

Lime Tree: *Tilia x europaea*

A Centre Vale Lime

This particular Lime in Centre Vale is estimated to be about 180 years old. We know this as it grows within a group of trees of similar age, which are shown on the first edition Ordnance Survey of 1849 as an isolated planting above the meadows that had gone down to the river.

This group, along with similar ones strategically placed within the park, were all planted in the 1840s shortly after Centre Vale House was bought by John Fielden, or even a little earlier when Thomas Ramsbotham was laying out the estate in the 1820s and 30s. There are several big Lime trees of about the same age along Lovers Walk.

Joshua Major, from Owston near Doncaster, was commissioned to design and landscape Centre Vale estate around this time. His original design can be understood by looking at the old maps, when there were fields and many fewer trees across the lower slopes of the Centre Vale estate. These specially designed groves or groups of trees can still be seen today but, with brambles and undergrowth and many losses of older trees, it may not be long before his designs are merely ghosts in the landscape.

An Interesting After-note

After landscaping Hanover Square in Leeds (1824), Joshua Major designed some of the earliest public parks, including Oakes Park in Sheffield (1834), before his work on Centre Vale.



Common Lime - What Else do we Know?

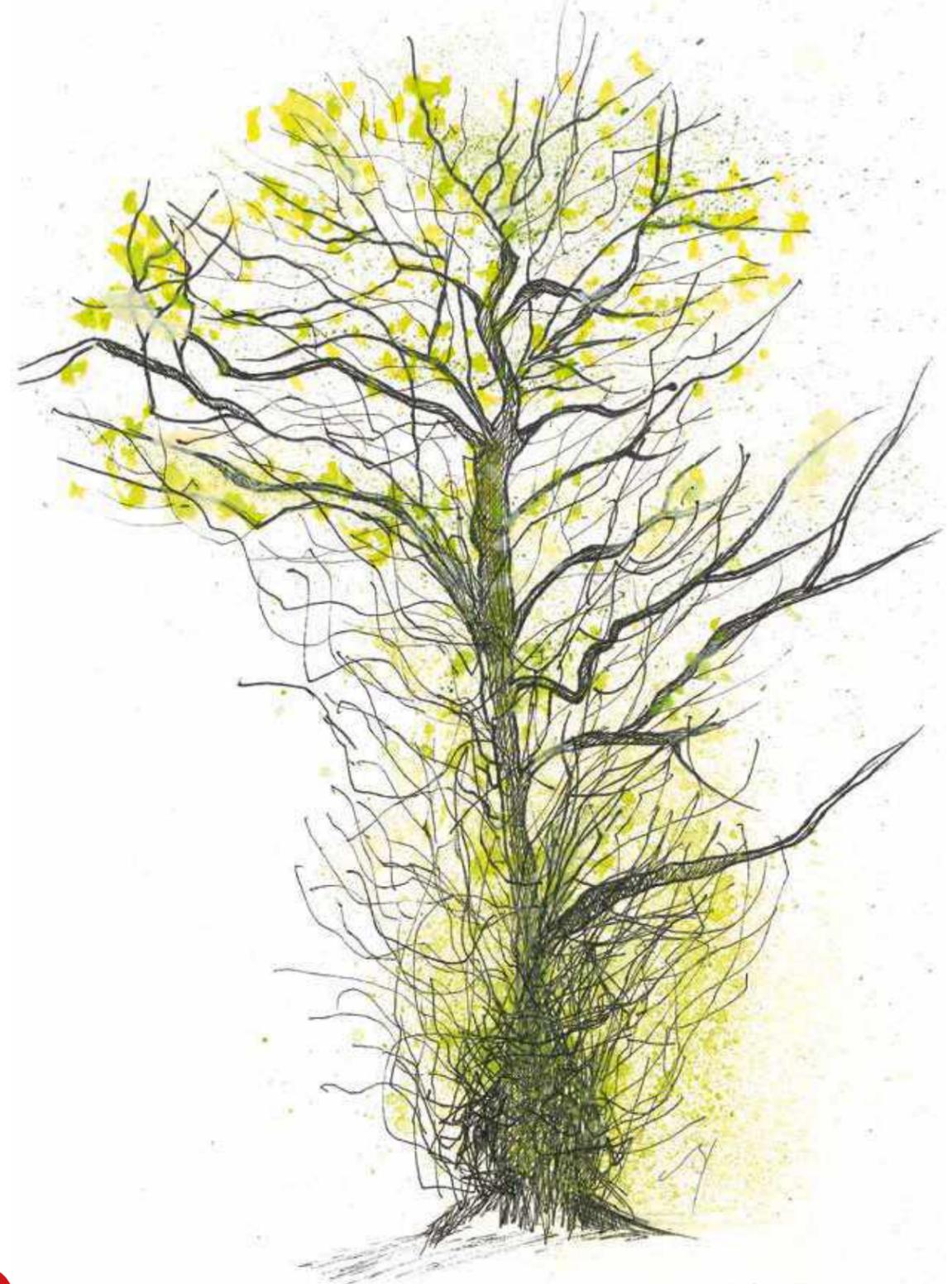
Common Lime sends out sweet smelling sprays of flowers in June, a source of nectar for honey bees. If you stand under the canopy on a summer's evening, you will be entranced by the soporific hum of bees.

