

Twigged!

**A guide to your trees
through the seasons**



**WOODLAND
TRUST**

Identifying tree species

We recommend planting trees as one to two year old saplings to give them the best possible start in life. Having smaller roots means they will adapt to the conditions of your planting site more quickly than older, larger trees. Saplings this size are proven to establish more successfully and can reach an adult's head height in around eight years. Because tree planting must take place when the trees are dormant in the winter months it can be a challenge to tell one species from another. This guide has been designed to help you choose which species to plant on your site, how to identify saplings and how the trees should look as they grow and change through the seasons.

Where our trees come from

All of the trees supplied through the Woodland Trust are UK sourced and grown, meaning they are fully traceable right back to the seed*. We recommend when choosing your trees that you select UK sourced and grown trees to reduce the risk of spreading tree disease.

Key to icons

-  Spring colour
-  Autumn colour
-  Great for wildlife
-  Firewood
-  Spiral protection
-  Tube protection

Find out more

For more information about native tree species, visit woodlandtrust.org.uk and search 'British trees'

*Trees supplied in Northern Ireland will be sourced and grown within the UK and Ireland.

Alder buckthorn

(*Frangula alnus*)



Alder buckthorn typically grows up to 6m in height and is suited to wet soils and open woods, thriving in scrubs, hedgerows, wet heathland, river banks and bogs. Twigs are smooth, straight and purple-brown in colour with fine white streaks. White star-shaped flowers appear in May to June and develop into a small berry, which ripens from green to red in late summer.

NATURE PHOTOGRAPHERS LTD/WMTML



Don't confuse with...
Dogwood - a stringy latex-type substance can be seen if the leaves are pulled apart



did you know?

Alder buckthorn charcoal is prized in the manufacture of gunpowder, and is regarded as the best wood for the purpose.

did you know?

Alder is very resistant under water and much of Venice is built on alder piles.

Alder, common

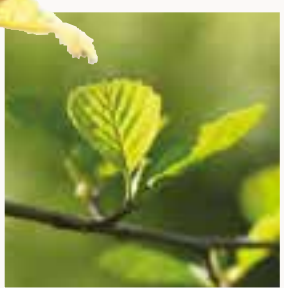
(*Alnus glutinosa*)



Alder is typically suited to wet areas such as next to watercourses, growing up to 20m. Twigs are brown and hairless with notches and club-shaped, stalked buds. Miniature, cone-like fruits appear in October and can persist on the tree until the following spring.

Don't confuse with...

Downy alder which has larger, doubled toothed leaves.



ISTOCK/HEIKAMPF AND NIAL BENWIE

ABCDEFGHIJKLMNOPQRSTUVWXYZ

Aspen

(*Populus tremula*)



ISTOCK/BIBIKOFF AND GGRAPHIX



The aspen twig is slender, dark brown and shiny. It grows best on clay and wet areas, to an average height of 20m. Catkins appear before the leaves and produce fluffy white seeds. Bark is creamy yellow with bands of black diamonds while buds are long, pointed and sharp.

ABCDEFGHIJKLMNOPQRSTUVWXYZ

did you know?

In America, aspen was used for paper making.



did you know?

Ground beechnuts are sometimes used as a coffee substitute.

Beech, common

(*Fagus sylvatica*)



The twig is slender and grey, following a zig-zag shape. Leaf buds are cigar-shaped with a distinctive criss-cross pattern. The leaf edges are smooth and fringed with silky brown hairs. It prefers acidic soil but can grow in poor, sandy, shallow or chalky soils, reaching a height of 40m. Beech nuts appear in autumn.

Don't confuse with...

Hornbeam which has serrated leaves or copper beech which has purple, not green leaves.



WTPU/CHRISTINE MARTIN, SHAUN NIXON AND ISTOCK/KNAUPE

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Birch, downy

(*Betula pubescens*)



WTPU/SHAUNNIXON, ISTOCK/TJASAM AND ALESVELLUSCEK

Don't confuse with...

Silver birch has hairless and warty twigs whereas downy birch twigs are covered in small downy hairs.

