



SAM FINCH, Head Gardener, Lytes Cary Manor & Tintinhull Garden, UK

A beautiful sunny Summer morning greeted us on arrival at Peasmarsh Place, with a shimmering lake to the left and the distinctive contrast of the blue window shutters of the house to the front. On walking round to our meeting point, I knew we were in for a treat when a majestic (and sizeable) *Paulownia fortunei* came into view opposite the house. The day began with some introductions from our guides for the day.

Owen Johnson of the Tree Register began with an interesting and valuable introduction to the genus. A small genus of approximately 20 species, limes are fairly easy to spot with typically cordate leaves, bulged on one side, with the petiole often attached to the base of the leaf at an angle. *Tilia* are woodland trees, with leaves able to adjust to differing light levels effectively, particularly in low light, and flowers formed at the top of the canopy.

Flowers typically all have large bracts (anyone who has lime trees in their garden will recognise the familiar sight of pale yellow/green bracts carpeting the ground through June and July), their differing colour providing contrast with the flowers to attract pollinators, and their aerodynamic shape helps the wind pollinated seed to spread when dry.

Bark 'is seldom a colourful feature', with the exceptions of *T. japonica* and *T. kiusiana*, the latter being a consistent exception within the genus.

Tilia species typically hail from 3 continents; Europe, North America and Asia, having been used as ornamental garden trees for several centuries, and used for carving for longer still. The most commonly seen in UK gardens (present company excluded) are *Tilia platyphyllos* and *Tilia cordata* – and their hybrid offspring *T. × europaea*, often grown (often to the frustration of the gardener in the winter) as pleached screening.

Owen's introduction was followed by one from Terence Devonport, giving context to his decision to curate a National Collection, settling on both *Tilia* and *Castanea*, for their good wood and fine flowers, as well as their suitability for the soil at Peasmarsh.

The rest of the morning was spent looking at *Tilia* specimens from around the garden as well as others provided by White House Farm Arboretum (brought by Jack Aldridge), with Owen giving valuable information on each species.

A selection of highlights



1. *Tilia endochrysea*

This is a lovely tree from China with typically asymmetrical cordate/orbicular leaves, with a few large teeth rather than regular serrations on their edges, and stellate hairs on the undersides. Most notable in this species is the often bright pink colouring of fresh new growth.

2. *Tilia oliveri* A beautiful Chinese species, characterised by very pale undersides of the leaves covered in numerous white stellate hairs, with small, regular saw-like serrations on the leaf margins. While it is similar to *T. tomentosa*, *T. oliveri* has more truncate leaves, with more dramatic longitudinal fissures in the bark with age. There are plans at Peasmarsh to plant an avenue of these striking trees on site, which, as far as anyone at the study day was aware, would be the first of its kind.

3. *Tilia americana* A particularly large-leaved (up to 25cm long) species from North America, with margins densely serrated, up to 40m tall or more. This is a species with great genetic diversity which has led to disagreement amongst botanists, taxonomists and horticulturists over the years ('This is a notoriously

variable tree, which continues to vex taxonomists', from *Trees and Shrubs Online*, do have a look for more information on there with regards to specifics on taxonomy amongst the species).

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4. *Tilia callidonta*

A relatively new introduction to the UK, first brought back from Sichuan in 1993 by Donald Piggott, *T. callidonta* is another attractive tomentose species. The leaf margins are very slightly but regularly serrated, with pale butter-yellow leaf margins contrasting well with the grey undersides of the leaves and pale grey bark that becomes rigid with age.



5. *Tilia cordata* 'Len Parvin'

A very charming, floriferous, particularly small-leaved form of *cordata*. Found by its namesake in the Wye Valley, it seems a strong choice as an ornamental garden tree, along with *T. kiusiana*.

