

Fishergate, Fulford & Heslington Local History Society

York University Campus West Tree Walk, July 16th 2022, led by Peter Mott

My colleague Charles Patmore has just produced a fascinating 19-page paper on the history of the gardens of Heslington Hall which will shortly be published, and meanwhile is on our website under the Heslington page. All that remains of the gardens are the shaped yew trees West of the Hall, but on the rest of the estate are still a few large, old trees going back to Lord Deramore's time. When York University was built from 1963, it was thought desirable to introduce a large number of exotic trees, as well as native British ones. Most of the trees are therefore fine 60- year-old specimens.

In 2018, the Campus West landscape was listed Grade II, demonstrating the beginning of contemporary university planning in Britain, integrating status buildings and complementing the 17th-18th-Century designed landscape of Heslington Hall. Over the next 40 years ideas changed: it was part of the planning permission for Campus East built from 2002 to have entirely native species of plants, managed to maximise bio-diversity.

Starting from Central Car Park (opposite the Library): Lime/Linden tree dating back to the Seramore Estate, planted along with the avenue of limes outside Heslington Hall - (*Tilia x europaea/vulgaris*) "x" means hybrid, in this case *T. platyphyllos x T. Cordata*; unlike most hybrids it is fertile, and so counts as a species in its own right. Native. Oldest record of coppiced lime wood 3,800BC in Sweet Track, Somerset

Oak (*Quercus sp.*) American. There are only 2 closely related species of oak native to UK, and only 10 in Europe, whereas there are 57 species in N. America. This is typical of the flora (and fauna) of the two continents because of the ice ages: as the ice sheets came South, plants encountered a series of barriers to migration: the Mediterranean Sea, then mountains and deserts to the other end of the Himalayas. In America and China, plants simply migrated South, and then returned North as the ice retreated.

Sycamore (*Acer pseudoplatanus*) introduced C15/16th; palmate leaf; 2-winged fruit; grey flaking bark. Name from sycomore fig, that Zacchaeus climbed outside Jericho to see Jesus (Luke 19:1-10); when the missionaries moved into Northern Europe and told this story, they were asked what was a sycamore? The missionaries looked round for a tree with similar-shaped leaves, and said it was that!

Ash (*Fraxinus excelsior*) in olive family, with pinnately compound leaf. Native. Widely suffers from ash die-back disease recently imported from Europe.

Hawthorn/May Tree (*Crataegus monogyna*) - fruit a haw; native; in rose family; widely used in hedging

Outside Berrick Saul building: Tulip Tree (*Liriodendron tulipifera*) - *Magnolia* family, flowers like tulips. From N. US; leaf shape 4-lobed, so midrib does not end in a point.

Hornbeam (*Carpinus betulus*) - native to SE England, in the hazel family; name from Old English meaning "hard(wood) tree"

Horse Chestnut (*Aesculus hippocastanum*) - introduced C16th from SE Europe; not related to Sweet Chestnut, but named after horseshoe-shaped leaf scar; widely suffers from leaf miner (insect), leaf blotch (fungus) and bleeding canker (bacterium).

Maritime Pine (*Pinus pinaster*) - from Mediterranean region; leaves in pairs on short shoots. Conifers, along with cycads, *Ginkgo* and a few others are **gymnosperms** (naked seeds), which are pollinated by a pollen drop mechanism: the small young female cone oozes a pollen drop through its scales, on which the pollen lands; the drop is then absorbed into the cone, taking the pollen right next to the ovule for fertilisation. The cone grows much bigger, and in 2 years time becomes woody; in fine weather the scales part and the winged seeds are scattered. In contrast to flowering plants (**angiosperms** = covered seeds) where the ovules are entirely covered in an ovary, which ripens into a fruit (botanical definition, including peas and cucumbers, whatever your greengrocer may say!). The pollen stays on the stigma, and the pollen tube has to grow down the style to the ovary.

Cherry (*Prunus avium*) - native; reddish bark with horizontal bands of lenticels

Swamp Cypress (*Taxodium distichum*) - SE US, deciduous conifer, grows in damp situations

Caucasian Wingnut (*Pterocarya fraxinifolia*) Walnut family, long catkins mid-summer

Sweet Chestnut (*Castanea sativa*) - in Beech family; native to Caucasus; cultivated by ancient Greeks; introduced to Britain in Middle Ages for timber (NB coppicing) and fruit

Field Maple (*Acer campestre*) - native; fruit 2-winged

Goat Willow (*Salix caprea*) - native; leaves oval

Crack Willow (*Salix fragilis*) - native, leaves long, pointed; wood cracks readily, in contrast to White Willow - *S. alba* - used for making cricket bats

Alder (*Alnus glutinosa*) - native; in birch family; fruit in catkins (look like cones), grows in damp places

Whitebeam (*Sorbus aria*) - native, with white of hairs on underside of leaves; same genus as:

Rowan/Mountain Ash (*Sorbus aucuparia*) in Rose family, native; black buds, leaves pinnate

Dawn Redwood (*Metasequoia glyptostroboides*) thought to exist only as a fossil, until found growing in the grounds of a Chinese temple in 1941; deciduous, grows in damp places

Beech (*Fagus sylvaticus*) - native (to S. Britain); smooth grey bark, thin twigs, sharp-pointed buds

Weeping elm (*Ulmus glabra* "Camperdownii") sport of Wych Elm found c. 1840 in Dundee

Weeping Willow (*S. babylonica*) - from China

Birch (*Betula pendula* - Silver Birch) leaves serrate; bark smooth silver, at base of old trunks base black, fissured into rectangular bosses; cf. Common Birch, *B. pubescens*, similar, but old trunks remain smooth, or just vertically fissured; leaf edges doubly dentate (the teeth are themselves toothed); the Birch was the first tree to return after the Ice Age, about 7,500BC; it has an open canopy, allowing other plants such a Juniper to grow underneath.

Hazel (*Corylus avellana*) - native; fruit a nut; 2nd tree to return after the Ice Age about 7,000 BC (Oak, Elm and Ash arrived about 6,000BC, followed by Alder about 5,000 BC), forming a closed canopy with too dense shade for much else to grow, except spring flowers such as wood anemone or bluebells which grow, flower and set seed before the tree canopy develops.

Oak (*Quercus robur* - acorns sessile on branch) - native (+ *Q. Petraea* - pedunculate i.e. acorns on stalks) - beech family - lobed leaves & acorns - pannage (autumn food for pigs)

Scots pine (*Pinus sylvestris*) - native, evergreen conifer, short shoots with 2 leaves

Beech (*Fagus sylvatica*) - native, arrived about 500 BC, and only spread North to Midlands before overtaken by planting). Copper Beech is a cultivar, selected by gardeners.