

Plane Trees in Battersea Park

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The Plane trees that line the avenues are unmistakable with their broad sycamore-like leaves and flaking bark. They are home to numerous invertebrates and the parakeets have nesting holes in some. Their seeds covering the ground in spring are perhaps, less welcome. These are London Planes – a cross-breed of the Eurasian Plane (*Platanus orientalis*) and the North American Plane (*P. occidentalis*). When and where they were first raised is uncertain. Their Latin name (*Platanus x hispanica*) reflects the view that it was in Spain around 300 – 400 years ago. One of the oldest specimens in the UK is 'Barney', planted in Barn Elms in about 1675. Planes are one of the commonest species of tree in the streets, squares and parks of London.

The trees in the Central Avenue are believed to have been planted around 1909, to replace an avenue of elms. Some of those lining the Carriage Drives are older and may have been part of the original planting in the 1860s. The 550 or so Planes are the

commonest tree species in the Park.

The tallest of our Planes is about 35 metres, and the girth of the widest exceeds 5 metres. Growth rates of trees depend on various factors such as soil conditions, proximity of other trees, light, and weather conditions.

The large leaves have 3 or 5 lobes, with 3 or more teeth on each lobe, and they are very variable. They are attached singly on alternate sides of the stem, distinguishing them from Sycamores which have them attached in opposite pairs (Fig.1).

The leaf stalk and the flower and seed heads have distinctive botanical features. Look closely where the stalk joins a twig and it is expanded like a hood. If removed, next year's bud is exposed. The flower heads are fuzzy balls in clusters of 2 to 4. Each ball is either all male or female flowers (on the same tree). A female head is illustrated (Fig.2) and the red structures are the pistils of each flower that receive the pollen blown to them from the male flowers. Those

insects which are around early in the year may help, but they are not required. The fertilized seeds stay on the cluster and mature over winter to fall in huge numbers about March. Although they have feathery hairs to aid wind dispersal they tend to fall mostly by the trees. Although the trees are hybrid, the seed is fertile so seedlings do occur – one can be seen in the embankment wall at Ransome's Dock. In the city, most seeds end up on paved surfaces and never germinate. In nurseries, Planes are grown from cuttings.

We also have a few Oriental Planes, distinguishable by their deeper lobed leaves (Fig.3). Examples can be seen outside the Old English Garden at the north-eastern and south-eastern corners.

There are some grotesque short but very wide planes (Baobab planes) (Fig.4). They are cultivated forms, once widely planted as novelties in Victorian times. It is thought (but not confirmed) that the deformity is the result of a plant virus infection.



Fig 1. Leaf of a London Plane



Fig 2. Female flower of an Oriental Plane



Fig 3. Leaf of an Oriental Plane (north-east of Old English Garden)

One of the reasons why so many Planes have been planted in London is their tolerance of pollution. The tree's leaves and bark function as filters absorbing pollutants such as nitrogen oxides and particles.

If you look at the trunk of an old Plane tree, you will typically see that on one side the bark has ridges and crevices, and on the other side the bark is smooth, with a mosaic-like pattern, as a result of plates of bark having fallen from the trunk. You could use this feature to navigate, as the smooth side in London is usually the south side. Differing levels of sunlight may be a factor contributing to this, but there may also be other causes.

The bark provides a home to many organisms. You can see different kinds of moss and lichen, and if you look closely you may see tiny mushrooms growing in the moss. The crevices in the bark provide a home for different kinds of spiders, and many trunks have spiders' webs on them. On

some trees you may see pear-shaped spiders' egg sacs (Fig 5). The bark is also a home to slugs, caterpillars, ants, bugs, centipedes, earwigs, barklice and silverfish. In rainy weather you may see snails of two or three species on the trunks. You may see the 7mm Plane tree bug (*Arocatus roeselii*) on the trunks both as a larva and an adult (Fig 6). In the summer you may occasionally see small moths on the bark, such as the tiny Plane tree leaf-miner (*Phyllonorycter platani*), the larvae of which leave blotches on the leaves, and the Spindle ermine moth (*Yponomeuta cagnagella*) which defoliates Spindle bushes.

If you look above you, in particular on North Carriage Drive, on a number of trees you can see the dark fruit bodies of the Shaggy Bracket fungus.

This summer, a powdery mildew has caused leaves on Plane trees to wilt, and the trees are showing very few flower-balls. This may be the result of the trees being in a weakened state after the drought in summer 2022.

The Oriental Planes seem to have been less badly affected.

In the last 10-15 years some Plane trees in London have been affected by the fungus infection, Massaria Disease. This breaks into the wood on the upper surface of older branches where they join the trunk. Other fungi may have paved the way and take advantage to grow and destroy more wood. This cannot easily be seen from the ground, so the trees are now periodically inspected from a platform to be diagnosed before enough damage occurs for the branch to fall.

At www.treesofbatterseapark.org you can access an interactive map which shows the location of some of the trees mentioned here, and also shows trees and shrubs of interest in particular months of the year.

To discuss plane trees, or other trees and shrubs in Battersea Park, contact batterseaparktreewatchers@btinternet.com



Fig 4. Over-sized trunk of a London Plane beside South Carriage Drive



Fig 5. Spider egg



Fig 6. Plane tree bug