Downy birch is found on damper soils than silver birch, and can even tolerate waterlogged or peaty conditions, growing up to 30m. The twigs are hairy with single toothed triangular shaped leaves. In spring yellow-brown catkins droop from the branches and once pollinated in autumn turn to a dark crimson colour.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

did you know?

Birch wood is tough and heavy, making it suitable for furniture, handles and toys. The bark is used for tanning leather.



did you know?

A large amount of silver birch brush is used for racecourse jumps.

Birch, silver

(*Betula pendula*)



Silver birch favours sandy or acidic soils, growing up to 25m. Twigs are purple-brown with rough white spots on the shoots which are prominent in the sun. Buds are long and sharp and, with age, the bark becomes papery-white with black fissures. The leaves are a distinctive triangular shape with drooping brown catkins in autumn.



Don't confuse with...

Downy birch which has single toothed leaves. The silver birch has double teeth along the edge of its leaves.



WTPU/SHAUNNIXON, STOCK/TJASAM AND ALESVELUSCER

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Blackthorn

(*Prunus spinosa*)



ISTOCK/BASIEB, WTPU/CHRISTINE MARTIN AND SHAUN NIXON



Don't confuse with...

Wild cherry which has large coarse teeth on the leaves and red fruit.

Blackthorn is suited to heavier soils and scrub areas. It can reach a height of 7m and once mature produces small clusters of flowers before the leaves in early spring. The twig is smooth and dark purple, with side shoots ending in long spines. In autumn, black-purple fruit (sloes) appear. These are sour and can be used to make sloe gin.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

did you know?

The wood has been used for walking or riding sticks and was the traditional wood for Irish shillelaghs.

did you know?

In parts of Yorkshire it is referred to as 'wild lilac' because of its spring white flowers.

Cherry, bird

(*Prunus padus*)



Bird cherry prefers limestone but will tolerate poor soils. It needs full sun in order to flower and grows to 7-10m. Twigs are deep green/brown with pale markings. New shoots are hairy but this is lost with age. Spiky white flowers appear in spring followed by black berries in August. The foliage is toxic to livestock, especially goats.



WTFU/COLIN VARNDELL AND MALCOLM STOREY/WWW.DISCOVERLIFE.ORG



Don't confuse with...

Wild cherry which has large coarse teeth on the leaves and red fruit.

ABCDEF GHIJKLMNOPQRSTUVWXYZ

Cherry, wild

(*Prunus avium*)



ISTOCK/IDEONE AND MIDDLEVELD



Wild cherry prefers rich/heavy soils and can reach a height of 25m. Twigs are hairless and brown with long clustered buds. Bark is purple grey with horizontal markings, which can be peeled back to reveal shiny red patches. Clusters of flowers appear in early April followed by red berries in mid-summer. Leaves have irregular coarse blunt teeth.

ABCDEF GHIJKLMNOPQRSTUVWXYZ

did you know?

The bitter-sweet resin has been used by children as a chewing gum.



did you know?

Crab apple is the most important ancestor of the cultivated apple.

Crab apple

(*Malus sylvestris*)



Crab apple favours heavier soils. Its bark is purplish brown with scaly ridges and it has an average height of 9m. Twigs are green-brown with spurs and spines. The buds on a crab apple tree have downy tips and the yellow-green autumn fruits can be used to make crab apple jelly and wine.

Don't confuse with...

Orchard apples which generally have pinker flowers and larger fruit.



ISTOCK/INERHRING AND LAMCAN

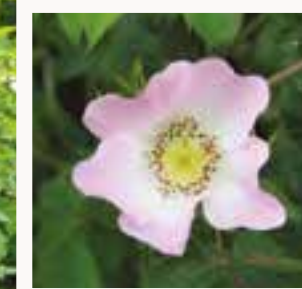
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Dog rose

(*Rosa canina*)



WTFPL/SHAUN NIXON AND KATHERINE JATTEH



Dog rose is a scrambling shrub suited to hedgerows and woodland edges. It has attractive pink and white flowers during the summer and long arching stems with curved thorns. In autumn it has striking egg-shaped, red 'rose-hips'.