This is a long lived tree, up to 500 years; a hybrid between our native Small Leaved and Large Leaved Limes. As it is mainly a sterile hybrid, Common Lime was grown from suckers or cuttings. You will notice the very large 'sprutty' growth of twiggy shoots at the base, which is a feature of this species. The wayward nature of this twiggy growth can occur at most places on the trunk and is a favoured nesting site for birds.

Common Lime is generally the tallest of any of our native trees. It is a very reliable species for coppicing or pollarding, readily sending out new shoots when cut. It has a very strong and fibrous inner bark. This was once used for making ropes, and birds also love these fibrous strings for lining their nest.

Limes became a very popular tree for estate planting by early landscapers from the 17th century. In spite of the wayward growth of all the older trees, they were commercially propagated for estate planting and along roadsides.

Lime Tree



10

Where to Find This Tree

Walk up the raised track that goes between the Cricket Club grounds and the children's playground. The track starts up the hill and passes the skate park on your right. This Lime is on the right, at the junction with the next path that crosses from left to right. It is not a clean trunked tree; you can identify it easily because of the 'sprutty' growth of side shoots near the base. The path in front of you is not an original estate path but was only created about 1935.

Norway Maple: *Acer platanoides*

Centre Vale's Norway Maples

Norway Maple was heavily planted in our park woodlands in the 1930s and 1940s. It was a good choice of tree in the industrial areas as it tolerates poor soils, smoke, and urban pollution.

Since planting, all are growing vigorously into stately trees, producing plenty of young seedlings, many of which are appearing in areas of the woodland that have been opened up by recent management and the loss of diseased Beech. Its seedlings readily fill any gaps on the woodland floor.

The roots do grow very close to the surface, starving other plants of moisture, but this isn't a problem on the water retaining clay soils of Centre Vale and in Todmorden's damp climate.

The leaves are similar in shape to the one on the Canadian flag. The best way to distinguish it from Sycamore is by the long needle-like points at the end of each leaf lobe, also by the red buds in winter compared with the green ones of Sycamore. Both species have similar 'helicopter' winged seeds, designed to be carried by the wind well away from the parent tree.



Once you see the distinctive difference between the Norway Maple leaf and the Sycamore you don't need to look very far to find Norway Maple seedlings in Centre Vale woodland.

Norway Maple in More Detail

We call this tree the Norway Maple because it was first introduced from Scandinavia. It is common throughout Central Europe, including the foothills of the Alps. They are found in the Arctic Circle and also as street trees in Alaska.

