

## Report from the Chairman

## Award winners and adventurous volunteers

This year we can celebrate the recording of the 250,000<sup>th</sup> tree on The Tree Register so Alison, our editor, has produced this bumper edition of our Newsletter. But, as you will see from Owen Johnson's report, we are not resting on our laurels and our adventurous volunteer tree recorders continue to discover more and more champion, notable and historic trees.

Vicky Schilling Bursary

I have just read the extremely interesting report from the first recipients of a Vicky Schilling Bursary, Paul Greenwood and Bryony Smith of Scotland's Yew Tree Heritage Initiative (SYTHI). Their project was to confirm and record yew trees at various significant sites in Argyll and the Highlands. One such tree was an old yew at Inveresragan which they concluded was probably the last survivor of the ancient yews of Esragan, which (as the old Gaelic poem recalls: "Bow of yew from Esragin") was an area long celebrated as a centre of excellence for medieval longbow manufacturing. A ring count of a fallen branch of the yew showed an age of 250 years and Toby Hindson of the Ancient Yew Group considered that the yew was certain to date earlier than 1650. You can read an extract on pages 6 and 7 and the full report can be found on the bursary page of our website.

We are very grateful to all those who contributed to the appeal for the Vicky Schilling Bursary Fund, and we look forward to seeing more excellent reports from recipients of a bursary.

## **RHS** awards

Congratulations are due to Jim Gardiner and Owen Johnson who were given RHS awards at a 2021 ceremony, the VMH (Veitch Medal of Honour) to Jim and a VMM (Veitch Memorial Medal) for Owen. We are fortunate to have such a priceless amount of skill and experience among our trustees and volunteers.



Owen receiving the Veitch Memorial Medal from RHS President, Keith Weed. (Photo: RHS copyright rhs.getbynder.com)

We are very grateful to Sir Paul McCartney for his continued generosity in sponsoring this newsletter



Charlotte Maclean receives a champion tree label for the *Ginkgo biloba* at her family home in Wimbledon, from trustee Tony Kirkham. The tree is the 250,000th tree to be recorded on the Tree Register database (see page 8) (Photo: Tree Register)

Many thanks once again are due to all those who have helped and supported us during another difficult year: to David Alderman, Owen Johnson, Philippa Allen, Alison Evershed, the Ancient Tree verifiers, all our other tree recorders, Tim Hills and the Ancient Yew Group, Clair McFarlan, our volunteer support officer, Pamela Stevenson, our hard working secretary, to our trustees and to Tony Schilling our President, and, finally, to you, our members.

## Colin Hall Chairman of the Trustees

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The Tree Register of the British Isles (TROBI) was founded in 1988 by Alan Mitchell VMH and Victoria Schilling

## Completion of the first quarter-million tree records

There's no sign yet that volunteer measurers are running out of trees to find; 2021 has been a vintage year, with over 720 national champions updated or more often than not measured for the first time. Here's an updated summary of the year's top discoveries (several of which were first reported in last autumn's e-news).

## Unseated champion

Pride of place must go to Hugo Egleston and the Dawn Redwood (*Metasequoia glyptostroboides*) which he spotted in a field at Shepton House, Shepton Beauchamp, in Somerset. With a girth of 556cm on its flared and fluted bole, this tree unseated the original planting in the Fellows' Garden at Clare College in Cambridge which has stood as champion almost continuously since the 1960s.

Stephen Verge found a Norway Spruce (*Picea abies*) practically 49m tall in an unfrequented part of Puckpits Inclosure, a mixed plantation from *c*. 1860 in the New Forest, which is comfortably the tallest to have been accurately measured in Britain or Ireland.

## Never measured before

Rob Lynley, who can be relied upon to find tall trees in out-of-the-way places, reported a group of Western Balsam Poplars (*Populus balsamifera* subsp. *trichocarpa*) to 44m tall by the Dales Way in Strid Wood, part of the Bolton Abbey estate in the Yorkshire Dales; no taller poplars have been reliably recorded in Britain, but astonishingly this stand may be less than 30 years old, having sprouted from bundles of brash laid to protect the riverbank from erosion; they are still growing fast but are under some threat of removal within this SSSI woodland. In the lower Fishpool Valley at Croft Castle in Herefordshire, where a population of

exceptionally tall native trees had never been measured but has recently been drastically thinned by the National Trust. Rob's finds included a new champion Alder (Alnus glutinosa), 34m tall but now left very exposed. A rarer record of Rob's was an 18.4m Sorbus croceocarpa in Darlington's East Cemetery; this service crops up now and again both in urban parks and as a selfsown 'wild' tree, though no-one has ever worked out where it originated.