ABC**D**EFGHIJKLMNOPQRSTUVWXYZ

did you know?

The term 'dog' can mean worthless, presumably by comparison to cultivated roses.



did you know?

The smooth, straight twigs have been used to make butchers skewers.

Dogwood

(*Cornus sanguinea*)



Dogwood prefers heavy soils. Twigs are smooth, straight and slim. In the sun, they go crimson, staying lime green in the shade. It reaches a height up to 10m and has leaves that have smooth sides and characteristic curving veins. Its black buds look like bristles and black berries appear in September.



WTFP/COLIN VARNDELL, ISTOCK/RXR3XR3 AND ROBERT VIDAL, DORONICUM PFT., BUSWOOD.ORG

ABC**D**EFGHIJKLMNOPQRSTUVWXYZ

Elder

(*Sambucus nigra*)



WTFP/STEVEN KIND, SHAWN NIXON AND ISTOCK/PELO29



Growing up to 10m, elder can tolerate any soil except sands. Twigs are creamy grey with raised warts. Once mature, it produces elderflowers in early summer with bunches of small black elderberries in autumn. The grey bark is criss-crossed with corky ridges while the purple buds have spiky scales like pineapples.

ABCDE**F**GHIJKLMNOPQRSTUVWXYZ

did you know?

The hollow branches can be used by children as pea shooters!



did you know?

As with all maples, its sap can be used to make maple syrup.

Field maple

(*Acer campestre*)



Field maple tolerates most conditions, including shade but dislikes acidic soils. Its average height is 8-14m. Twigs are slender, brown and straight, developing a corky bark with age. The distinctive five-lobed maple leaves turn from dark green to golden yellow in autumn.



* Burns well once seasoned for a year.



WTFPL/MARGARET BARTON; SHAUN NIXON AND STOCK/MANDERVELDEN

ABCDEFGHIJKLMN**F**OPQRSTUVWXYZ

Guelder rose

(*Viburnum opulus*)



Don't confuse with...
Maple has similar leaves but with three clear lobes and a wrinkled upperside surface.

Guelder rose is a spreading shrub best suited to damp, neutral or calcareous soils, thriving along riversides, in fens and damp scrub. It can reach up to 4m high and can spread from 2-5m. Its twigs are greyish in colour and hairless. White flowers appear in May to July and bright red berries appear in autumn in hanging bunches.

ABCDEFGHI**G**HIJKLMN**P**QRSTUVWXYZ

did you know?

Guelder rose berries are mildly toxic if eaten raw but can be cooked into jelly or jam.

did you know?

The tough timber has been used to make mallets, tool handles and the ribs of small boats.

Hawthorn

(*Crataegus monogyna*)



Hawthorn tolerates most soils but flower best in full sun. It is a hedgerow shrub, reaching a height of 12-15m. Twigs are slender and brown with thorns and bark is brown with shallow scaling ridges. The leaves appear before the flowers which follow in May/June. Red berries replace them from late August.

Don't confuse with...

Midland hawthorn which has straight main veins and leaf lobes less than halfway to the mid-rib.



WTPU/SHAUN NIXON AND PETE HOLMES AND FORESTRY COMMISSION

ABCDEFGHIJKLMN**H**OPQRSTUVWXYZ

Hazel

(*Corylus avellana*)



WTPU/MARGARET BARTON AND NIAL BENVIE

Hazel grows well in most conditions except water logged or poor soils. Twigs are pale green-brown and covered with long hairs. Young bark appears bronze, turning pale brown with shallow ridges as the tree ages. Catkins appear from late winter with hazelnuts following in early autumn. If unmanaged, trees will grow to 12-15m.