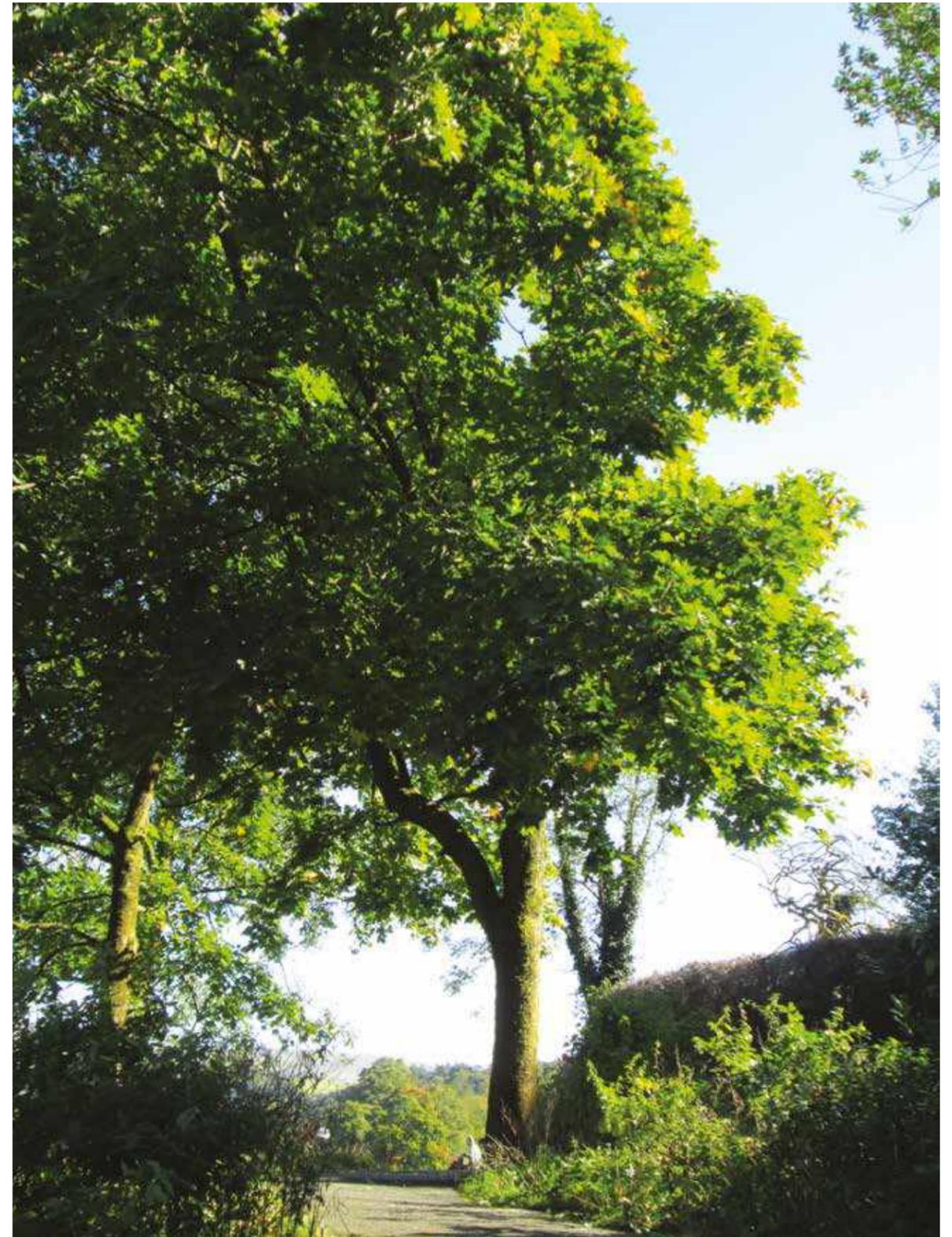
It was first recorded in Britain in 1683 by botanist James Sutherland when he listed all the trees he moved from the botanic garden at Holyrood Palace to Trinity Hospital, which was demolished in the 1840s to make way for Edinburgh's Waverley station.

