

# St Luke's Campus Tree Trail



### Map key

Pinus nigra (Black Pine) Acacia dealbata (Silver Wattle) B Liquidambar styraciflua (Sweet Gum) Catalpa bignonioides D (Indian Bean Tree) Magnolia grandiflora (Southern Magnolia) Fagus sylvatica 'Riversii' (Purple Beech) Juglans nigra (Black Walnut) Taxus baccata (English Yew) Platanus x hispanica (London Plane)

### Walks

There are a number of self-guided walks to enjoy around campus. For further information and to download these guides, please visit exeter.ac.uk Q 'grounds'



The University of Exeter Streatham and St Luke's campuses, fields and woodland areas contain over 10,000 mature trees managed by the Grounds staff.

A number of the largest were collected as part of expeditions by famous plant hunters such as Wilson, Lobb and Douglas and date back to the middle of the 19th Century. Cumulatively the exotic and native trees on campus make a significant contribution to health and wellbeing. They help reduce water run-off, keep temperatures lower, store carbon and lock up other pollutants. They provide habitats and food source for a variety of birds, insects and mammals.

This guide has been developed to enable some of our significant trees to be visited and enjoyed. It is not a comprehensive list, but provides a flavour of some of the elements that contribute to the look and feel of the estate resource. It can start/finish at any point around the route.

### **I-tree information**

I-tree is a state-of-the-art tree evaluation software that converts measurements such as tree height, girth and canopy spread into an economic value of the natural benefits they provide.

The i-tree survey of the trees on the Exeter campuses generates the following headline environmental benefits:

- Removes 2 tonnes of pollutants each year (£11,728 pa)
- Stores 1,951 tonnes of CO<sub>2</sub> (£125,000 pa)
- Diverts up to 4,217 cubic metres of storm water run-off from sewers (£6,394 pa)
- Sequestrates 36 tonnes of carbon (£2,300 pa)
- Total annual benefits £145,222

This figure excludes impacts which can't be so easily measured, such as aesthetics, noise mitigation, habitats, the health impact of naturally cooling buildings and wellbeing trees generate in an urban setting.

The University of Exeter has adopted a tree management policy designed to sustain tree cover and the positive contributions they have to our campus. We also consider the condition and lifecycle of trees during each of our developments on campus. This helps ensure options to prune or remove trees are balanced against retention or mitigative planting, post development.

### Visiting the campus

The Line 4 bus stops at the St Luke's Campus. For further information on parking and directions to the campus please visit:

exeter.ac.uk Q 'directions'

Cross Keys is situated on the St Luke's Campus and offers a range o options whether you're dropping in for a midmorning coffee or meeting riends or lunch. Please see our website for a full list of places to eat and drink – exeter.ac.uk Q 'eat and shop'

### **Guidance for visitors**

- Please remember that the grounds and roads on the University are private and you visit at your own risk
- Children must be supervised at all times
- Please keep to paths, do not disturb the wildlife or pick flowers and do not cause damage to property, trees plants or lawns
- We do not allow barbecues, fires or camping
- No skateboarding, rollerskating, aggressive cycling or any other activities which cause damage or annoyance
- Please listen to any additional advice given by the University staff
- Access may be restricted or permissions withdrawn at any time
- Dogs must be kept on a lead at all times
- Dog owners are required to clean up after their dog

# A Pinus nigra (Black Pine)





Not native in the UK this Pine is native across areas of Europe, such as the Alps, Corsica, Greece and Asia.

Introduced to the UK in the 19th Century, it is often found as a windbreak or as a specimen tree in larger gardens.

It has various varieties and forms but most are characterised by very dark brown to black fissured bark, giving rise to its common name.

Pines are grouped according to the number of needles they have in their sheath. This is a two needle Pine with dark green needles.

The male flowers produce pollen around May which often spreads over a wide area. The female flowers appear at the end of shoots, tending to be dull pink. Cones are ovoid which change from yellow to brown as they ripen (5-8cm).

This is a good example of the tree species, as it has a heavily branched wide crown.

## B Acacia dealbata (Silver Wattle)





The Acacia is native to southern Australia and Tasmania. It was originally introduced to the UK in the 1820s and requires a sheltered spot to thrive, as consistent temperatures below -5°C can kill it. It is, however, fast growing given the correct conditions.

Its popularity is its profusion of fragrant bright yellow flower racemes in Spring, but it is also an evergreen species giving all year round interest with its greenish blue leaves.

The original tree in this location was severely affected by frost but it recovered by shooting from the retained stump. The original tree is now out-competing the replacement planted beside it in the sheltered spot.

# THE GUIDE

# C Liquidambar styraciflua (Sweet Gum)





This tree is native to east America and was introduced to the UK during the 17th Century. It comes into its own in Autumn when its leaf colour is simply spectacular; it glows with red and amber leaves.

At other times of the year it can be mistaken for a Maple due to its similar shaped leaves.

It makes a spectacular specimen tree, but it does require a fertile soil to thrive.

# Catalpa bignonioides (Indian Bean Tree)





This tree is a native of north America introduced in the 18th Century. It has several attributes which make it interesting; it comes into leaf very late in the season but produces very large leaves when it does so. These are followed by exotic flowers that are very orchid like. In turn, every Autumn, these are followed by seed pods which look like oversized vanilla pods and contain the beans.

