

# Silver Maple: *Acer saccharinum*

## Centre Vale Stories

Five Silver Maples have been planted in Centre Vale, and the one we feature here is probably the easiest to identify. It looks to be in the prime of its life, sending out vigorous growth. It has benefitted from the recent management of nearby trees, which opened up the area allowing in more light. Prior to this it was hidden from view and suffered too much shading. Now there are new stems growing upright from the leaning trunk, making this a very distinctive tree. As it needs moist ground, its position in this wet area is ideal, although difficult to reach because of the wet ground and being set away from the main path. It is one of a pair, and there are another three a short distance away. All are large and attractive trees.

The date of planting of the five Centre Vale Silver Maples is not known but may have been in the 1930s when they were planted as ornamental trees on the instructions of the Todmorden Borough Council.



## Silver Maple - A Few Facts

This isn't a native species, having been introduced from America in 1725 by Admiral Sir Charles Wager. For a while the tree became known as Wager's Maple. Like many Maple species, they can change sex from year to year. It is not a long lived species and 100 years is a good age.

It is now named Silver Maple because the leaves are silver underneath and fresh green on the upper surface, with long slender stalks allowing them to flutter in the lightest breeze. This makes a striking effect as the silver underside is exposed. It is a hardy tree and only casts a light shade which allows smaller species to establish below.

Native Americans produced Maple syrup and sugar from the bark sap of this species, and for the early settlers of North America this was their main source of sugar. Disappointingly, the tree yields very little sugar in this country. The autumn colours vary from yellow through to orange and red.

Something to watch for - Silver Maple comes into flower very early in spring before any leaves appear, which makes it stand out in the bare woodland scene.

# Silver Maple



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## Where to Find This Tree

Walk straight up the path that goes into the woods between the skate park and cricket ground, until you reach the junction with the path crossing left to right. This Silver Maple is almost opposite you, a little to your right on the far side of this path, the main trunk leaning to the left. If you look to the left, close to the path and extending up the hill, you can see a more open area. This was recently cleared and planted with wetland loving species. Deer come to drink here.

# Scots Pine: *Pinus sylvestris*

## Centre Vale Scots Pines

A group of six Scots Pine in the fenced off wetland area had, until about ten years ago, four other large trees for company, including a Copper Beech and a Lime. When these died because of the waterlogged soil and were felled, the Pines benefitted as they prefer an open aspect. However, there is some concern for their health because of the wet ground, often with standing water, not a situation usually associated with these mountain and seaside pines.

It is in the character of this species to sometimes grow in a twisted and haphazard manner, and one Scots Pine in the woodland part of the park shows this well. When grown without competition from nearby trees, Scots Pines will keep the lower branches but our pines now have a high crown of foliage. They may be approaching 90 years old.



## Scots Pines – Life and History

The Scots Pine has been much planted in England for the last 300 years, after going extinct south of the Scottish border about 5,500 years ago. The oldest recorded tree is in Finland at over 760 years old, but most trees here grow for 150-300 years. The greatest threat to the survival of Scots pine in Scotland is deer and sheep preventing regeneration of seedlings through overgrazing.

Scots Pine is one of the most widely distributed trees on the globe, and Scotland is at the North-Western extremity of its range, where it is more sensitive to climate change than most of our other native trees. The trees in Scotland are often referred to as Caledonian pines and are a distinct genotype, with short cones and short needles.

It is an evergreen conifer with a distinctive papery, orange-pink and flaking bark which intensifies with age in the top half of the tree. We can see this on the upper trunk of our six. The contrast of soft grey needle-like foliage and orange-pink bark makes it one of the prettiest pines. The lower trunk grows big papery-surfaced mauve plates, or sometimes rugged purple ridges. Look out for tapered and scaly cones in autumn.

When grown in a plantation, they form straight trunks which were used for ships masts. As a naturally durable timber it is ideal for much exterior joinery work. It was also the best timber for use as roof props in the coal mines as it makes a cracking sound when in need of replacement; a good early warning system!

In the past there were many uses in Scotland for this pine. Houses used to be lit with 'fir candles' made from the trunk and roots, and the cones as kindling for fires. The wood was used for farm implements and the roots for making ropes and baskets, while tar was obtained from the tree to waterproof fishing boats. Water pipes made from hollowed out trunks were even exported to London. The tree's fibres are still used for making a textile known as 'vegetable flannel' with a hemp-like appearance but softer.

# Scots Pines

## And More Stories

The Romans wrote that Scotland was covered in woodland which they called "the Great Wood of Caledon", perhaps as an excuse to their bosses in Rome for why they weren't able to conquer the Scots! (They also reported that natives lived in bogs and disappeared to the bottom, breathing through straws whilst the Roman soldiers passed by.)