This is a very fast growing species, with a straight trunk that is popular with landscapers and for amenity planting. The wood of Norway Maple is hard, strong, and smooth textured. In Europe it is harvested and used for furniture, wood-turning and wood-carving. In Britain it is not planted as a timber producer because it does not reach the useful dimensions found in the related Sycamore, which has similar uses.

Not being grown for timber, it is grown instead as a very desirable ornamental tree for the early acid green flowers in mid-April, two weeks before the leaves appear, and the bright butter-yellow and crimson leaves in the autumn. The tree stands out from all others in the woodland in both these seasons.

Unusually, the tree shows every possible arrangement of sex. Some are single sex trees, a few have branches of each sex and some flowers may open as female then become male. The bark is shallowly grooved vertically and easily distinguished from the Sycamore's plate-like bark.

Norway Maple



Where to Find This Tree

There are many Norway Maples in the park now as they spread so easily. An easy one to identify is at the start of the path into the park from the top Sports Centre car park. The Norway Maple is the first tree you come to on your right.

Sessile Oak: *Quercus petraea*

Centre Vale Sessile Oak

The Sessile oak grows well in the North and North West and, in earlier times before coke became the common fuel, this wood was used to make excellent charcoal. The trees were coppiced; the multiple stems cut, stacked and dried, then partially burned to make charcoal.

Because charcoal had been in high demand for blacksmiths' forges and furnaces, photos of Centre Vale from the mid 19th century show the hillside almost bare of trees. After charcoal burning ceased, farm meadows were created and used for grazing.

There is an abandoned charcoal burning platform very close to our chosen tree, and once you know what to look for you can see several of the old curved charcoal platforms cut into the Centre Vale hillside.



Our Oak tree lives above Lovers Walk and Carr Laithe, in a re-wooded hillside. Nothing could look more natural, but all these Oaks and Beech of a similar age were planted when this upper woodland was extensively modified and re-wooded in the 19th century. The woodland floor is covered with bluebells in spring, together with wood anemones, wood horsetail and greater stitchwort, making it well worth a walk up to this level of Centre Vale, taking the woodland paths.

Sessile Oaks - Life and Times

Oaks are easily recognised by their distinctive acorns in autumn. Not as well known are the lovely green tassels of male catkins that hang down from the twigs in May. The leaves are longer than their width and have lobes on the sides, the lower of which taper into a stalk that attaches the leaf to the twig. However, the acorns of these Oaks attach directly to the twigs without a stalk – hence “sessile” meaning stalkless.

It can be a very long-lived tree with many notable examples in Britain that are up to 1,000 years old. Indeed, there are more ancient trees in this country than in the whole of Europe. The Sherwood Forest Oak is well known through its association with Robin Hood.

Oak only grows well in sunlight and needs plenty of space to achieve large branches and a full crown. Acorns seldom germinate within woodland, as they need the extra light of open glades or woodland edge. This is where young saplings will be found. The Jay is the bird essential for spreading the acorns, which it buries outside the wood to be dug up and eaten in the winter. Jays can remember where they have buried hundreds of acorns, but always forget a few.

Often trees were deliberately cut, or pollarded, above the height at which deer browse, and the re-growth could be cut repeatedly over many centuries. Oak trees respond quickly after being cut in this way, as the trunk contains dormant buds which grow when increased light reaches them. These ‘working trees’ often had bark stripped from the cut branches to be used in big vats for tanning leather.

Oak was the ideal timber for shipbuilding, being very durable and resistant to rot. The tree naturally produces huge curved branches. To meet future requirements, dockyard surveyors would visit woodlands to select and mark these curved ‘knees’ many years in advance.

Acorns seem to have been part of the diet of hunters in the Stone Age, due to their high calorie content. In some areas pigs are let out into the woods in autumn to feed on acorns, the practice known as ‘pannage’. It is important to realise acorns are toxic to horses.