The rather vulnerable looking new champion alder (*Alnus glutinosa*) at Croft Castle (Photo: Rob Lynley)

#### **Ancient Tree Inventory**

Veteran tree recorders from the Ancient Tree Inventory continue to uncover new champions. Kevin Stanley, surveying many Lincolnshire villages and estates for the first time, found a Broad-leaved Lime (*Tilia platyphyllos*) in the parkland of Stoke Rochford Hall with a vast bole

950cm in girth, along with new girth records for Red Horse Chestnut (*Aesculus* x *carnea*) at Syston Hall, for the elm *Ulmus* 'Sapporo Autumn

Gold' in the middle of Tattershall, for the unusual poplar *Populus* x *jackii* in a line near the Castle at Bourne, and to be confirmed when it flowers – for the Double-flowered Wild Cherry (*Prunus avium* 'Plena') on a verge in Bottesford, 370cm girth at 1m.



Kevin Stanley (right) and Oliver Newham with the 9.5m Broad-leaved lime (*Tilia platyphyllos*) in the park at Stoke Rochford (Photo: Lorienne Whittle)

Peter Messent recorded a new record Smooth-leaved Elm (*Ulmus minor* var. *minor*), an ancient hollow pollard 548cm in girth which has continued to withstand Elm Disease outside Akenham church in Suffolk. In Devon, Simon Pardoe found a new record-holder for Cork Oak (*Quercus suber*), 546cm girth at 1m, on the village green at Powderham – a place which being on a dead-end lane receives few visitors and, until now, no tree measurers.

Volunteers updating the records for Preston Hall in Midlothian found that the park's largest Horse Chestnut (*Aesculus hippocastanum*) is still growing remarkably fast and is overhauling its English rivals, with a girth of 736cm. An ancient willow 717cm in girth, noted by Julia Fletcher near Titchmarsh in Northamptonshire, has features of the little-recorded hybrid of Crack and White Willows, *Salix* x *rubens*, and is big enough to be tentatively offered as a champion.

## 33m tall cherry

Aidan Champion, the youngest of Britain's volunteer tree measurers, has begun to live up to his name, recording a 33m wild cherry (*Prunus avium*) in woodland near Bramley, Surrey, and a *Eucalyptus dalrympleana* on the nearby Wintershall Manor estate with a girth of 481cm.

## **Extinct tree found in Wales**

In Cardiff, Anne Bell turned her attention to the rare plantings in Cathays Cemetery, yet another of this city's sites of dendrological interest, and found five new champions, including an example of a beech cultivar ('Purpurea Tortuosa') that was feared extinct in cultivation. All these Cardiff trees can be explored on Anne and her husband's fascinating website, www.cardiffparks.org.uk

Alan Hunton and John Killingbeck were busy in Yorkshire and Lancashire, finding new record trees at familiar places such as the Harlow Carr Botanical Gardens and the Castle Howard estate, and measuring for the first time at gardens including Parcevall Hall high in the Yorkshire Dales, and Ingleborough Hall which used to be the home of the plant hunter Reginald Farrer; one remarkable tree surviving here is a multi-stemmed and gnarled example of the hornbeam *Carpinus turczaninowii*, collected by Farrer in China in 1914 and last noted nearly 90 years ago.



Champion *Abies hickelii* in the Yorkshire Arboretum, Castle Howard (Photo: Alan Hunton)

### School champion

Ron Kemeny updated the champions at Nymans and Leonardslee gardens in West Sussex; his other finds, from this well-studied corner of the country, included new champions for the graceful flowering cherry *Prunus x yedoensis* 'Tsubame' at Ashurst Wood Primary School and for the rare maple *Acer pseudosieboldianum* on the Michael Fields estate in Forest Row.



