the typical forms, the tip of the tree always droops.







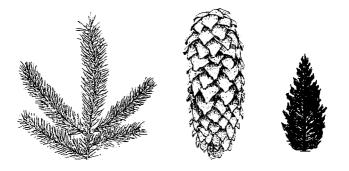
Native to southern and central Europe from the French Alps to Poland, European larch was first grown here in 1620. It has long been one of the essential trees of estate forestry and is widely grown in coverts, shelterbelts and plantations. Young trees grow very fast, sometimes 1 · 3 r a year and can reach 30 m in 50 years, but few tree exceed 40 m. The leaves, which are grouped in tufte except on the long shoots, emerge bright green in March and turn golden in early November just before they fall; they are 3 cm long. The female flowers are numerous, upright and rosy-pink, before the leaves come out. The shoots are pale yellow or pink. Cones have straight scales, and average 3 cm long.

JAPANESE LARCH

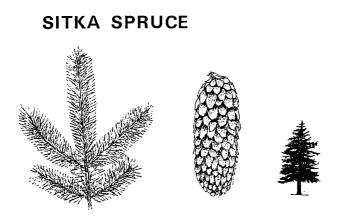


Introduced in 1861 from Japan where it is found only on a few mountains. After 1900 it was planted widely as a forest tree. The orange twigs in winter are a distinctive feature. It grows with great vigour even on poor soils and many trees 50 years old are over 30 m tall. Boles are dark red-brown. The 3 cm long cones, borne freely, are squat and have the tips of the scales curved downwards. Female flowers, red and cream, open before the leaves, from February to March. Leaves, are 3 cm long.

NORWAY SPRUCE



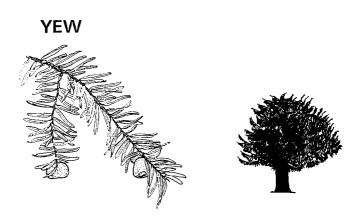
Familiar as the usual Christmas tree, this tree is also planted in forests as a timber tree on a fairly large scale. It is native to Europe from France to Russia and was probably brought to Britain before 1500. Young trees can grow one metre in a year but few old trees attain more than 37 m. It seldom lives longer than 200 years. The drooping cones, 15 cm long, are borne around the tip of middle-sized trees, but over much of the crown on big old trees. Needles are set singly, each on a little peg, and are $1\frac{1}{2}$ cm long.



This tree grows near the Pacific coast in a narrow belt for over 2,000 miles from Alaska to North California, and was first sent to Britain in 1831. Here it grows with great rapidity in wet areas and has attained 53 m in 124 years and 40 m in 42 years, while several of the oldest are more than 6 m round the bole. It is the tree planted in the greatest numbers in Britain; plantations cover large tracts of poor moorland soils. The foliage is deep blue-green above, silvery beneath, each needle is 2 cm long, rigid and spine-tipped and stands on a little peg. The cones, soft and nearly white, are only 7 cm long.



This species grows wild in a very narrow belt where sea fogs hang, just behind the Pacific coast, from the southern tip of Oregon for nearly 600 miles south to mid California. The tallest tree in the world, 111 m tall, is a Coast redwood, and there are groves of trees 1,500 years old with every tree over 90 m tall. Coast redwood was introduced in 1843 and is quite common in parks and gardens, especially ir. western parts where it grows very rapidly and may become 40 m tall. The bark is either bright orange-brown or deep red and is soft and fibrous. The leaves are deep green above, with two silvery bands beneath, and are hard; length 2 cm. Note the odd-shaped cones, 2 cm long.



The yew is native to chalk and limestone, and to some oakwoods on other soils in Britain; its range extends from North Africa to Persia. It is much planted in gardens for shelter, big hedges and topiary work (peacocks especially). It is slow-growing and extremely long lived; the big trees frequent in churchyards 6–9 m in girth must be 600–1000 years old and most are in full health. Leaves, around 3 cm long, are dark green above, pale green below. The scarlet "berries" of female trees (shown above) are much sought by blackbirds and other thrushes; they are 1 cm long. Yellow male flowers appear on separate trees.

BOOKS ON TREE IDENTIFICATION

The following are issued by the Forestry Commission and may be purchased from Her Majesty's Stationery Office, at the addresses on the outside back cover, or through booksellers.

Booklet 15. Know Your Conifers, by H. L. Edlin 30p (37¹/₂p post free) Booklet 20. Know Your Broadleaves by H. L. Edlin 80p (91号p post free) Booklet 33. Conifers in the British Isles, by A. F. Mitchell £2.25 (£2.50 post free) (Dent £1.75) British Trees, by Miles Hadfield Trees and Bushes in Wood and Hedgerow, by H. Vedel and J. Lange (Methuen £1.05) Treasury of Trees, by H. L. Edlin and M. Nimmo

Well-illustrated books issued by independent publishers, and obtainable only through booksellers, include:

(Countrygoer Press £3.75)

Wayside and Woodland Trees, by H. L. Edlin

(Warne £1.75)

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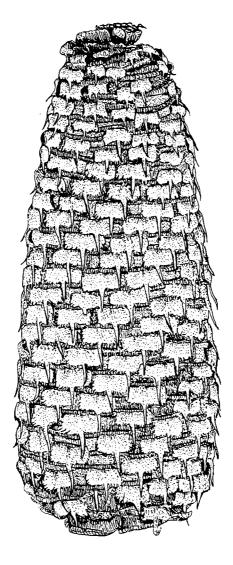
This booklet was planned by two members of the Forestry Commission's Research Division staff. Alan F. Mitchell, B.A., B.Agr. (For.), Silviculturist, selected the specimens shown and wrote the text. John Williams, Illustrator, drew the pictures and designed the layout.

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