Sessile Oak



12

Where to Find This Tree

Walk up the hill to the site of Carr Laithe, which is above the arches that can be seen from the Old Coach Yard. Take the path up to the next level, signed to Carr Farm; either up steep stone steps (be careful) or the main path to the finger post signing left to Carr Farm. Walk past the ruin and the pond, and up steps to the woodland path. This Sessile Oak is not far along on your right.

Centre Vale Woodland Management . . .

Why not leave the woodland alone to manage itself naturally? This is a good question often asked.

Before we answer, it should be acknowledged that all woodlands in this country have been managed or modified since their appearance after the ice-age ended around 10,000 years ago. Through numerous changes in climate over millennia, and disturbance by large herbivores, the woodlands have continued to change. Their future survival is dependent on disturbance and the ability of trees to 'move about' via self-seeding.

Woodlands have seen thousands of years of intervention, planting and harvesting for fuel, building, and tool making. Coppicing and

Pollarding are ancient crafts to utilise the re-growth of many new stems after cutting. With Coppicing the stems are cut close to ground level, while with Pollarding the stems are cut above the height of browsing animals.

Much of Centre Vale woodland is not "natural", in that it was deliberately planted with a very limited range of tree species. These woodlands were then left undisturbed and unmanaged for many decades. Some species, such as Beech and Sycamore were vastly overplanted, which is now causing ecological problems due to the deep shade they cast. Beech trees, in particular, prevent any other species growing under their canopies. In Centre Vale, many Beech saplings were still being planted only 25 years ago, making matters even worse.



Bare Woodland Photo

This shows an area of woodland after some management to thin out the crowded trees. Note the stacked logs and brushwood left for habitat, making ideal places for birds such as Robins and Wrens to search for insects.

You can see how sparse the ground flora had become after excessive shading over many decades. "Leaving the woodland to manage itself" resulted in severely reduced light levels on the woodland floor; grasses and flowers have disappeared and there is a loss of the diverse ecology within the woodland.

. . . and Regeneration

Management of the Centre Vale woodland began about ten years ago, involving the removal of some trees and coppicing others. As a consequence, a multi layered under-storey of smaller species can flourish as light reaches the woodland floor through the canopy. This work has continued each winter since then and is ongoing.

As a result, the transformation has been amazing, with flowers such as Bluebell, Stitchwort and Wood Anemone appearing for the first time in many decades. Birds have returned in greater numbers and bird song in springtime is now a delight. Continuing management for regeneration is vital for Centre Vale woodland.

Unfortunately the 180 year old Beech trees are beginning to decline in health, and many on the

steep hillsides are falling over, causing dangerous landslips. Several such losses took place in the year 2020 and more will follow. Although it is a tragedy to see the loss of these magnificent trees, it does present an opportunity to encourage natural regeneration of more suitable species for these steep slopes. This will provide a ground flora that will help knit together these unstable soils, minimising landslips and flooding.

The natural regeneration by new saplings of species such as Oak, Hawthorn, Willow and Alder, is already adding to the variety of habitat, and this is ensuring the woodland's future. The mature trees have benefitted from increased space. This also enables us to appreciate them even more, and gives the opportunity for natural regeneration that will help to secure the woodland's future.



