



Visit: Wednesday 18th June @ 2 pm to The Isle Estate, Isle Lane, Bickton, Shrewsbury SY3 8EE (see below).

Chair's Chat,

Each month I try to find something a little different that I have discovered. This is not always easy as many of you are far more knowledgeable about things tree-related than I am. That said, it should be remembered that STT is here for all, and many members, like myself, may well have joined to expand their knowledge of trees. Google may well be a source of information but there is nothing like being able to have a discussion with a human!

Here is my latest discovery of a tree I have never come across before – the Manna Ash, or *Fraxinus ornus*.

I came across quite an old example in the garden of a large house nearby. I used some technology I find very useful - an app on my mobile phone - which identifies plants from a photo. The photo of the tree's flower identified it as a Manna or Flowering Ash.

This tree is native to S. Europe and SW Asia and was introduced to Britain in the 18th century. It is grown as an ornamental tree, often grafted onto common Ash, and can reach up to 15m in height. It exudes a pale yellow gum and when made into a syrup it acts as a mild laxative – you have been warned!!

There are other facts to be gleaned but I will let you find out further snippets for yourself.

Having written this piece I would like to ask members to also contribute any items of interest that the Editor can call upon for the newsletter. A few of you have already done so, but it would be useful to have a 'library' of material, including photos. Editor David will need a suitable format for photos which he can advise on at some point. *Julie Kaye*

PS does anyone want to man our stall at the Green Fair, see flyer, as Julie can't be there due to unforeseen circumstances? (ed)

Which trees are best for carbon sequestration?

There is too much carbon dioxide in the atmosphere and the amount is increasing at an accelerating rate. We need to stop burning fossil fuels. We also need to remove

carbon dioxide from the atmosphere in ways that keep it sequestered for as long as possible. Trees can do this.

In many parts of the world trees establish themselves and grow without any human involvement, but in degraded ecosystems without mature trees to act as seed sources, planting is needed. The question that then arises is which tree species are best for carbon sequestration? A recent paper in Nature has surprising findings:

Widespread slow growth of acquisitive tree species, L. Augusto et al, *Nature*, vol 640, 10 April 2025, pp 395-40, <https://doi.org/10.1038/s41586-025-08692-x>

Here is a summary:

Trees vary in how fast they can carry out photosynthesis. To photosynthesise rapidly, trees need abundant supplies of resources – mineral ions and water from the soil and carbon dioxide from the atmosphere. Trees with rapid maximum photosynthesis rates are therefore known as **acquisitive species**. Other tree species with lower maximum rates of photosynthesis that absorb resources more slowly are referred to as **conservative species**.

Many experiments have been done around the world to assess growth of different tree species. Blocks of each species are planted and in as similar conditions as possible so that their growth over the following years can be compared. Results from 160 such experiments, established up to sixty years ago, have been collated and analysed. The tree species were categorized as acquisitive or conservative based on their maximum rate of photosynthesis. Perhaps surprisingly, the conservative species that photosynthesise more slowly tended to grow faster than the acquisitive species. Only under exceptionally good growing conditions did acquisitive species grow more rapidly.

The explanation is probably that much of the time during their long lives, trees do not experience optimal growing conditions. There may be droughts, nutrient deficiencies in the soil, disease epidemics, pest infestations or periodic plagues of insect consumers. At such times the priority is efficient use of resources, even if maximal photosynthesis rates are slow, rather than a high potential but unrealised photosynthesis rate. Conservative species therefore fare better.

There were some experiments in which acquisitive species did grow faster. These were mostly in tropical regions where there was high light intensity, high humidity and abundant rainfall throughout the year, combined with fertile soils.

So, if our aim is to promote carbon sequestration over the long term in regions with temperate climates such as the UK, we should be planting conservative species rather than acquisitive species – oaks and yews rather than willows and *Pinus radiata*.

Andrew Allott

Visit to the garden of David and Jessica Pannett on Sunday, 11th May 2025

I say 'visit to the garden of David and Jessica', but this is no ordinary garden. It is part of what used to be a very large nursery originally established by Jessica's father. This was a genuine nursery, not a garden centre. It grew its own plants from its own seed, including vegetables, and bagged them on the premises. Nothing pre-packed here and it attracted buyers from a very large area. As a nursery it closed in 2001 after a successful thirty one years. A large part of the former nursery was sold while David and Jessica retained the bungalow on site with the wonderful "treed" garden in front of it.

Twenty four of us turned up on this beautiful day and David gave us a short talk first showing us a photograph of the site in 1961 when Jessica's father, Herbert Lewis, was just about to start his nursery venture having taken early retirement from the Civil Service. And the photograph showed hardly any trees! So all this great variety of trees, mainly conifers, that are here today, were planted from 1961 onwards.

David gave us an interesting couple of sheets showing the silhouettes of the trees as seen from the bungalow. So all we had to do was to walk round them from left to right using these sheets to tell us their species. He told us that this was a special collection of all the conifer genera including yew, ginkgo and ephedera.

