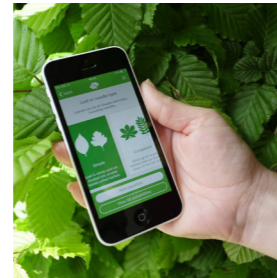
 The path continues, becoming tree lined as you pass gardens to the left before reaching another open field edge. Follow this to enter Rothamsted Park.

Turn right to follow the boundary path through the park, with the Rothamsted estate to your right.

Keep along this route until you meet the tree lined avenue again where you turn right, soon reaching the main estate access road where you turn left to return to the start point.

What's that tree?

There are many books and several phone apps that can help with tree identification in the UK. We recommend the Woodland Trust free phone app Tree ID.



Rothamsted Research is a partner along with the Woodland Trust and others in a consortium study to explore the benefits of silvopasture (trees in pasture fields) for livestock farmers.



Rothamsted Tree Trail


Discover the huge variety of trees on the Rothamsted estate and learn how our science is helping to preserve them on this easy-going trail.




Start: The public car park by the restaurant at Rothamsted Research, facing north towards the main Rothamsted campus.

Before leaving the car-park take a quick look behind and to the left where you will see a stand of **willow** bordering the conference centre carpark. These young trees come from the **National Willow Collection** which is based on the Rothamsted Estate. Set up after the First World War to ensure future national supplies of basketry materials, it contains over 100 different species. Today, Rothamsted's scientists are studying these fast-growing trees both to explore their potential as a biofuel and to probe their unique biochemistry for new industrial products and drugs, including a compound that may be effective in fighting cancer.




 With the restaurant on your right, Walk 30m north to the junction with main site access road. The curved Centenary Building is ahead to your right.

Dating from 1843, **Rothamsted Research** is the world's oldest agricultural research institution. The 57-year partnership of founder John Bennet Lawes, the owner of the Rothamsted Estate, and Dr Joseph Henry Gilbert, a chemist, established the principles of crop nutrition and today's scientific agriculture. The current site has an extensive range of modern laboratories and 400 hectares of experimental farmland.


 Turn left, slightly uphill and continue up through the site, past sports facilities, until you reach the avenue of **lime trees**, where you turn left.

Lime or **linden** is commonly found in UK parkland. The leaves attract swarms of aphids which suck the sap turning it into honeydew. Ants farm the aphids for this sweet treat. As you progress down the avenue, keep an eye out for a sessile oak and two London plane trees among the limes. The latter is commonly seen across the capital and the south east of England and is a hybrid of uncertain origin.



 Continue to a T junction. Turn right here and then, after 100 m, bear left and pass through the black metal gates into the grounds of Rothamsted Manor. Follow the drive, bearing left after 50 m.


As you walk through the manor grounds you will see a range of impressive trees. Keep an eye out for a line of five **wellingtonias (giant sequoias)** with their distinctive spongy bark. Also noticeable are yew trees, which are famously long lived and were used extensively in the middle ages to make military long-bows.

 Turn right, following the path into the woods, then bear left and continue to a metal gate. Go through and turn right down the track until you reach another kissing gate.



The narrow band of woodland immediately ahead is **Broadbalk Wilderness**. It was part of a wheat field until 1882 when, as an experiment, it was fenced off and left. It is now an area of deciduous woodland, clearly demonstrating the ecological process of succession where one set of species naturally replaces another over time.



 After the gate turn left along a signposted bridleway. Passing two **hornbeam trees** on the left, follow this path over fields, crossing a farm track with an impressive **oak** to your right, until you reach Knott Wood.

Hornbeam is renowned for its hardness and was used to build Roman chariots.


Beech predominates in the woodland but look out for a large **ash** tree directly ahead as you approach the wood. **Hawthorn, elder** and **hazel** flourish in the understory by the path.

Beech is monoecious, meaning both male and female flowers grow on the same tree. In April and May the tassel-like male catkins hang from long stalks at the end of twigs, while female flowers grow in pairs, surrounded by a cup.

Hazel has long had spiritual associations - it is said to have been the preferred wood for druid's magic wands. It is also an important species of food for many animals. The nuts or cobs are eaten by small mammals and also by woodpeckers, nuthatches, tits, wood pigeons and jays.




Rothamsted scientists are studying the complex collection of microbes and fungi that live in soil and are vital to plant health. A cubic metre of soil will contain many millions of microbes and up to 20,000 km of fungal filaments called hyphae. In woodland, tree roots and soil fungi are so interconnected that they appear to chemically communicate with one another - a phenomenon some scientists have dubbed "the wood wide web".

 Follow alongside Knott wood until you reach the old railway track known as the Nicky Line. Here turn right and follow the track for 0.4 km/1/4 mile. At a sign for Rothamsted park turn right again.

The hedgerow to your right contains a mix of **blackthorn, hazel** and **hawthorn**.



Blackthorn produces deep purple sloe berries in autumn, popular for making wine and preserves. Hawthorn berries are red and inedible to humans, but vital for wildlife.

 After following the field boundary, take a short dog leg left then right to continue on a signed path.

Two fine **oak** trees guard this path. An English icon, the oak is currently under threat from acute oak decline, a complex condition that is poorly understood. Rothamsted's plant pathology experts are part of a national project to help find the causes of this disease and look for solutions.

