



Dear Members,

I would like to extend my warmest wishes to you all. We would like to especially welcome new members Dr P Barling and Ms Jenny Bromage.

My son, a GP, insisted that my wife and I went into isolation two weeks ago, but agreed with me that surveying trees on my own was pretty good isolation. I was able to go to Acton Scott Working farm three times with permission to look for the many notable trees that were not on the Ancient Tree Inventory or to amend the data for the trees that had been recorded in 2008. I 'found' an 800 year old Pedunculate oak there which somehow had escaped other visitors. That was fine until the Government said we should not drive to places to exercise. So I have been driving to the Attingham Estate farmlands looking there for recordable trees (yesterday I 'found' a 600 year old Pedunculate oak). The latest ruling ended my freedom, since when I have serviced my mountain bike and will be forced, far more dangerously, to cycle to the farms! The Government's instructions are all encompassing and do not cater for those of us who will be driven mad by many weeks of total isolation and will have to look for other ways to reduce their impact!

I am sorry to say that these same Government instructions have forced us to cancel our first visit of 2020 to Dingle Nurseries on April 10th. It is also extremely likely that we will have to cancel our second visit to see the second half of the Telford Tree Walk on Sunday 12th May. The chances of us being able to visit April Lay's farm on 13th June are not looking good but hopefully restrictions on travel and isolation will have eased by then. Watch this space for up-dates.

At Dael Sassoon's very interesting talk on the Pollen proof was found that the Scot's Pine is indigenous to Shropshire and the bordering parts of Wales, a report of which by John Tuer is to be found later in this Newsletter. I was given a short report on "Tiny Forests" by Ivor Salter. These are 200 square metre plots (i.e. 14.1m by 14.1m) in which 600 native trees are planted. This works out at 100,000 trees per hectare and compares with the 2500 per hectare we normally plant in the UK or the 10,000 trees per hectare they plant in France and Germany (no wonder their oak forests are so much better than ours). Ivor's report was about the first such Tiny Forest that had been planted in Witney, Oxfordshire and described the 100 Tiny Forests that had already been planted in The Netherlands and encouraged planting many more in the UK.

The latest E-Newsletter of the Royal Forestry Society which I received yesterday has published links to articles on increased tree planting. That Newsletter is a marvellous way

for me to keep up-to-date with what is going on in the forestry world including abroad and is produced by their H.Q. staff twice monthly. As a retired member it only costs me £37 per annum and is extremely good value. I shall be raiding it in future for snippets which I will pass on to you.

The forest nursery industry is going to be in difficulty to supply plants for the increased planting proposed by most political parties at the General Election at the usual rate of planting. It will be totally impossible for it to supply the plants for planting at 100,000 per hectare. These political promises may seem good for the forest nursery industry but what the parties forgot to do is warn the nurseries of their intentions. It takes up to three years to grow forest ready plants. So there will be a strong temptation for nurseries to import the stock, which until December 2020 will still be possible under the EU Regulations with all the associated health risks.

The nursery industry should have been warned three years ago. But even if they had been there is no certainty that they would have expanded to meet the expected demand. Why? Because three times in the 55+ years I have worked in the industry, sudden changes in Government policy, not always associated with a change of party, have resulted in catastrophic drops in demand for plants. The most glaring example is after the 1982 Lawson Budget when forestry taxation was totally changed and planting fell from 25,000 hectares per annum to 12,000 hectares within 18 months. This resulted in tens of millions of trees being burnt and some nurseries folding. Nurseries have been living very close to the wire for a number of years; few have made enough profit to consider large investments. None would be able to finance a large expansion of their nursery area without Government fiscal support. After the vast sums of money promised to overcome the effect of Covid 19 the chances of this happening are vanishingly small. So will it be back to Continental suppliers?

Forgive me for that rant and please stay safe. I look forward to seeing you all as soon as it is permitted
Andy Gordon (chair)

Our Tree Planting Session at The Hurst: Friday, 6th March 2020

A big 'Thank You' to those of you who came along to help with tree planting at The Hurst. We actually planted 550 trees and have now finished the hedge to the end of their drive. And what wonderful weather we had.

Members who weren't there might like to know that we also planted 5 Dutch Elm Disease Resistant Elms for the Wildlife Trust. The Hurst was absolutely delighted to have them on their site. Someone who has been researching these Elms found that there were two varieties that provided the best disease resistance: 'Sapporo Gold' from Japan and *Ulmus* 'Wingham' from Kent. The latter are named after a village in Kent. Unfortunately *Ulmus* 'Sapporo Gold' is known for its breaking branches on mature trees in exposed sites. So we planted five *Ulmus* 'Wingham'. The latter are known for having a similar habit to our old English Elms that died out in large numbers in the 1970s. So if this variety is successful in Shropshire, and more are being planted elsewhere in the County, then we may return to something similar to the old landscapes that we lost. Come back John Constable and take up your paintbrush again!

And while I'm writing about these Elms.....Those of you who came along to see some of Telford's 50 Trees on one of our visits last year might remember that the first tree we

looked at, the large mature Elm in the car park of Admaston House Community Centre, was identified for us by Graham as 'Sapporo Gold'. I had to plant another tree on our Corporate Woodland a couple of weeks ago and called to look at this Elm again. I was amazed. It has now been severely pruned to "within inches of its life", large stubs left everywhere. I shall keep an eye on this tree very carefully because one of two things can happen. The tree might have been successfully coppiced and, therefore, send out new vigorous shoots from the stub ends. In that case, we might be lucky and the tree might be saved. Alternatively, the tree may flush its new leaf growth for this season along the branches, putting out copious amounts of foliage to save itself. If this is the case, it is my view that this will be the last season for this tree. So the story will continue. Of course it may be because the tree had been dropping branches that this work had to be done but there are much better ways of doing it.