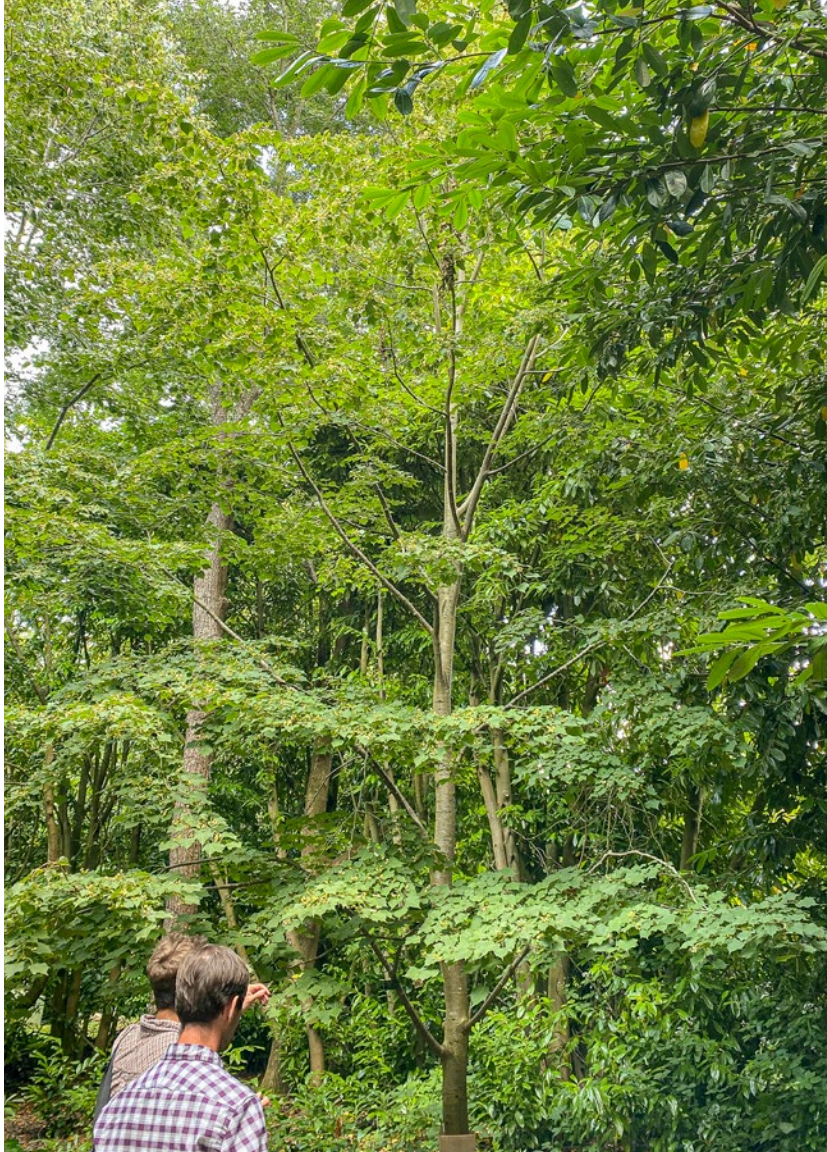
6. *Tilia kiusiana* This graceful species provided some morphological respite during the day, as unlike so many members of the genus, *kiusiana* looks distinct from other limes; the short-stalked, narrowly ovate leaves, with long-pointed tips, appear more like a species of hornbeam than lime on first inspection. With lovely auburn buds and twigs, this slow growing species will grow to a medium sized tree with time in the UK, one specimen at Peasmarsh being around 8–10 m tall.

After a delicious lunch kindly hosted by the Devonports at Tillingham Winery, we continued touring the collection at Peasmarsh with Owen Johnson and Head Gardener Martin Carree; one of the myriad useful insights Martin provided was that all the limes planted on this side of the road are on their own roots. We crossed over the road to visit more limes, planted amongst existing woodland and laid out along the path by provenance, starting with Asia, on to Europe and ending with North America. We were first met with a planting combination of *T. kiusiana* and *T. japonica*, the latter being a 24-year-old specimen, with a graceful habit and leaves and flowers similar to those of *T. cordata*, each flanking the winding woodland path.



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Continuing on the path, we were greeted with a hybrid of *mongolica* and *tomentosa*, bearing long petioles and jaggedly serrated, mildly lobed leaves, casting dappled shade onto the woodland floor. We passed an old Atlas cedar dating back to the mid-1800s, opposite which was a combination of limes and sweet chestnuts with contrasting forms, textures and reflections as aesthetic as any bed or border.



Admiring *Tilia mongolica* × *tomentosa*, an elegant young tree.

Around the corner we came to a recently planted clearing featuring a range of interesting species. A newly planted *T. henryana* was next to an older example of the same species, the distinctive leaves smooth-topped and bearing fine marginal teeth (awns) almost like pale lime green eyelashes. Moving further along the path and then past the large European specimens we came finally to their North American relatives.

One tree that caused quite a discussion was *T. mexicana*, as there were not only vertical ridges formed in the grey-brown bark, but also small, regular



Above & right: *Tilia henryana* with its characteristic leaf margins. The older tree is labelled *T. henryana* var. *subglabra*.

horizontal indentations, starting at about 1.5m up the trunk. The debate was as to whether these indentations were caused by animal damage (e.g. woodpecker) or were in fact deeply indented lenticels (I can't remember what the conclusion was in the end, but the photo overleaf is of the tree in question). Finally, we came to a lovely example of the sweet chestnut *Castanea crenata*, a Japanese species bearing oblong lanceolate leaves with gently serrated margins, with a trunk clear to 2.5m and branches forming an upright habit – lovely!



Above left: *Tilia mexicana* trunk with marks and holes, possibly woodpecker damage.

Top right: Huge leaves of *Tilia × moltkei*, hybrid of *T. americana* & *T. tomentosa*.

Above right: examining the samples brought by Owen Johnson and Jack Aldridge. *T. × moltkei* is unmistakable.

In all a really valuable day, full of useful teachings on a surprisingly diverse if ubiquitous genus, surrounded by knowledgeable and interesting people. Single genus study days are always worth attending, and it would definitely be worth running another *Tilia* day again.