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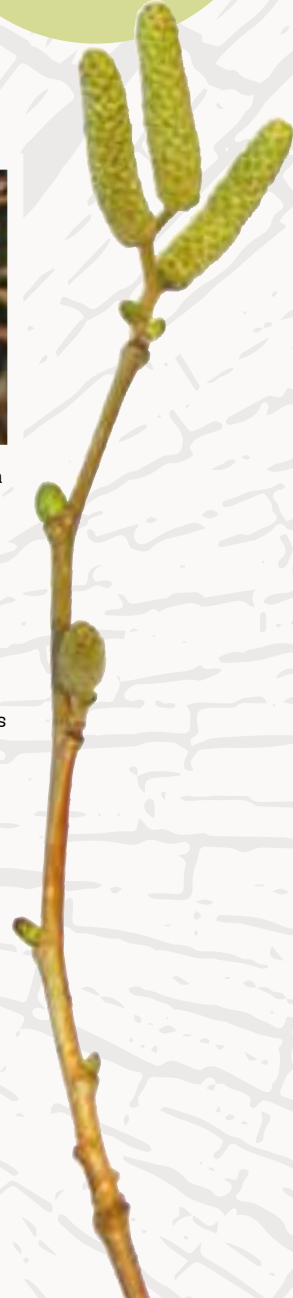
did you know?

Hazel is so bendy in spring that it can be tied in a knot without breaking.



* Burns fast with no spitting and best mixed with slow burners.

**If risk of deer use a tube. A spiral will encourage more bushy growth whereas a tube is suited to trees.



did you know?

Holly berries are poisonous to humans but livestock can benefit from the leaves.

Holly

(*Ilex aquifolium*)



Holly tolerates most soils and deep shade. The bark is brownish-grey with small round warts. Clusters of flowers appear from late spring while the iconic red berries appear in autumn. The average height for a holly tree is 8-15m. The distinctive spiny leaves grow on young trees, becoming smoother with age.



FORESTRY COMMISSION AND WPL/LENE STERNUS



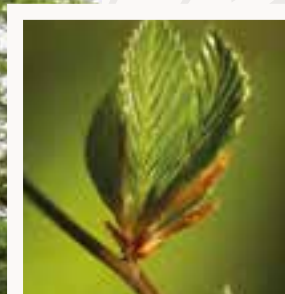
* Can be burnt green.

Hornbeam

(*Carpinus betulus*)



ISTOCK/DABJOLA AND CLIVE STEWARD



* Burns slow and hot once seasoned.

Don't confuse with...

Common beech which has smooth edges to the leaves and few leaf veins.

Hornbeam likes rich and clay soils. It can grow to 10-20m in height with uneven, serrated leaves. Twigs are slender and dark brown while the bark becomes smooth and grey/silver with vertical markings. Catkins appear from May, replaced with large winged keys in autumn.

did you know?

The wood is very hard so not used for timber but for musical instruments and chopping boards.

did you know?

A favourite wood for carving and has been used for Morris dancing sticks.

Lime, large-leaved

(*Tilia platyphyllos*)



Large-leaved lime prefers neutral or alkaline soils. Twigs are grey-green and bark is grey with criss-crossed ridges. Leaves are serrated and heart-shaped, with white-tufts on the underside of the leaf joints. It can reach an average height of 18-35m and has large winged seeds in the autumn.

Don't confuse with...

Common and small-leaved lime which have numerous shoots from the base of the trunk.



WTP/JANNA BADLEY; SHAUN NIXON

ABCDEFGHIJKLMNOPQRSTUVWXYZ

Lime, small-leaved

(*Tilia cordata*)



WTP/MICHELE DAVIES AND ANNA BADLEY



Don't confuse with...

Common lime which has drooping flowers and larger leaves.

Small-leaved limes are uncommon across much of the UK. Twigs are brown in the shade and red in the sun. Its bark is slightly craggy and grey-brown. Its heart-shaped leaves are hairless except for brown tufts on the underside of the vein-joints. It has winged seeds in the autumn.

ABCDEFGHIJKLMNOPQRSTUVWXYZ

did you know?

During the war lime blossom was made into a tea due to its soothing capabilities.

did you know?

Charles II is rumoured to have sheltered in an oak tree whilst hiding from the Roundheads in Shropshire.