It does require a sheltered spot to thrive and seems to do well in its position in the Quad.

# Magnolia grandiflora (Southern Magnolia)





A magnificent evergreen Magnolia native to the North American states such as Carolina, Florida and Texas. Since its introduction in the 18th Century, it has proven to do well as a wall shrub in a sheltered south facing position with full sun and in fertile soil.

The leaves are glossy and leathery on top and reddish brown underneath. It is, however, the magnificent large creamy white flowers, which can last from early Summer to Autumn with their beautiful fragrance, that single the plant out for praise.

# Fagus sylvatica 'Riversii' (Purple Beech)





This is one of our well known native trees, which has several magnificent named varieties and clones that are grouped in the Purple Group. It is a significant feature of the campus and thrives in its position.

The leaf colour is particularly impressive but its size and structure in the surroundings is also worthy of note.

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## G Juglans nigra (Black Walnut)





The Black Walnut was introduced to the UK from America during the 17th Century. It is related to our own native Walnut and will produce an abundance of nuts as it matures, which are often difficult to get out of the shell. Its bark is much rougher and more fissured than our native Walnut Juglans regia, which has been in the UK since Roman times.

It has been noted as having a tolerance of soil borne fungal pathogens such as Armillaria (honey fungus) and has been selected for this spot due to other trees being adversely affected by fungal infections.

# Taxus baccata (English Yew)





One of our native evergreens, it is extensively grown as a hedging plant as well as a specimen conifer. When it fruits, they are fleshy with a brightly coloured red cap (aril) around a poisonous green seed. The leaves are deep green and the needles are almost black.

The Yew has an historical close association with church yards, so it would have been appropriate planting when St Luke's was an ecclesiastical teaching college. It remains an important feature of the campus today.

# Platanus x hispanica (London Plane)





The London Plane has been recorded in the UK since the 17th Century and remains a very popular street tree in cities and urban areas. It is noted for its tolerance to air pollution and recovers well from urban pruning techniques including pollarding.

Significant characteristics include the leaf shape and a flaky trunk bark, as well as rounded fruit clusters that resemble baubles.

The trees in the car park area were generally planted at the same time; variants in height and vitality are influenced by the available area for tree roots to take up nutrients and water, as well as the tolerance of salt applied to the car parks during severe weather.

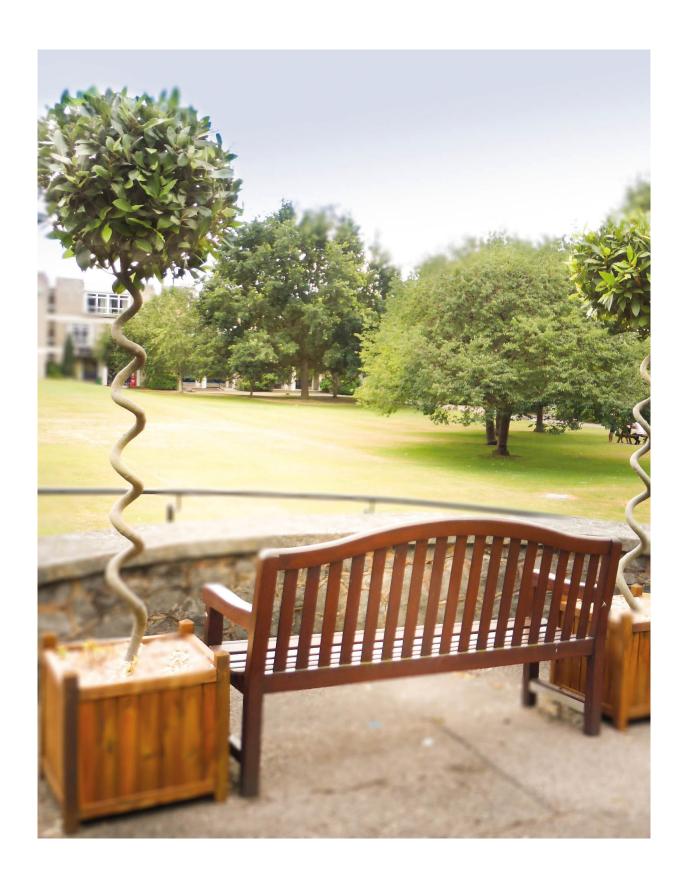
### **Summary**

We hope we have provided an interesting representation of the range of trees on St Luke's Campus.

We have examples of trees from most of the continents of the world and also representatives of angiosperms (flowering trees) and gymnosperms (cone bearing trees). In combination they provide long periods of interest and a variety of habitats for biodiversity.

The landscape and trees that grow on our University campuses are living organisms. They are subject to damage, particularly during severe weather. They can also be impacted by pest/disease outbreaks, requiring positive management intervention. Typically this will include pruning of branches and crowns or the occasional removal of trees in the interests of safety or pest/disease control. Similarly the importance of some roads and footpaths on the estate may necessitate pruning or occasional felling, to preserve access/egress on principle routes.

Our Grounds Team care for trees on campus throughout the year and in all conditions. They also keep planting to ensure the resource is available for future generations to enjoy.





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