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## Where to Find These Trees

Walk straight into the park towards the statue, passing the children's playground on your left. You will see this group of pines on your left, behind the fencing that marks the wetland area, and before you get to the John Fielden statue. For some years from the 1930s there was a paddling pool nearby, and these trees may have been planted to give a seaside appearance.

# Goat Willow: *Salix caprea*

## Centre Vale, Curious Willow Story

This Goat Willow in the Chimney Field grew as a multiple stem tree until the spreading and weighty trunks split apart. Each trunk now lies on the ground but with roots still in the earth. The tree is happy in its present grounded position and continues to grow upwards towards the light, forming the unusual bowl shape of stems.

This tree is difficult to date but as Willows are a fast growing species and do not live very long, it is perhaps no older than 60 years. Nevertheless it does have the appearance of age, which has helped to make it a distinctive and unusual tree.

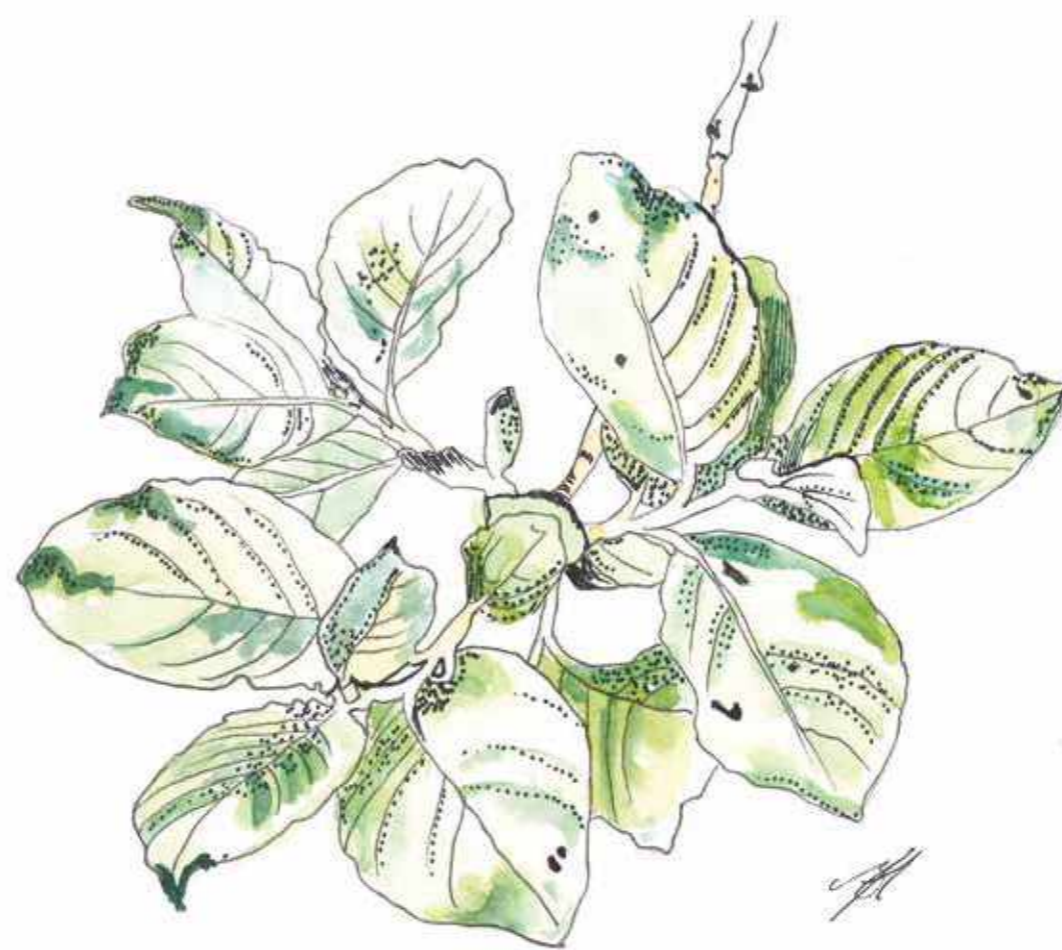
Its position is very close to where we estimate the chimney of Ridgefoot Mill was built to take some of the fumes from the mill up above the town (hence "Chimney Field"). The mill was eventually demolished in 1932. Before then photos of this hill, called "The Ridge", show almost no trees on the hillside above the town.