Oak, common or English (*Quercus robur*)



Common oaks are suited to most conditions except marshy, very light or chalky soils. The smooth brown twigs grow into grey bark with knobby ridges. The characteristic leaves have large deep lobes and smooth edges. Catkins appear from early May with acorns turning from green to brown in autumn.

* One of the best firewoods. Needs to be well seasoned. Burns low with hot heat



ABCDEFGHIJKLMN **o** PQRSTUVWXYZ

Oak, sessile (*Quercus petraea*)



did you know?

A favoured timber tree, the ships in the Battle of Trafalgar were built with oak.

WTP/L/RICHARD BECKER AND LAURIE CAMPBELL



* One of the best firewoods. Needs to be well seasoned. Burns low with hot heat

Sessile oak does not like heavy or alkaline soils. It can reach an average height of 30m. Twigs are silver and the bark is ridged and grey. The leaves have shallow, regular lobes with hairy veins on the underside. It produces catkins from May to June and acorns in the autumn.

ABCDEFGHIJKLMN **o** PQRSTUVWXYZ

did you know?

Rowan berries can be eaten by humans, and are especially suited to jellies accompanying meat.

Rowan

(*Sorbus aucuparia*)



Rowan grows well in light acidic soils, reaching an average height of 15m. Twigs are slender and purple-grey with purple hairy buds. Bark is greyish silver with dark horizontal markings. Clusters of white flowers appear in late spring with orange-scarlet berries in autumn. Leaves have 15 serrated leaflets arranged in pairs with a single leaf at the tip.

Don't confuse with...

Ash which has smooth edges on the leaflets and winged seeds instead of berries.



WTP/ALL BENNIE: SHAUN NIXON AND STEVEN HIND

ABCDEFGHIJKLMNOPQRSTUVWXYZ **R**STUVWXYZ

Scots pine

(*Pinus sylvestris*)



ISTOCK/CHUSHKIN AND NORTHLIGHTIMAGES



Scots pine thrives on mineral soils and sands low in nutrients. Twigs are green-brown and hairless with papery-white buds. Young bark has orange-brown scales which gain deep fissures with age. The thick, slightly twisted needles are arranged in pairs. It is an evergreen tree which can grow up to 35m.

ABCDEFGHIJKLMNOPQRSTUVWXYZ **S**TUVWXYZ

did you know?

The dry cones make good fire kindling.

did you know?

Straight, smooth spindle twigs have been used for tooth picks, knitting needles and pegs.

Spindle

(*Euonymus europaeus*)



Spindle is a shrub which prefers rich soils and reaches an average height of 6-9m. Twigs are thin, straight and green, whereas bark is deep green with light brown marks, becoming grey-brown with age. Clusters of flowers appear in early summer, replaced by bright pink fruits with orange seeds inside.

Don't confuse with...
Purging blackthorn with has more rounded leaves and black fruit.



WTPU/STEVEN KIND AND PHIL LOCKWOOD

ABCDEFGHIJKLMNOPQRSTUVWXYZ **S**TUVWXYZ

Sweet chestnut

(*Castanea sativa*)



did you know?

The Romans ground sweet chestnuts into flour.



WTPU/WEBUPLoad

Sweet chestnut can tolerate a variety of conditions. Reaching a height of 25m it has a silver-purple bark which becomes ridged with age. Stems have blunt-ended, hairless buds and flowers that can be up to 15cm in length. Nuts are encased in a spiky green outer shell and its leaves are edged by saw-shaped teeth.

ABCDEFGHIJKLMNOPQRSTUVWXYZ **S**TUVWXYZ

did you know?

The best wood is at the base of the tree so walnuts are often dug up rather than felled.

Walnut, common

(*Juglans regia*)



Walnut prefers warm areas and dry soils as it is vulnerable to frost. Twigs are curving, green and hairless, with squat purple-brown buds. In summer it produces brown nuts encased in green outer shells. The leaves are 5-13 leaflets arranged in pairs, with a large end leaflet up to 20cm in length. The tree can grow up to 40m.



