

Tree News from the Regions

June 2004

Sussex

Champion trees go unrecorded - Stephen Young

A Tale of Two Birches

I joined the Tree Register over two years ago, when I became interested in tall and old trees, after realising there were many such specimens growing in my local area. Since then, I have located and photographed many notable trees in parks, woodlands and public gardens across the south-east. This story concerns two birches (*Betula pendula*) found on my travels; not just ordinary trees but the largest-girthed trees of their species presently growing in Britain. The first discovery of these champion birches was made while walking in Penshurst Park, West Kent, in September 2001. The main objective for this visit was to locate a huge old English Oak (*Quercus robur*) listed by the Tree Register in Rookery Wood. As this is a private woodland, I had obtained permission from the estate manager who was also interested in old trees. On making my way across the wood, which consisted mainly of sweet chestnut coppice, I suddenly chanced upon a gnarled birch growing near the top of a steep slope among taller beech. I realised the short, burred bole of this tree was exceptionally large, before it forked into two trunks at head-height. I marked its location on the map intending to return to measure it.



Giant Oak

Subsequently, the giant oak that I had come to see was found in the wood's far corner; a squat giant with a massive hollow trunk but with a healthy canopy of branches. With a girth of 11.2m (37 feet), this is Kent's second-largest oak, after the "Majesty" tree at Fredville.

I returned to Rookery Wood a week later to measure and photograph the Silver birch. The tree leans slightly and, due to the presence of a large burr on its bole, care was needed to measure it. Above the burr, but below the height at which the bole divided, the girth was 4.1m. Below the burr, just above ground level, the girth was 4m. Owen Johnson of the Tree Register confirmed only one larger tree with a girth of 4.2m had been recorded, growing on Leith Hill in Surrey, but this had probably been one of the many losses of the great storm of 1987.



Huge birch in Priory Park

Since discovering the birch in Rookery Wood, I located a slightly larger tree, again discovered by chance, on a visit to Priory Park, Reigate, Surrey, in May 2002. As I knew there were many fine trees growing in the park, I had decided to explore and photograph the best specimens. On reaching the western end of the greensand ridge, I turned downhill into woodland and noticed what appeared to be a group of three large, tall silver birch growing at the wood's edge. Following the path towards these trees, I was amazed to see that what had appeared to be three trees were, in fact, the three trunks of one huge birch! The bole was about 1.8m tall and fluted before it divided into three. The girth was measured both above and below a bulge from where a lower branch had broken off the bole: At 1m above ground level, the girth was 4m and at 1.8m the girth was 4.2m.

The reason for the great stature of the Priory Park birch is probably due to its location in a light, well-drained situation on greensand soil, which is noted for good tree-growth. Again, details of this champion birch were reported to Owen Johnson for inclusion on the Tree Register. Although it is understandable for such a large tree as the Rookery Wood birch to remain undetected in a privately-owned woodland for many years, it seems strange that no-one had reported the champion tree in Priory Park, growing as it does in an area popular with walkers. I wonder how many of our

other 'lesser' native trees, such as hornbeam, hawthorn and rowan that grow in private estates and woodlands, have reached record proportions un-noticed?

Scottish Isles

The Mystery Tree of Islay - Peter McGowan

In the year 2000, Islay Estates gave me the job of preparing a management plan for the 'designed landscape' of Islay House. As a landscape architect, projects of this type have become a specialism of my practice over the last ten years, taking me to fascinating historic gardens and landscapes in some of the most beautiful parts of Scotland ... it's a chore but somebody has to do it. Part of the exercise is to get to know the landscape thoroughly, both through archival research and on the ground, to achieve a good understanding of how the estate landscape has developed and its present condition as a basis for future management. At Islay, local historian Margaret Storrie provided the research expertise while I did the leg-work. Typically, we survey the oldest, largest and specimen trees as part of this process.

Diverse semi-native woodlands

The designed landscape of Islay House is extensive and characterised by large areas of woodland stretching over five kilometres from west to east along the shore of Loch Indall and up the strath of the river Sorn as far as the East lodge, and northwards as far as Loch Skerrols. The woods were planted progressively in the late-18th century and during the 19th century for shelter, amenity, timber, game-cover and to enhance the landscape and are extremely interesting and varied. Some survive with their original mix of European conifers, others have developed as diverse semi-native woodlands. Among the hundreds of acres of woods there are few ornamental trees and one exotic tree of particular interest.