## Willow Lives . . .

There are numerous species of Willow in Britain and many hybridise with each other. Goat Willows (sometimes called Great Sallow) are easily recognised, particularly in spring when the 'pussy-willow' catkins appear before any leaves. The leaves are oval with slightly twisted points, a dull green above but underneath a much lighter grey/green and covered with felt-like soft hairs.

The tree is a very common pioneer species and grows in most situations, although the seed requires bare soil to germinate. It grows mainly as a very bushy tree but can reach up to ten metres tall. There is a single very fine specimen in the meadow behind the Centre Vale wetland area. Look out for its beautiful "halo" of catkins in spring. Goat Willow is often referred to as 'Palm' when branches with flowering catkins are used to decorate churches on Palm Sunday.

The name 'Goat' [Willow] is derived from the 1546 Herbal by Hieronymus Bock, in which this willow is illustrated as being eaten by a goat! Curiously his name "Bock" is German for "male Goat"!



## . . . And Willow Uses

Willow trees have an amazing variety of uses. The bark contains Salicylic Acid (from which the medicine Aspirin was derived) and has been used as a pain killer for at least 2,400 years.

When coppiced, the small diameter shoots are split and easily woven, which in medieval times formed the basis for 'wattle and daub' houses. Some willows are coppiced to produce very pliant shoots which are then made into all kinds of baskets, crates and artwork sculptures. There is also a willow species that is grown exclusively for making cricket bats.

Twisted willow twigs can even be used to make horse bridles and in central Asia the bark was macerated so the fibre could be spun into threads from which cloth was woven. In Essex strips of shavings were made into hats. Willow gets its name from the Anglo-Saxon word 'widig', meaning pliant.

## Goat Willow



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## Where to find the Chimney Field Goat Willow

One way to reach the Chimney Field Willow is to turn left off Burnley Rd., and go up the lane next to the graveyard, up the steep steps beside the disused church. Continue into the park woodland up a cobbled path with a handrail until a junction and a finger post. This points you to Chimney Field up a track to the left. Once you reach the information board you will see the "collapsed" Willow in front of you. If you don't fancy the steep steps and path the finger post junction can be reached by following Lovers Walk toward town.

# Hungarian Oak: *Quercus frainetto*

## Centre Vale's Hungarian Oak Story

This Oak was a donated tree planted by the park staff about 25 years ago. An American Red Oak was chosen but that died. It was replaced by the nursery supplier, apparently with another Red Oak.

It therefore came as a total surprise when, four years ago, it was identified as a Hungarian Oak, which is fortunate as this species is very uncommon in Britain, and probably unique in the Calder Valley. The author of this account has only seen one other, and that was in an Arboretum.

This Centre Vale tree has put on good growth, but appears now to be showing significant die-back, and lack of vitality within the crown. Like other Oaks, the Hungarian Oak requires plenty of space to thrive, not the situation for this individual at present because of encroaching large shrubs and trees.

Oak trees in general often recover by producing stronger new shoots from lower down, so attention may be needed here. In its current situation root disturbance should be avoided, and the whole area around the roots mulched to prevent any drying out. We need to look after our unusual Hungarian Oak.

Hungarian Oaks do not seem to produce many acorns in this country. As with other oaks, during WWII acorns from many Oak species were roasted and used as an ersatz coffee, but our tree is not yet old enough to produce acorns.



## Hungarian Oak - What's Different?

Hungarian Oak is not native to Britain but was introduced by Charles Lawson, an Edinburgh nurseryman, in about 1835. The native range of the tree is mid-Italy and the Balkans. Lawson's original trees were grown from cuttings grafted at the base on to common oak and this remains a preferred method for producing the best specimen trees.

This species has been described as having straight branches radiating like the spokes of a half-opened umbrella.

It is identifiable by its large leaves which are elaborately cut into big square lobes which also have smaller lobes within them, making it distinctive from any other Oak species. It has good autumn colour. The attractive fallen leaves have a fragrant, if faint, smell of Balsam when dry. Leaves put in a bowl will provide this fragrance for many months.

# Hungarian Oak



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## Where to Find This Tree

This young Hungarian Oak is almost opposite the steps that lead you into the side of the Garden of Remembrance. It was planted in a bed of shrubs on the left hand side of the path going up to the Old Coach Yard, near the lamp standard.

# Tulip Tree: *Liriodendron tulipifera*

The name comes from the Greek meaning "Lily Tree"



## Centre Vale Tulip Tree Stories

This impressive tree, seen here in spring, is not as old as it looks. It does not appear on old photos of the park, and was most likely planted in the 1930s. This was the time when the public park was still being developed, and many areas of the former open parkland of the Centre Vale Estate were being planted.

