STT

Newsletter

February 2026

(Formerly Men of the Trees following the work of Richard St Barbe Baker)

SEVERN TREE TRUST

Next talk: Andrew Allott on the Forests of central China on Tuesday 10th February 2026 @ SWT Abbey Foregate. 7 for 7.30pm (refreshments beforehand).
Please see annual programme at end of newsletter.

From the Chair

It seems a long time since 1st January, but Happy New Year to everyone anyway. I hope you have not experienced any major tree damage due to the recent storms. I do know that the garage of one of our committee members had a very nasty shock when a large Yew blew onto it. The car inside was rescued, undamaged, and the Yew was replanted after a major trim!

You will see from this year's programme that STT's Annual General Meeting is coming up on 10th March when the membership must elect a new committee. No doubt you will recall that, in 2023 I volunteered to become Chair of the Trust for 1 year in order that the Trust could continue. I was happy to continue in the role for the 2 years following, however I wish to step down as Chair as of this year to encourage a different face with a fresh approach.

A Chair's role is by no means as difficult as is often perceived, just a case of gentle persuasion of members who may wander off the point on occasions, to keep meetings to the agenda. Introduction of and votes of thanks to speakers is usually down to the Chair but there can be delegation of these duties! In fact delegation is one of the 'arts' of a Chair and, when one has a committee as willing as we have at the moment it makes the job of the Chair that much easier.
Some other, though not all, committee members would also like to step down if new volunteers can be found. Changing a committee is always a good idea but rarely easy, as anyone who has experienced committee work will agree.
We currently have 2 people who share the secretarial work of minute taking and this has worked very well and could continue with new people if required.
Committee meetings are arranged as and when necessary and to suit members as much as possible, rather than fixed dates.
The current committee is very supportive of its members when it comes to taking on various aspects needed to run the Trust, sharing the jobs that need doing.
If anyone feels they would be able to join the committee but would like the opportunity to discuss any aspects of being on the committee, please come and talk to me or any other committee member, at the next meeting or via email.

We have a membership of around 80 at the moment, so it should be possible to find a few willing people to help the Trust to continue, and this is the main point - **to**

enable us to continue. In conclusion please consider joining STT committee if only for a year initially *Julie Kaye*

Oak pollen grains and acorns – long and short distance travellers

by Andrew Allott.

Consider an oak tree that grew naturally from an acorn in a forest. It has two parents, a 'mother' and a 'father'. Assuming they are still alive, the mother is likely to be growing nearby, because acorns are large and unlikely to travel far. The father could be much more distant because oak pollen is dispersed by the wind and can be carried considerable distances.

Dispersal of acorns was particularly important when the last glaciation ended. All oaks had been eliminated from northern Europe, but as the climate warmed and the ice sheets retreated, it was possible for both *Quercus robur* and *Quercus petraea* to recolonise from their southerly refugia in the Iberian and Italian peninsulas. This would have happened at just a few metres per oak generation without help from birds and mammals, especially scatter-hoarders that bury acorns singly or in small caches over a wide area for future retrieval. A significant proportion of the buried acorns are never retrieved so are able to go on to germinate.

Studies of acorn dispersal have shown in Europe it is the jay (*Garrulus glandarius*) that disperses most acorns. A single jay is capable of burying as many as 4,600 in a single season over a wide area. Up to nine acorns can be carried simultaneously in the jay's bill and oesophagus, over distances as great as 8 kilometres from the mother tree.

Of the two white oak species in northern Europe, jays disperse *Quercus robur* (pedunculate oak) more effectively than *Quercus petraea (sessile oak)*. There are various reasons for this:

- Jays prefer long slim acorns which are easier to swallow. *Q. robur* acorns are longer and slimmer than those of *Q. petraea*.
- Jays collect acorns in September and October when they are still hanging on the tree. The long peduncles of *Q. robur* make the acorns more conspicuous so they are more likely to be collected.
- Oaks growing at forest margins and in open areas are likely to produce greater numbers of acorns and start producing them at a younger age. *Q. robur* is more likely to be found in these habitats than *Q. petraea.*

Because of these differences, we can expect *Q. robur* to have recolonised northern Europe ahead of *Q. petraea*. There is evidence for Q*. robur* having arrived in southern Scandinavia about 8500 years ago but *Q. petraea* not until 4000 years ago. A pollen study in Norfolk has suggested that Q. petraea arrived 700 years later than Q*. robur.*

DNA analysis now allows the travels of oak pollen to be investigated. In one study, 35% of acorns sampled in an isolated patch of *Q. robur* forest east of the Ural Mountains were found to be the result of fertilisation by pollen from outside this

forest[1]. The nearest other *Q. robur* trees were 35 kilometres away in another small forest, but this was not the source of most of the pollen. The next nearest source was over 80 kilometres away. It is remarkable that pollen from male catkins on an oak tree can be blown entirely randomly by the wind and received by a stigma inside a female flower on another oak tree tens of kilometres away.