Royal Botanic Garden

On the west side of the old kitchen garden is a small area of shrubbery with several interesting trees and shrubs, including *Acer griseum*, *Acer japonicum* 'Atropurpureum', *Ailanthus altissima*, *Eucryphia x nymanensis*, rhododendrons and *Viburnum rhytidophyllum*: all good but not unusual specimens. However, one larger tree, about 15m tall, stands out. It has a fine smooth pinkish-brown bark, small serrated deciduous leaves (like birch or *Kerria japonica* more than anything) and is covered with dense panicles of minute flower-buds from early spring, opening in summer to small white flowers. But these features together did not fit the description of any tree I had ever seen. Like many people with an interest in trees I know all the common trees and a great many others besides. Even if you can't identify a tree straight away, some feature is familiar, lurking deep in your memory, or you have a good idea of what family it belongs to and, with the help of a tree guide or two, you will soon identify it. But not in this case. When I first saw it in March, I took some small samples of the emerging foliage and buds back to Edinburgh and having failed to identify it from books or by showing it to gardener and forester colleagues, I took the by now rather pathetic and withered specimen to the Royal Botanic Garden, Edinburgh. They tentatively identified it as the male form of White Mulberry: quite a rarity for its locality, although they needed a larger fresher specimen to be sure. The larger fresher specimen was delivered after another visit to Islay in May but no further word came back from the RBGE. So the first identification stood, although it did not seem quite right.

New Zealand Ribbonwood

I told a number of people about this interesting and attractive tree. One forester friend, Alistair Scott, saw the tree while on holiday on Islay and was sceptical about the White Mulberry designation. He took up its case and sent photographs to The Tree Register. Dr Owen Johnson suggested it was probably the species called Ribbonwood or *Plagianthus regius*, a native of New Zealand forests, which grows to be a graceful slender small to medium-sized tree in Britain. If identification was correct it was possibly the largest specimen in the British Isles, since only a few others were recorded on The Tree Register, the biggest other example on record at Bicton, Devon. So back to the RBGE, who confirmed that my second specimen when compared to one in their herbarium collection was indeed *Plagianthus regius*. Then an email to The Tree Register with the measurements I had previously taken of the tree: a girth of 306cm and a height of approximately 15m. They confirmed the mystery tree that had proved to be a great rarity, was the largest recorded

Ribbonwood tree in the British Isles and 'quite a remarkable find'. The species is recorded as having been introduced to Britain in about 1870. How and when it got from New Zealand to Islay, who brought it there and who planted it are not yet known - the estate changed hands about this time. But for its graceful form, fine bark, delicate foliage and abundance of small flowers, which in the mild climate of Islay form into bud very early in the year, it deserves to be more widely planted.

Scotland

Tall trees re-visited - Stephen Verge NDF

World class trees in Scotland

Giant trees are a special favourite of mine, and I can recall fond memories of enjoying the huge conifers in Scotland during holidays there during the 1980's. Ever since, I promised myself that I would return to Scotland and revisit the same places and also find new, possibly undiscovered trees of exceptional size there. After a gap of some 11 years I returned and found the trees had made considerable growth since my last visit. During one day of admiring the huge conifers on the old Benmore estate near Dunoon (where there is, I think, the largest concentration of trees over 55m tall in Europe) I explored the well known Pucks Glen walk, which I had not seen before.

Pucks Glen Gorge

After following the footpath up the steep hillside for approximately a quarter of a mile, amongst huge Douglas Firs of some 50m+ in the Pucks Glen Gorge, one easily imagines oneself in the Cascades of Washington rather than Scotland. I took a breather and was admiring also the Western Hemlocks there, when I turned around and saw this very fine specimen of Douglas Fir towering upwards in front of me, between two other trees of slightly smaller stature. I estimated the tree to be around 50m tall. It wasn't until I got closer to the tree that I realised a proportion of the base of the tree was hidden from view. When I got even closer I was astonished to see that around 10m was below my feet standing at the foot of a cliff in the gorge, some metres above the river. This led me to take a measurement with my clinometer of the section visible from my baseline distance which was 51.9m tall. After scrambling down a near vertical hillside, I measured the hidden section of trunk to be 8.2m tall, giving a combined height of 60.1m tall! This tree is a magnificent specimen; however, it is probably the most difficult of the tallest trees to measure because of its position in the gorge. Using a laser range finder may be useful in getting several readings from different angles to reach a more accurate figure. The tree is of magnificent form with a trunk of little taper, leading upwards to a lightly branched conical top with a good leading shoot, good for many more metres yet! The girth unfortunately was extremely difficult to measure, due to the tree being on a 1 in 3 slope; I estimated the diameter at around 120cm. As far as I know this tree has been undiscovered until now. As to its precise location in the gorge for future reference, I estimate the tree is some 1/4 of a mile up the gorge on the south west side of the river, same side as footpath GR NS 151 842.