Remember, public access to Centre Vale was only possible after it became the property of Todmorden Borough Council in 1912, following the death of Mrs Sarah Jane Fielden. Mrs Fielden lived alone with one companion in Centre Vale Mansion until she died in 1910, the last of the wealthy "cotton" Fieldens to live in Todmorden.

Settled in its present position, in moist soil with an open aspect, this tree is flourishing and produces a wonderful display of very unusual flowers each summer. Possibly as a result of climate change it has flowered more profusely and regularly in recent years.

When you visit this tree do notice the unusual and beautifully complex figuring of the bark, so unlike the rough bark plates of the Sycamore (No. 2) close by, or the Turkey Oak (No.3). And if you are there in the autumn you will be able to see the bright masses of custard yellow leaves.

## What Else do we Know?

This is an ancient tree species that would have been around with the dinosaurs. The large bowl-shaped and upright flowers have origins before the evolution of bees and flies, and evolved so that blundering beetles could fall in and do the pollinating. In its native North America the flowers are a major source of a strong flavoured honey, favoured by bakers. The early settlers in America called it 'canoe wood'. The Native Americans preferred it for making their dugout canoes, as the tree is quick growing, easy to work, and with a good straight trunk.



# Tulip Tree

This fast growing species can grow as high as 35m (115ft.). Its very large upright flowers in mid-summer are coloured yellow with splashes of bright orange. It is a shade intolerant species, and prefers deep moist soils. The leaf shape is unlike any of the other trees in the park

The species was introduced to this country around 1630 from Virginia, North America, by the gardeners to Charles I. It was first described as a white Virginia Poplar because of the long slender leaf stems. The Bishop of London's residence at Fulham Palace had one planted before 1680. There remain two survivors in this country dating from 1685.

Curiously, there are only two species of the Tulip Tree in the world. The other originates in the Far East and is referred to as Chinese Tulip.



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## Where to Find This Tree

When you walk into the park from North Lodge, go straight ahead until you reach the park shelter. From there turn right up the slope towards the Council's depot and the fenced Fruit Garden. Go right again past the Fruit Garden, as if you were going to the "Outdoor Gym". The Tulip tree is the last tree on your right.

# Horse Chestnut: *Aesculus hippocastanum*

## Centre Vale Horse Chestnuts

We all know these trees because of 'conkers'. The large, shiny and poisonous seeds or nuts are often used by children to play the traditional game of conkers (meaning 'conqueror'). The seeds that escape the game of 'conkers' germinate readily, and there are a number of young saplings within the park woodland.

Estimating the age of the Horse Chestnut trees near the bandstand is difficult, as the species grows very fast for 100 years and then slows down rapidly, putting on very little stem diameter. They may have been planted about 1840, with the other mature trees in this same linear group - another Joshua Major landscaping design like many of the Lime trees.

The substantial tree at the rear of the bandstand had one of its large branches severely damaged by the flames of the burning bandstand, following an arson attack.

Unfortunately, Horse Chestnuts are under threat from recently imported diseases, and many thousands of mature trees have died, including a few which have had to be felled within the Park. The main problem is a bacterium that originated in the Himalayas. The disease appeared here in the early 2000s and causes the bark to die. In spite of the many young seedlings springing up in the park, the outlook for our Horse Chestnuts seems rather bleak. It would be such a pity if future generations never experience this magnificent tree.



## Horse Chestnut Facts and Stories

It is an exotic tree, only native to three small populations on high mountains around Greece and Albania. It was completely unknown to botanists until 1596, and was introduced to England around 1612. Horse Chestnuts are potentially long lived, and some in England are known to be over 300 years old.

