

# Trees of Norfolk



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**This is one of three presentations on the Trees of Norfolk covering:**

**Part 1: Broadleaf trees**

**Part 2: Shrubs and smaller trees**

**Part 3: Coniferous trees**

# Bibliography

A Flora of Norfolk – Gillian Beckett, Alec Bull (1999)

Notable Trees of Norwich (N&NNS Occasional Publication no.10) – Rex Hancy (2005)

Flora Britannica (Sinclair-Stevenson) – Richard Mabey (1996)

Collins Complete Guide to British Trees – Paul Sterry (2007)

# Trees in Norfolk

12,000 years ago the glaciers of the last ice-age began to retreat from Norfolk, leaving a tundra-like landscape. As the climate warmed, successional vegetation such as birch scrub (10,000 - 8000 BC) and hazel and oak woodland (from 8000 BC) would have filled much of the landscape.

The land bridge to the continent was inundated by the sea about 6500 BC. At this time primitive man would have made only a minimal impact on the predominantly forest landscape, but from 3000 BC onwards, new cultures came to Norfolk with agricultural traditions and patterns of animal husbandry which required the clearance of land.

Over the ensuing millennia, the development of social structures and consequent division of land using earth banks and hedgerows, would create the mosaic of landforms which we see today, and within which trees are such a dominant factor.

Trees provided fuel and raw materials for building and for stock control. The woodland resource was carefully managed through processes of:  
**coppicing** – cutting trees at ground level so they regenerated to provide a cyclical harvest of poles;  
**pollarding** – cutting trees at 6-8 feet to allow regrowth above the heads of grazing livestock; and  
**standards** – mature trees to give the most valuable timber for house and ship building.

This guide to the broadleaf trees of Norfolk focuses on the native trees of the county, and on long-standing introductions such as Sweet Chestnut and Sycamore, though it does include some more recent introductions. It does not deal with exotic introductions to parkland landscapes or to the urban street environment.

For an account of tree plantings in central Norwich see Rex Hancy's "**Notable Trees of Norwich**" (*N&NNS occasional publication no. 10*).

Species are listed in alphabetical order of the family name (eg Silver Birch comes under "B"). Each page usually shows a mature tree and close ups of leaves, blossom or fruit.

It is hoped that this presentation and the companion guides to shrubs and conifers will allow users to identify most of the commoner trees and shrubs in the Norfolk landscape, and that it may encourage them to go out into the countryside and compile their own portfolio of favourite tree pictures through the seasons.





## Alder

*Alnus glutinosa*

A tree of wet places often coppiced by regular cutting. The broad, rounded leaves are strongly ribbed on the underside. The small cones are about 1cm long and attractive to wintering birds. The purple catkins appear in Spring.







## Ash

*Fraxinus excelsior*

A native species now at risk from ash die-back disease. The fingered leaves are easily brought down in storms. In winter look for the black buds and clusters of seeds called ash keys.







## Aspen

*Populus tremula*

The Aspen is a member of the Poplar family which can be recognised by its round shivering leaves which tremble in the slightest of breezes with an audible whispering sound. Other members of the Poplar family with a similar habit have more triangular leaves.

It suckers freely and can be found in woods and carrs across much of Norfolk, but is absent from the higher ground in the north-west of the county and from the Fens.







## Beech

*Fagus sylvatica*

Native in the south of Britain. In Norfolk it has been grown in areas of wood pasture and there are many fine examples in parks throughout the county. Leaves go russet in autumn, the fruit is called “beechnut”.







## **Downy Birch**

*Betula pubescens*

Widespread across the county but less common than the more familiar Silver Birch. The bark is browner than Silver Birch and lacks the bosses found in that species. The twigs are downy and the leaves rhomboid.







## Silver Birch

*Betula pendula*

A familiar tree of light acid soils readily colonising ungrazed heathland.

The strange twiggly growths illustrated below are known as witches brooms and are galls caused by mycoplasma-like organisms.







## Wild Cherry (or Gean)

*Prunus avium*

Mature trees in full springtime blossom present a magnificent spectacle. At all seasons it can be identified by its distinctive bark which has prominent horizontal bands forming corky ridges on an otherwise smooth surface.







## Horse Chestnut

*Aesculus hippocastanum*

Introduced from south-east Europe in the late 16<sup>th</sup> century. It is famed for its “sticky-buds” in spring and its conkers in autumn.

It has large showy candle-like flowers in white or pink, and large palmate leaves comprising 3-5 clustered leaflets.







## Sweet Chestnut

*Castanea sativa*

Introduced in Roman times for food and fuel, and now a popular tree in parkland settings. The bark is heavily sculptured. The nuts are found in 2's or 3's in prickly husks which litter the ground in autumn.







## Small-leaved Elm

*Ulmus minor*

Native to S and SE England, nowadays rarely reaching maturity because of the ravages of Dutch Elm disease. The asymmetrically pointed leaves are narrower and smoother than those of Wych Elm. The flat papery fruits mature in early summer.







## Wych Elm

*Ulmus glabra*

Widespread across Norfolk, except in the peat Fens and the Broads. This species is susceptible to Dutch Elm disease so is mainly found as a hedgerow shrub, often with dead trees behind as in this picture.

It is distinguished from Small-leaved Elm by its broader, rougher leaves, which are widest toward the tip.







## Hornbeam

*Carpinus betulus*

A tree of old hedgerows and woods particularly on the boulder clay of south-east Norfolk.







## Common Lime

*Tilia x. europaea*

A frequently planted hybrid, common in urban environments. It can usually be distinguished by the dense twiggy outgrowths around the base of the trunk.