Temperate Rain Forest

The next day I moved on to see the little known grove of Sitka Spruce, called McKenzies grove, on the North side of Loch Awe, in Inverliever Forest near the village of Dalavich, owned by the Forest Enterprise. I had not been back here since 1985 and I was not disappointed! This was planted in 1910, and was one of the earliest experimental plots of Sitka Spruce before the large scale afforestation programme began after 1919. The trees are situated in a sheltered gorge and very closely resemble the Temperate Rain forests of western Washington State, due to the very high rainfall (over 2500mm). With the trees and surrounding vegetation festooned with mosses and lichens. At once I set about measuring the height of these trees recording heights of 51m - 55.5m. The diameters were around 90cm with larger specimens nearby, one 141cm diameter, but of lesser height. Not bad for some 90 years growth! All these trees are growing in height vigorously and it will not be long before they catch up with the Sitka at Randolph's Leap, particularly as the site is so well sheltered.

Thicket of natural regeneration

I was keen to measure a Douglas Fir near the Pass of Killiekrankie near Pitlochry. 15 years ago I found this tree amongst a thicket of natural regenerated Western Hemlock, and wondered whether it was every bit the size I remembered. After locating the tree on National Trust for Scotland

property (Grid Ref.NN 908 601) it was as big as I had imagined with a diameter of 160cm and an average height of 54.3m. There are bigger trees but this is a vigorous tree planted c.1885 and it has a particularly fine conical top with a good leading shoot, little affected by exposure and had grown considerably since I last saw it. Around the world, there are surprisingly few trees in their native habitat exceeding 60m. Only the few remnant old growth stands of eucalyptus in Australia/Tasmania, and the trees from the Pacific coast of North America greatly exceed 60m. I think the trees in Scotland will soon reach world class.

Wales

The continuing search for our tall trees - Derrick Holdsworth

Welsh wonder at lake Vyrnwy

Letting David Alderman know I was going to the Brecon Jazz Festival sealed my fate. "Derrick", he wrote, "There is a Douglas Fir in Wales which might be taller than our existing champions in Scotland. Would you like to have a look at it while you are there? It's at Lake Vrynwy". Being a sucker (excuse the pun) for tall trees I said I would.

Energetic

Lake Vrynwy - a reservoir of the Severn Trent Water Authority (STWA) - is about 4 miles long and surrounded by trees. I needed a more precise localisation. The local information centre helped, "it is just beyond the old village car park. Just before the bridge turn right...and follow the footpath to the tree". Another bonus was a report I found of a recent visit to the tree by the North Wales branch of the Royal Forestry Society, which included a photograph of its trunk. It was planted along with other Douglas Firs in the year of Queen Victoria's Golden Jubilee in 1887. More ominous was the remark, "the huge size only became obvious when a couple of members energetically made their way to the base".

Fluorescent tape

Aided by the photograph, Emma (my wife) and I found what we thought was the tree along with several other Douglas Firs in a patch of dense woodland. It was on a steep slope at the bottom of a deep hollow surrounded by dense Rhododendron. The base was invisible beyond 3m. So I attached fluorescent tape to the tree higher up the trunk at a measured distance from the base. Unfortunately even this was only visible within 18m and trigonometric calculations were necessary to obtain an angle to the tape from the only place where the top was visible, roughly 60m from the tree.

Wrong top!

Laser measurements are best worked out in comfort - or so I thought - so we retired to our hotel in Welshpool. To my horror I calculated the height to be only 35m! Clearly this was wrong. What had happened? Had we measured the wrong tree? Luckily I found a contact who worked for the STWA who knew the precise location of the tree. He met us at Lake Vrynwy the next evening and took us to the same tree we had already measured. We then went to the spot from which I had seen the top the day before, and he pointed out that I had been looking at the wrong top!

Laugh not; it was extremely difficult matching each top to its corresponding trunk in the dense woodland and I had struggled trying to do it the previous evening.

Midge attack

Six readings taken under intense midge attack gave an average height of 61.5m. The search for the highest tree continues; but from now on I will calculate at least one of my measurements on site!