But thanks again to all you planters and I hope to see you back at The Hurst next season for planting on a different site.

John Tuer (planting officer)

A word from the editor;

I am getting an awful lot of unexpected gardening done, as I am unlikely to be able to get back to work in London till the autumn, but why not garden whilst the weather is good? I am already thinking about putting in seeds for the summer crops and doing some weeding. In the 'jobs that *never* get done' category I am clearing old piles of branches and either shredding them or letting them rot, as well as keeping some for firewood. I cleaned out the leaves from the pond, avoiding the frogspawn (not really the best time to do it but any job at the moment is something to fill the time). If you have a garden just do a small bit a day and it really does get done, rather than sitting thinking about how big a job it is! It should be a year when nature has a chance to recover a bit; with less cars around even the birdsong seems clearer. A noisy woodpecker is drumming away in the large trees round here, looking for grubs!

David Martin (newsletter editor)

Dael Sassoon's talk on the Persistence of "Scots" pine in the Welsh Marches

On Tuesday 10th March, Dael Sassoon travelled down from Manchester to talk to us about his research. Dael took a BSc course in Geography at Manchester University from 2014 to 2017, followed by an MSc in Environmental Monitoring and then a PhD in Physical Geography. He is on track to complete his PhD in 2021. Dael was a volunteer Ancient Woodland researcher with the Woodland Trust from 2015 to 2018, with a focus on Ancient Woodland in North Wales.

The first part of Dael's talk described Ancient Woodlands in the UK – what they are and why they are important. He showed us the results of some of his early research into the loss of Ancient Semi-Natural Woodlands (ASNW) at Felindrhyd-Llennyrch in North Wales. The main losses occurred in the first 30 years of the 20th century. The good news is that areas of conifer plantation have now been returned to broadleaved woodland.

Dael then talked about how past ecosystems can be investigated, using fossil pollen grains in peat. The pollen is obtained from sample cores taken out of peat bogs. Using a microscope, pollen of different tree species and other plants can be distinguished. Radiocarbon dating is used to find when the pollen was deposited. Typically, this research shows when trees colonised an area after the last glaciation, when events such as the elm decline happened and also when humans cleared woodland to begin farming.

One well-known event in the vegetational history of Britain revealed by pollen analysis is the 'pine decline'. *Pinus sylvestris* thrived in Britain after its post-glacial return from 10,000 years ago onwards. It reached its maximum extent at about 4500 years before the present (BP). It then suffered a widespread and sudden demise, with the date varying from 5400 to 3200 years BP. For example, pines were present on Whixall Moss 3400 years ago but disappeared soon after, leaving a layer of dead stumps in the peat. Only in the Highlands of Scotland is it obvious that *Pinus sylvestris* lived on. Because of this finding, it has been assumed that pine is not native to the Welsh Marches – any specimens present must be non-native reintroductions.

Dael's pine interest was spiked by some historic maps and landscape paintings of Nesscliffe and Breidden hills which show pines, apparently growing naturally rather than in plantations. A species of hoverfly has been found that only lives on Scots pine – surely it would have died out in the Marches if pines were absent for a protracted period. These observations led to the hypothesis that pines persisted in small populations on sites where it was hard for people to get at them. Such sites are known as refugia. To test this hypothesis, a bog was needed close enough for pollen to be blown to it from Nesscliffe or Breidden hills.

A peat bog called Lin Can Moss survives close to Nesscliffe Hill. Dael took a core of just over 3 metres of peat from the Moss and spent many hours extracting and identifying the pollen in it. Radiocarbon dating showed that the peat had been laid down from 6910 to 320 years BP. Although not the most abundant species at any stage, *Pinus sylvestris* pollen was present throughout. This suggests that pines were growing close to Lin Can Moss all the way through this time period and that the pine decline never happened. The most obvious place for pines to have survived close to Lin Can Moss is on the sandstone crags at Nesscliffe.

There aren't any peat bogs close to Breidden hill, but Buckbean Pond, close to the summit, contained peat deposits. These have been investigated in the past and, as at Lin Can Moss, pollen of Scots pine was found even in the most recent peat deposits. Sadly, this pond has been lost to quarrying at Criggion, so further investigations of the pollen record are impossible. Nonetheless, it seems very likely that pines persisted on Breidden Hill.

It is of course possible that the pollen found at Lin Can Moss and Buckbean Pond was blown to the Marches from Caledonian pines in the Highlands. Dael investigated this by looking at the morphology of the pollen grains. Although there is some overlap, pollen grains from Lin Can Moss were found to be larger on average than those found in a peat sample from Bennachie in the Highlands. This makes it unlikely that pollen in the Lin Can Moss peat is from Caledonian pines. It really does look as though Scots pine never died out in the Marches and is therefore a true native. The name 'Scots pine' is therefore not appropriate! It looks as though we really will have change our ideas about this species' status in the Marches and we need to look carefully at specimens of pine on hills in the Marches to try decide if they are part of a survivor population, rather than being artificial plantings.

Dael ended his talk with some information about his current PhD research. He is investigating peatlands in Peru, on the western side of the Amazonian basin. This area is very low-lying because the tectonic plate on which Amazonia sits is being subducted under the Andes. While Dael was in the area there was an earthquake of 8 on the Richter Scale.

Dael has extracted cores from the peatland and is now identifying the pollen from it. From this he should be able to deduce the vegetation history of the area and why a tropical peat bog has developed. The importance of this research is that tropical peatlands are storing vast amounts of carbon and also that many of these peatlands are threatened.