## Small-leaved Lime

*Tilia cordata*

Native in a few ancient woods and hedgerows. The illustrated example is on a boundary bank in Blickling Great Wood.







## Holm Oak

*Quercus ilex*

An evergreen tree introduced from southern Europe and occurring widely throughout the county.

It has been known at Holkham since 1729, where it regenerates well, forming dense, self-sown thickets on the sand dunes.







Tony Howes



Tony Howes



## Pedunculate Oak

*Quercus robur*

The Pedunculate Oak is the most usual oak species to be found in Norfolk. It can be distinguished from the Sessile Oak by its stalked acorns.





## Sessile Oak

*Quercus petraea*

Sessile Oak is a native of the acid soils of north and north-east Norfolk. This example is on a road bank at Salle. Note the long stalks of the leaves and the short stalks of the acorns which distinguish this species from Pedunculate Oak.







## London Plane

*Platanus x hispanica*

A deciduous tree thought to be a hybrid between Oriental Plane *P.orientalis* and Western Plane *P.occidentalis*. In Norfolk it has been widely planted as a street tree, most famously in Elm Hill, Norwich and in parks. The leaves are large and maple-like turning yellow and orange in autumn. The distinctive bark peels off in flakes producing a mottled effect on the trunk.







## **Balsam Poplar**

*Populus* 'Balsam Spire'

Poplars are a complex group with many cultivated forms planted for timber or amenity. Balsam Spire is a widely planted hybrid between Western and Eastern Balsam Poplars, both of which are natives of North America. The emergent spring foliage is an attractive orange-brown colour.







## **Black Poplar**

*Populus nigra*

The native Black Poplar is a rare tree in Norfolk. The illustrated example is at Primrose Green, Lyng.

It is typically a massive tree with leaning trunk, and lower branches arching downwards. The bark is deeply fissured and heavily bossed in older trees. Many Norfolk trees are now reduced by age and storm damage and there are probably fewer than 50 trees of 150 yrs or more (*Rogers, Trans Nfk Nch Nat Soc, 1993*).

Most Norfolk trees are male so that regeneration is dependent on the taking and distribution of cuttings. In this way many young trees have been planted in recent years in suitable sites throughout the county.

Additionally a number of hybrids and cultivars of European stock have been raised and used for ornamental planting.





## **Lombardy Poplar**

*Populus nigra* 'Italica'

A distinctive cultivar which is native to Italy. It is readily identified by its plume-like outline, which is caused by all the side branches following the upward trend of the trunk.

It is easily raised from cuttings and is hardy and free-growing, and frequently planted in lines as a windbreak or to hide buildings.

It is named after the Lombardy region in northern Italy where it first attracted attention as a prominent feature of the landscape in the Po valley.







## White Poplar

*Populus alba*

A deciduous tree, perhaps once native in Fenland, but now widely planted. Pale grey bark with many black gashes. Young twigs and buds densely cottony. Leaves white cottony beneath, retaining their down in summer.







## Rowan

*Sorbus aucuparia*

Rowan is widespread across the county, being native on sandy soils and frequently planted elsewhere. The leaf is like that of Ash, hence its alternative name of Mountain Ash. It has dense clusters of creamy-white flowers in May-June which are followed by scarlet berries in August and September.







## Wild Service Tree

*Sorbus torminalis*

This is a rare tree being reported from only 13 tetrads in a Flora of Norfolk. It is found in ancient woodland on the boulder clay of central and south Norfolk. The leaves are maple-like with basal lobes projecting at right angles. They are among the first to change colour in the autumn, becoming yellowish from July onwards, as in these pictures, and turning red later in the season.

The bark is dark brown or grey, cracked into scaly plates giving the tree its older vernacular name of Chequers.







## Sycamore

*Acer pseudoplatanus*

Introduced from central Europe possibly in Roman times. The leaves are frequently infested with a black rust fungus giving a spotted appearance. Its winged seeds have long been a favourite with children.







## **Crack Willow**

*Salix fragilis*

A frequently pollarded riverside willow, aptly named because of its tendency to split, and for the ease with which twigs break off.

Leaves long, slender and finely tapering, bright glossy green above and paler beneath. Catkins yellow, long and slender.







## **Weeping Willow**

*Salix babylonica*

Introduced from China about 1730.

This frequently planted ornamental tree is easily recognised by its cascading foliage which can reach down to the ground. The long thin leaves are a bright yellowish-green in Spring, maturing to a darker green as the year progresses, and surviving on the tree until late Autumn or early Winter.

It is nearly always planted, though it can become naturalised in wet habitats.





## White Willow

*Salix alba*

Frequently occurring as a mature tree, it is readily identified by its silvery white leaves, especially when caught in low sunlight against a stormy sky.

Leaves are long and narrow covered with silky white hairs on the underside. It has long, yellow dangling catkins.

*For other Willow species see the guide to Shrubs of Norfolk.*







## Checklist of Norfolk Trees

Print out this page to record your sightings of broadleaf trees in Norfolk.

Species	Where	When
Alder		
Ash		
Aspen		
Beech		
Birch – Downy		
Birch – Silver		
Cherry – Wild		
Chestnut – Horse		
Chestnut – Sweet		
Elm – Small-leaved		
Elm – Wych		
Hornbeam		
Lime – Common		
Lime – Small-leaved		

Species	Where	When
Oak – Holm		
Oak – Pedunculate		
Oak – Sessile		
Plane – London		
Poplar – Balsam		
Poplar – Black		
Poplar – Lombardy		
Poplar – White		
Rowan		
Service – Wild		
Sycamore		
Willow – Crack		
Willow – Weeping		
Willow - White		

See also the separate guides to shrubs and to conifers.