Champion Prunus x yedoensis 'Tsubame' at Ashurst Wood Primary School, West Sussex (Photo: Ron Kemeny)

John Weightman concluded his vast survey of John Ravenscroft's private Cherry Tree Arboretum in Shropshire, and also found new record-holders for Smoke-bush (*Cotinus coggygria*) in Chipping Campden and for the Andean *Drimys winteri* var. *andina* at Corsewall House in the very far south-west of Scotland.

Paul Greenwood, hunting veteran yews on the west coast of Argyll, remeasured one of the earliest plants of Dawyck Beech (*Fagus sylvatica* 'Dawyck') at Achnacloich Garden, and found it has become a Scottish champion for girth (310cm). Harry Flower

reported a record Caucasian Maple (*Acer cappadocicum*) at Blundell's School in Tiverton, 472cm in girth at 1m before it forks. Russell Miller measured a new champion for the now-scarce hawthorn hybrid X *Crataemespilus grandiflora*, 190cm in girth, at Trinity Gardens in north London, and Nick Macer measured a record Pink Siris (*Albizia julibrissin*) at Kingston Bagpuize in Oxfordshire, 9m tall.

#### Catalina Ironwood

The staff at RHS Wisley pushed their garden's tally of champions past a hundred, while the inevitable haul of new champions from the Sir Harold Hillier Gardens included the Catalina Ironwood (*Lyonothamnus floribundus* subsp. *aspleniifolius*) by the lawn of Jermyns House, now a remarkable 18m tall.

The Tree Register's Trustee Roy Lancaster CBE now has five confirmed national champion trees in his suburban garden in Chandler's Ford, including the elegant laurel *Nothaphoebe cavalieri*, planted in 1996 and already 15m tall. His 7m plant of the Australian *Lomatia fraseri* was a sixth champion for a few weeks, until John Killingbeck happened to measure a slightly taller one at Gresgarth, the Lancashire garden of fellow-Trustee Lady Arabella Lennox-Boyd.

## 10,000 different taxa

The completion of the first quarter-million individual tree records on the database was celebrated last summer by the addition of one of the biggest and oldest Ginkgos, found in a private garden in Wimbledon. This tally will only rise as we discover new trees, rather than remeasuring ones that have already been recorded, and I have no intention of adding second-rate record-sets simply to boost the total; but as I write this the list has already swelled to nearly 258,000. The next accomplishment to anticipate will be to reach 10,000 distinctly different taxa on the Register (species, varieties and cultivars).

## Tree hunting with Google and YouTube

In the dark days of winter it's even possible to spot new champion trees from the comfort of your armchair.

Google Streetview allowed me to find, by complete chance, a new Scottish record for a hackberry (*Celtis* 

sp.) on the verge of St Leonard's Road in St Andrews - to be measured and identified to species level this season - while YouTube videos of palm trees round London have helped furnish details of several remarkably thriving specimens, including a Washingtonia 'Filibusta' with about 8m of bole in a small front garden in Darleston Road, Wimbledon.

A fine Washingtonia palm in a garden in Dulwich (2018) (Photo: Owen Johnson)



## Champion trees fall during storms Arwen to Eunice



## **Extensive damage at Bodnant Garden**

On Friday 26th November 2021 the tallest Coast redwood (*Sequoia sempervirens*) in Wales (51.5m) blew down during the ravages of Storm Arwen. Only beaten by one other tree, it also held the title of British champion for many years.

(Photo: National Trust www.nationaltrust.org.uk)



## **Wray Castle**

Cumbria also took a battering from Storm Arwen. Here the British champion Cockscomb Beech (*Fagus sylvatica* 'Cristata') was destroyed. One of only 45 known examples of this rare cultivar.

Photo: National Trust www.nationaltrust.org.uk)

## **Champion Tree Trail at Leonardslee**



Gardener, Elliot Chandler, fixing champion tree labels at Leonardslee Lakes & Gardens, West Sussex. Look out for a new champion tree trail coming soon at this historic garden.