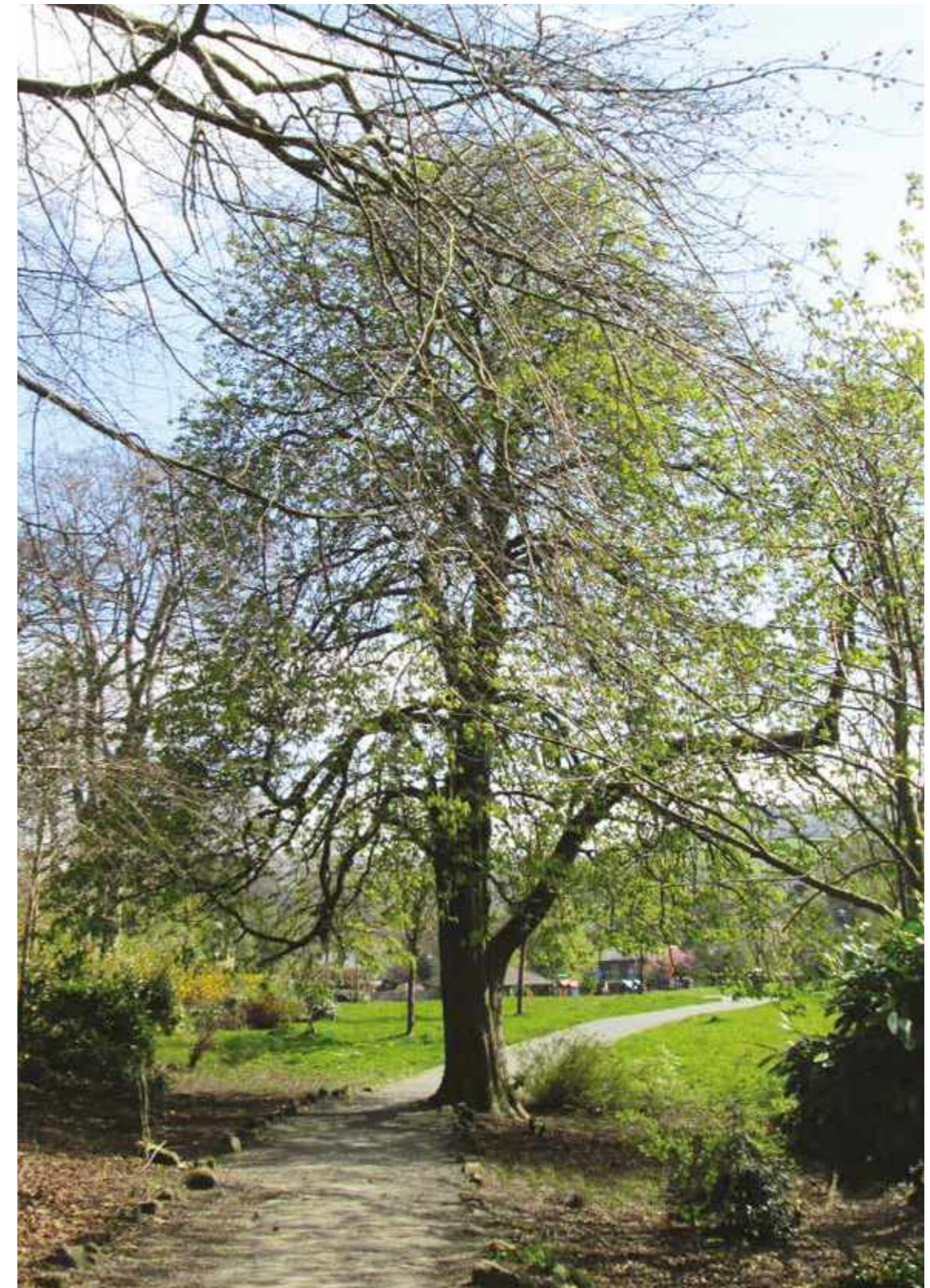
The tree is very distinctive, with its large palmate leaves and erect panicles of flowers up to 30cm long in spring, whatever the weather. The period of flowering is lengthened by opening only one of the three flowers on each branch of the panicle at a time. With the flower spike being at the tip of each branch there is no further growth there until the following spring. The flowers are a rich ochre-yellow at the base of the petal which, following pollination by bees, turn bright crimson.

Old trees tend to have long and drooping branches that reach almost to the ground. If allowed to touch the ground these branches would root and grow into a new tree.

There are several theories on how Horse Chestnuts got the name, including a tradition that the seed was ground up and used in Turkey as a medicine for horses. It is also interesting to note that the leaf scars on the fallen leaves in autumn have a distinct horse-shoe shape, even showing the position of nails.

The species has very interesting associations. In 1915 there was the war 'Shell Crisis', and a serious shortage of acetone for the production of cordite explosive used in shells. Apparently children throughout the country were directed to collect 'conker' seeds. These hold a lot of starch and, with corn and potatoes, were used in the fermentation process to produce acetone. The inventor of this process in 1915 was Chaim Weizmann, senior lecturer at the University of Manchester, who eventually became the first President of Israel.

# The Horse Chestnut



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## Where to Find This Tree

There are several large Horse Chestnuts in the park, as every conker-hunter will know. This tree and several other Horse Chestnuts are reached from the main park entrance at South Lodge. Keep on the right-hand path that goes up towards the Bandstand, but fork off at the top of the rise. This smaller path follows the river, and the first large tree you come to is a Horse Chestnut. The path is still pleasantly wooded with several Horse Chestnuts, and beeches of about the same age and size.