Regeneration Photo

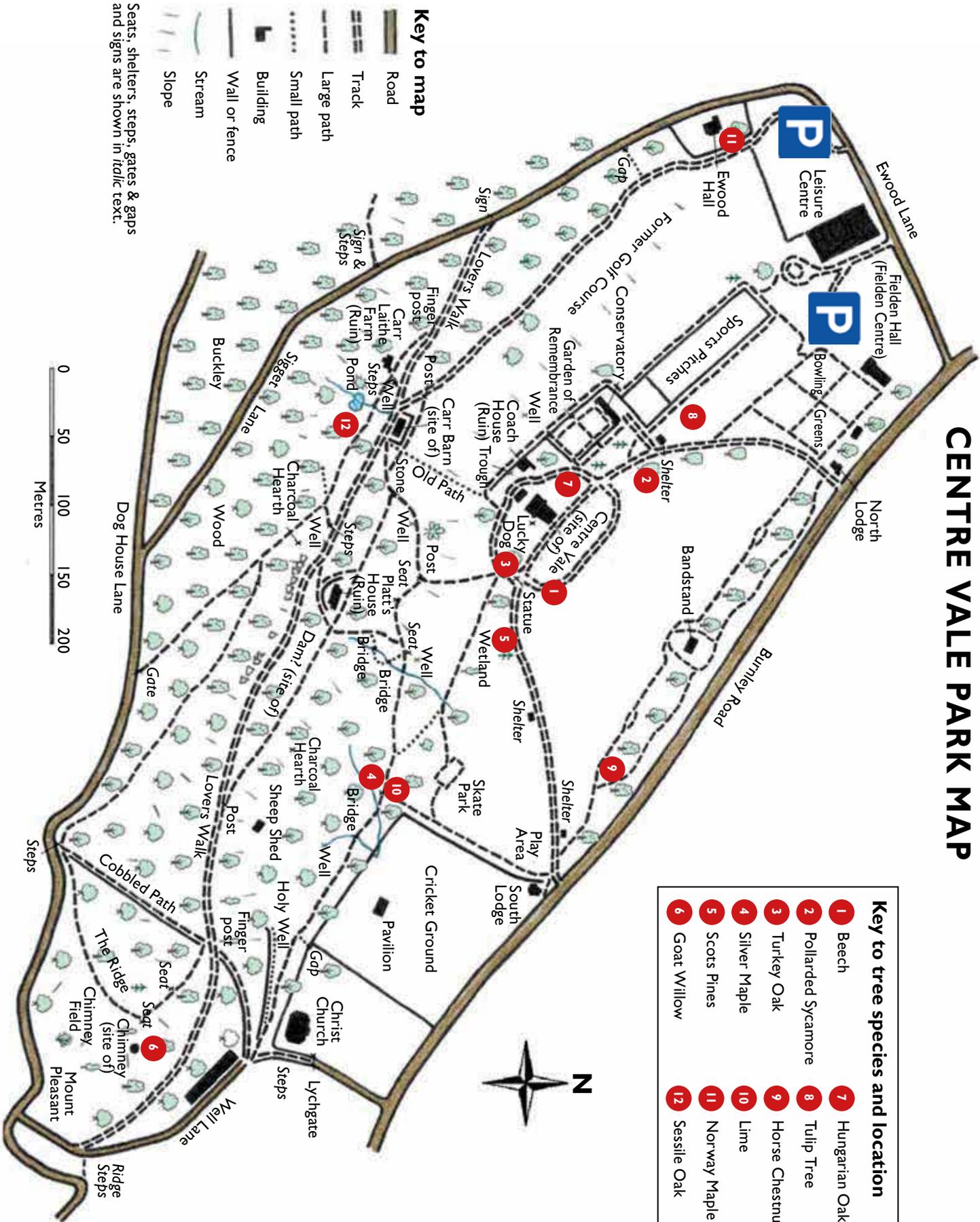
After only four years the difference is amazing. The same mature trees can be seen in each photo, but their surroundings have been transformed, with an abundance of wild flowers and grasses increasing biodiversity. Their roots have created

a healthy soil which retains rainfall in times of flooding. The existing mature trees are now much healthier with room to expand, while the addition of self-seeded saplings and shrubs brings a more secure biodiversity to the woodland.

CENTRE VALE PARK MAP

Key to tree species and location

1	Beech	7	Hungarian Oak
2	Pollarded Sycamore	8	Tulip Tree
3	Turkey Oak	9	Horse Chestnut
4	Silver Maple	10	Lime
5	Scots Pines	11	Norway Maple
6	Goat Willow	12	Sessile Oak



Seats, shelters, steps, gates & gaps and signs are shown in *italic* text.