FOTOLIA/VANFAN, ISTOCK/VIDKA AND AMETE



ABCDEFGHIJKLMNOPQRSTUVWXYZ **W**XYZ

Whitebeam

(*Sorbus aria*)



ISTOCK/WHITEWAY AND ANNALOVISA



Whitebeam prefers alkaline soils and thrives on chalk, reaching a height of 15m. Twigs are brick red in the sun but greyish green in the shade, with green pointed buds. Bark is smooth and grey and the thick leaves are serrated. Clusters of flowers appear in early summer with red berries in late summer.

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did you know?

The berries are known as chess apples in north-west England and are edible when nearly rotten.

did you know?

Prior to its Scottish extinction in the 16th Century, the European beaver favoured the eared willow.

Willow, eared

(*Salix aurita*)



Eared willow is a bushy shrub with smooth grey bark. Although it prefers moist and acidic soils, it is extremely hardy and has been found as far north as Orkney. The eared willow is identified by its small, ear-shaped droplets at the base of each leaf. Catkins appear in the spring and are up to an inch in length.



POTBIC AND WTP/L



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Willow, goat

(*Salix caprea*)



WTP/L/PETE HOLMES AND WIKIMEDIA



Don't confuse with...
Grey willow which has smaller, longer and thinner leaves.

Goat willow is suited to reedbeds, scrub, wet woodland and hedges, growing to 10m. Twigs are grey (thicker than most willows) and can be red-yellow in the sun with rounded buds. Bark is grey with diamond-shaped pits. The wide oval leaves have a fine, grey felt underside (unlike the thin leaves of other willows).

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did you know?

The catkins used to be called 'goslings' as they look and feel like newly hatched geese.

Planting guidance

Pit planting

Pit planting is the most thorough but time consuming method suitable for all ground types but can be difficult in areas with stony soils. This is the recommended planting method for areas that are susceptible to drought. Each tree sapling requires an individual pit which should be dug with a spade and which is several centimetres wider and deeper than the roots of the tree. Any grass dug up to create the pit can be turned upside down and placed in the bottom. This will provide each tree with additional nutrients. Position the sapling into the pit and ensure all roots are below ground level. Carefully backfill the soil around the tree while holding it up straight. Saplings left at an angle are at risk of snapping as they grow. To compact the soil and reduce the chance of movement, firm the top layer around the sapling with your heel.

Slit planting

Slit planting can be easier in stony soils and is a simple method, suitable for bare soil and grass. We don't advise using it if you are planting in an area susceptible to drought or with clay soils because in dry conditions the slit can re-open exposing the tree roots.

Insert a spade into the ground and push it forwards to create a slit. Ensure the slit is deep enough for the tree roots.

When the slit is open, insert the roots into the slit, keeping the roots straight and ensuring they're all below ground. Then simply remove the spade and push the soil back firmly down around the tree.

T-notch planting

T-notch planting is another quick method suitable for grass covered ground but not bare soil. This method is an alternative to pit planting in areas susceptible to drought but again not recommended for sites with clay soils. Push the spade fully into the ground. At a right angle to the first cut, repeat step 1 to create an inverted T-shape. Take the spade to the original cut and lever it upwards parting the turf. Place the tree carefully in between the sections of turf. Lever the spade back out and the turf will fall into place. Ensure all roots are taken into the hole. Adjust the tree to ensure it is at ground level, and thoroughly firm down soil around the tree.

How to plant

- Mark out where you are going to plant your trees to ensure your planting design fits well in the desired space, and that trees are not planted too close together.
- Cut down any excess weeds and grass to make the planting process easier. This will also reduce the competition for water and nutrient from the soil.
- Use one of the planting methods detailed here, depending on your spoil type.
- Once your tree is planted, push the cane or stake into the ground next to it, making sure it is stable and upright.
- Place your guards – if using a spiral guard, ensure this is placed over both the tree and cane. If using a tube, place this over the tree only, with the stake on the outside. You can then fix the tube to the stake using nylon ties.

How's it growing?

Tell us how your trees are doing – we'd love to hear from you.

Your pictures and stories can help us inspire more people to plant trees.

Get in touch with us at
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twitter.com/woodlandtrust



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