DNA in the nuclei of oak trees is inherited equally from the mother (via an egg cell) and father (via the pollen). The chloroplasts of oak cells also contain some DNA, but this is inherited exclusively from the acorn-producing mother, as pollen contains no chloroplasts. Nuclear and chloroplast DNA can therefore be used to distinguish between male and female ancestry. Surprisingly, *Q. robur* and *Q. petraea* in northern Europe mostly have the same chloroplast DNA as each other, indicating common ancestry, but they show far more difference in the nuclear DNA inherited from their mother and father. A fascinating hypothesis has been proposed to account for this. After the last glaciation, *Q. robur* spread relatively rapidly northwards, dispersed by jays and other scatter hoarders to Scandinavia and the British Isles. Pollen from *Q. petraea* was then dispersed northwards, where it hybridised with *Q. robur*. This happened repeatedly, gradually converting some of the *Q. robur* population to *Q. petraea*. Over the generations, trees containing only nuclear DNA from *Q. petraea* developed, with adaptations for a different ecological niche from that of *Q. robur.* DNA in the chloroplasts of these trees was still of the *Q. robur* type.

In summary, it seems that *Q. robur* colonised northern Europe by dispersal of acorns, but the subsequent colonisation by *Q. petraea* was at least initially due to dispersal of pollen, resulting in gene introgression by hybridisation – a process that has been called cytoplasmic capture.

Further reading: Oak Origins, Andrew L. Hipp, The University of Chicago Press, 2024.

References:
1. Ashley, M.V. Answers Blowing in the Wind: A Quarter Century of Genetic Studies of
Pollination in Oaks. Forests 2021, 12, 575.
2. Hybridization as a mechanism of invasion in oaks, Rémy J. Petit, Catherine Bodénès, Alexis Ducousso, Guy Roussel and Antoine Kremer, New Phytologist (2003) 161: 151–164

Riverside trees

I received a brief video before Xmas of an interview concerning several diseased limes alongside the river in Shrewsbury which were having to be cut down. They were to be replaced by more.....limes. They are obviously being badly affected by increasing flooding and higher water table- the eternal problem of a weir preventing a river scouring its own riverbed and causing severe silting (eg sandbanks by English Bridge)- I cannot recall the river ever being dredged. I planted two of the

same Common Limes close to a brook ten or years back and one which was planted at a slightly lower level succumbed to drowning almost a year back after almost 18 months of having its roots saturated. Several hollies nearby had the same fate. The limes up the paths towards St Chad's are healthy and regular (right trees, right place), but those alongside Victoria Avenue are becoming ever more "gappy" and uneven. Other species would be far more appropriate- suggestion, two of the finest trees in town are Black Poplars in small parks upstream and downstream of English Bridge. A row of those would be spectacular and unique. Any other ideas? Should STT be more proactive and put more ideas forward instead of the old ways…? *Peter Aspin*

Severn Tree Trust Programme of Events for 2026.

Please note that **Visits** are for members only and **Talks** are open to all. Non-members will be asked for a contribution of £5 and to become a member please see the 'Join Us' section on our website: severntreetrust.co.uk

Full details about Visits will appear in the Newsletter.

Talks will be held at the Shropshire Wildlife Trust, Abbey Foregate, Shrewsbury, at 7 for 7.30pm.

Severn Tree Trust Programme 2026*

January = No meeting

February 10th = Forests of Central China. Talk by Andrew Allott.

March 10th = AGM + Perthshire, Big Tree County Talk by John Tuer.

April 12th = Visit: Nobridge and Oakgates, Telford : Self lead.

May 9th = Visit: Bolesworth Castle, Tattenhall (Sat.): Self lead.

June 13th = Visit: Willey Estate, Broseley (Sat.)

July 15th = Visit: Birmingham Inst. for Forest Research (Wed.)

August = No meeting

Sept. 12th = Visit: Gredington, Hanmer (Sat.)

October 11th = Visit: Gatley Park, Leominster

November 10th = A fascinating Talk by Bob Watson. Refreshments.

December 8th = Urban Woodland Initiatives: their past and present in creating better places for people and nature. Talk by Tristan Haynes Christmas Social & Refreshments

**meetings are subject to change depending on weather and other events. Please see monthly newsletters for updates.*