9. Common Alders are vigorous trees which have very large leaves, but the infected trees are weaker. This is a close-up of the young vigorous shoot of a Common Alder. Like all the Alders found in the UK, the buds sit on short stubby stalks - one of the ways you can spot Alders all year round, particularly if there are no old woody alder cones to be seen on that particular tree! The small lumpy orange spots are lenticels for "breathing"!



11. The Common Alder is stronaly linked to wet soils and is found naturally in the UK in fens, wet vallevs and along springs in woods, and sometimes high on damp lowland plateaux. It was also widely planted around Gunpowder works. including the huge Oare Gunpowder Works near Faversham. In times of war it was a highly soughtafter tree, as powder stocks declined!



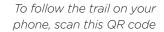
10. This is a fairly typical outline for a Common Alder tree, an increasingly uncommon sight along Kent's river valleys. The tree is not of great value nowadays but the charcoal was regarded as excellent for making gunpowder in Elizabethan times – and it took a ton of wood to make a ton of powder! The wood rapidly turns a bright orange colour when cut and exposed to the air.



12. Here is a young Common Alder showing fresh infection by Phytophthora. See if you can spot any of the half dozen trees around The Ocean that are showing signs of fresh attack this year? The disease has had a major ecological impact upon Alders in the lowlying clay vales and river valleys of Kent, and it is still spreading throughout the UK. Will it be the end of the native Common Alder?



On the Eastern side, watch out for a rare hybrid, Grey x Common alder!





This leaflet was produced as a legacy of the Kent Heritage Trees Project, a five year project funded by the Heritage Lottery Fund celebrating Kent's tree heritage. A significant achievement of the project was the recording of over 10,000 heritage trees – trees that are old, wide, rare or have a story to tell. Visit tcv.org.uk/kentheritagetrees to view the tree finds and map.

This is one of a series of leaflets created by volunteers to encourage people of all ages to explore the outdoors, learn about nature and heritage trees and enjoy the Kentish countryside.

The Kent Heritage Trees Project was developed and run by The Conservation Volunteers (TCV), a charity that works with thousands of people across the UK, helping them to discover, improve and enjoy their local green spaces and by doing so create happier and healthier communities.

ww.explorekent.org

Kent Heritage Trees Project is managed by

The Conservation Volunteers Singleton Environment Centre Wesley School Road, Ashford, Kent TN23 5LW T: 01233 666519



Guide written by David Carey.

TCV The Community Volunteering Charity

© 2016. Registered Office: Sedum House, Mallard Way, Doncaster DN4 8DB. Registered Charity in England (261009) and Scotland (SC039302) Registered in England as a Company Limited by Guarantee No 976410 VAT No. 233 888 239

[LLTT/TH-RB01.16]

Kent Heritage Trees Project

Leybourne Lakes Tree Trail

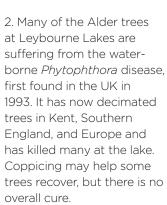






Cross the footbridge and follow the main path anticlockwise around 'The Ocean' to enjoy these amazing trees, during your healthy half hour walk!

1. This is one of a series of auides designed to help you enjoy, and learn about the wonderful trees on a 30 minute walk around Levbourne Lakes. This guide focusses on the Alders you can see by the waterside. Guides for the other species found around the largest of the lakes, known as 'The Ocean' are available. We start at the footbridge. walking straight ahead on the path, leaving the watersports centre to the left.







3. Just beyond the swan sculpture keep an eye out for the neat heart-shaped leaves and large cones and catkins of the **Italian Alder (1)**, an imported tree commonly planted in towns and shelterbelts. The yellowish male catkins can grow up to 10 cm. (4 inches) long by February.



5. The strange wooden cones of all Alder trees are unique in flowering trees, resembling the ancient cones of the true Conifers, such as Pines. They help to identify the trees all year round. Note the tough, bright green, unripe male catkins of autumn on this Italian Alder, still to grow into the droopy pollenbearing display of early spring.



4. Italian Alders are rapid growers with straight stems. The wood is quite light and can be used for furniture and plywood. The trees have now become part of the Kentish landscape, as they have often been planted as windbreaks in the orchards of the "Garden of England". Italian Alders originally come from the Apennine region of Southern Italy - and also from Corsica, where the leaves are rounder.





7. Here is a tree to look out for! This is the third species of Alder you are likely to see in Kent, the **Grey Alder (2)**, another introduced species. There are only a few of these trees here, scattered on the southern and eastern sides of 'The Ocean'. The young shoots are covered in light grey down, and the toothed and pointed leaves are a dull green above, and greyish below.





6. One of the reasons Alder trees grow so well, even in wet soils, is their partnership with a bacterium that forms lumpy nodules on their roots. The bacteria fix nitrogen from the air in a form that the plant can use as fertiliser, while the plant feeds the bacteria in return. The trees can then grow right down by the water's edge, where nitrogen levels are low in waterlogged soils.



ultra-fine emery paper to the touch. Scattered all around the sides of The Ocean, this is the only native species of Alder in the UK, and used to be much commoner before the impact of the disease Phytophthora alni (a pathogen that causes lethal root and collar rot in Alders). Alder has its own unique type of woodland on wet soil - "Alder carr"! Alder wood is strong but light and so historically has been use for clogs and brush-heads!