Some of you will know that yews and ginkgos are in the same class as conifers even though they don't bear cones. If we call them Gymnosperms, as we should, then their common denominator is the arrangement of their flowers and, particularly, seed. They have naked seeds. Sorry that I'm probably "telling grandmothers to suck eggs here" when I say that Angiosperms which include mostly the broadleaved deciduous trees, have "clothed" seeds. But David and Jessica have here, and probably even the grandmothers among you may not know this, another genus that belongs to this large class of Gymnosperms. This is the Ephedra. I'd never heard of it but it is more of a shrub than a tree and David and Jessica had two species of this from two different continents, *Ephedra americanum* var. *Anclina* and *Ephedra monspersum*, the former obviously from the Americas but the latter from Asia. They are very unprepossessing plants but if you have a collection that you wish to make complete you really must have them.

David and Jessica have a complete collection of conifers in that they don't always have the straight species of these but they do have representative cultivars. For example, they have

Juniperus pfitzeriana Aurea and *Chamaecyparis lawsoniana* Ellwood's Pillar to name just two.

Back in the April Newsletter I mentioned the strange way by which the *Prunus fugenzo* arrived at its botanical name. I ended that short piece by saying "don't get me started on the botanical name for the Hiba "*Thujopsis dolabrata*". Well, perhaps now is the time to get me started because David and Jessica had one. Note that this is dolabrata not dolobrata which sounds like "dolorous" meaning sadness. No, dolabrata is something different and if you turn to your Latin-English dictionaries (of course you all have them!) you'll see that this word refers to a Roman entrenching

tool. What strange ways plants get their names! If you turn the leaves of this tree over to revealed their backs, they have very white shapes surrounded by the green of the leaves. These white shapes are supposed to look like, yes you've got it..... Roman entrenching tools. Now I've got it off my chest!

I'm going to mention one other species of tree for a particular reason.

David and Jessica had a *Sciadopitys verticillata* which is the species of a monospecific genus. But this is commonly called an "Umbrella pine" which can easily be confused with all the other trees that are called the same thing like *Pinus pinea* and others.

This is where calling trees by their botanical names comes into its own but if you must call *Sciadopitys verticillata* an umbrella pine, call it a "Japanese Umbrella Pine" so as not to confuse it with anything else.

So many fascinating trees and what an excellent visit which was capped off by excellent refreshments. Thank you David and Jessica for allowing us to see your magnificent trees and, of course, for refreshing us so well.

Visit Wednesday 18th June @ 2 pm to the Isle, Shrewsbury.

Edward Tate: The Isle Estate, Isle Lane, Bicton, Shrewsbury. SY3 8EE

Edward hopes to be able to lead our group around the farm, but if not, then Peter and Angela have walked the route with him.

The Isle at Bicton is one of those very special places in Shropshire which few people visit being almost completely enclosed by a loop of the Severn even more so than the county town itself and of a far bigger area. And intriguingly it possesses no public footpaths whatsoever and the northernmost part of the Loop is the most northern point of the Severn, in England or Wales. In the middle of it is Isle Pool which is an ancient kettle hole formed as the ice sheets retreated. To the north and east across the river is Leaton Shelf, a heavily wooded ridge belonging to the estate that bears that name and which borders Berwick estate further to the south. Both of these would be worthy of a STT visit in the future. The last time STT had a midweek visit was to Highgrove some years back. This will not be as immaculate but arguably just as fascinating. No rare trees but one or two to identify and lots of woodland to explore. Binoculars might be useful.

Directions

Isle Lane is to the east of Bicton, sign posted off the Shrewsbury to Montford Bridge road / B4380 at a minor cross roads.

(and directly opposite Shepherds Lane where we went to see The Pannetts Garden recently.)

The Isle lane leads along a long road directly to a pair of Stone pillars and lodge. Please note there are some very serious 'Sleeping Policemen' all the way to the farm!

Continue along the single track road until you see a choice of 3 lanes.
Take the LEFT lane to the farm buildings, bear left near the buildings and then right into a concreted farmyard.

Please be aware that this is a busy working area, with riders on horses, peacocks, loose sheep and farm vehicles.

A member of the STT will be there to show you where to park, a toilet is nearby.

** Refreshments will NOT be available on this visit, but there is a good cafe at Severn Hospice, (closes at 4.30pm) approximately a 10min drive away.
Some of us will be having a bite to eat at the café beforehand (from 1pm) and will drive on, or we hope to see you there.

Severn Hospice, Refresh Cafe, on Clayton Way, Bicton Heath, Shrewsbury, SY3 8HS. The Hospice and Cafe are sign posted off the Welshpool Road on the roundabout at Clayton Way.

Visit 5th July 2pm Hodnet Hall Gardens TF9 3NN

As this is early next month we are letting you know now.

The Gardens will be open to the public that day. The entrance fee is £10 which can be bought online. (free to Historic House members) There is a good tearoom.
This is a self-guide visit but no doubt many of us will wander round together.
We will meet in the car park.

Hodnet is between Shrewsbury and Market Drayton. From the south, turn left off the A53 at the roundabout with the A442 onto Shrewsbury Road into the village.
The Gardens are approached by the road on the left just before the Bear Hotel.

THE SEVERN TREE TRUST – Membership Renewal 2025

To renew your membership by cheque, please complete the following and send it to our Treasurer.

John Tuer, Evergreen, 5 Woodside, Homer, Much Wenlock, TF13 6NQ

(please tick as appropriate)

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Receipt of newsletter. If possible we would like to send you the newsletter by email as it saves on postal costs. However our editor will post it to you if you have no email access.

The newsletter is always available on the website <https://severntreetrust.co.uk>

Thank you for renewing your membership.
We look forward to seeing you at our meetings.