(Photo: Jamie Harris)



## Kew Gardens original Lacebark pine

Storm Eunice caused havoc in many gardens in the south as trees succumbed to strong gusts that included a new record of 122mph, recorded at The Needles off the Isle of Wight. One such tree was a favourite to many regular visitors to Kew Gardens, their original Lacebark pine (*Pinus bungeana*) introduced by Robert Fortune in 1846.

(Photo: Bryan Roebuck)

## New tallest silver birch in Britain!

Just as we were going to print Hugo Egleston reported a clear new height champion for silver birch (Betula pendula), 33m tall, in an unfrequented corner of the New Forest

Discovered at Shave Green Inclosure near Minstead with other good finds, none measured before, including a small plantation of the tallest Red Oaks (Quercus rubra) in England.

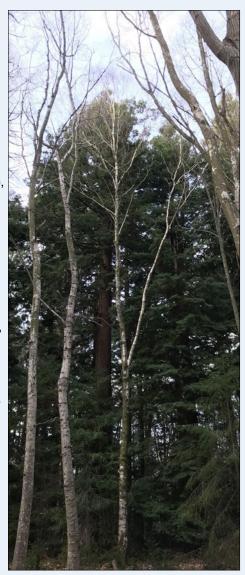


Photo: Hugo Egleston

## Vicky Schilling Bursary Report

Paul Greenwood and Bryony Smith

## Searching for St Columba's Yew on the isle of Bernera, Scotland

Bernera is a tiny, uninhabited tidal island off Lismore in the Firth of Lorne. It was on Lismore in the 6th century the Irish Christian missionary St Moluag established his mission. He was a companion of St Columba and legend has it that St Columba (or perhaps St Moluag, or both) preached and created a cell on Bernera underneath a huge yew tree. It became popularly known as St Columba's Yew.



Waiting to cross the narrows to Bernera (Photo: Paul Greenwood)

The yew was felled in the 18th century by the Campbells of Loch Nell in Argyll and its wood used to make a staircase in their castle. The castle burned down about a century later, but the staircase apparently survived. However, enquiries made with the current owners of Loch Nell discovered that the yew staircase was finally lost in a fire only a few decades ago. On the Loch Nell official website is a claim that the building stands upon a 6th century 'Columban' cell.

## Legendary yew

Various reports were made, in recent decades, that the yew survived the felling and had regenerated, in a creeper like manner, along a cliff, but searches made by many people had failed to locate it. Enquiries made prior to the visit with our guide Bob Hay (author of Lismore: The Great Garden, Birlinn Ltd., 2015) had confirmed he knew of two yews, but they appeared to be small bushes growing at the top of a cliff. Nevertheless, the question was were either of these yews connected to the legendary yew. If so, and part of the post 18th century regeneration, it would mean they were part of a yew with a root system certainly 1,400 years of age minimum.

## Large congregation

The yew was said to have been large enough in the 6th century to shade and shelter large congregations of people, hence the size at that time implies a possible age of 2,000 years old today. If so, this would put the age on par with the broad consensus that the Fortingall Yew in Perthshire is at least 2,000 years old and Robert the Bruce's Yew at Stuc an T'lobhairt, above the eastern shore of Loch Lomond south of Tarbert, said to be big enough 700 years ago to shelter King Robert and 200 of his followers, could be circa 2,000 years old.

That a yew can grow big enough to shade and shelter large numbers of people is proven today by the Great Yew of Ormiston, East Lothian. It is said that, over 450 years ago, this yew was used to gather sizeable congregations under its boughs to hear the radical ideas of the Scottish Reformation promulgated by George Wishart and John Knox.

## Precarious experience

Accessing Bernera is dangerous and only possible at low tide across a narrow neck of rough rocks with deeper water either side and should only be attempted with a guide, in our case, Bob Hay of Lismore Heritage Centre and Iris and Lorna of Explore Lismore. Even at low tide, as we found, strong winds can cause swells strong enough to knock a person off their feet and wading across such a short space is a precarious experience, moreover, when carrying sensitive technology such as cameras and mobile phones. Waiting to cross in comparative safety meant the time window on the island was compromised and reduced to just over an hour. From the narrows a rocky path takes about 20 minutes to reach an area below the summit and above a sheer cliff about 30 ft (10 metres) high.

## Clifftop overhang

On reaching the spot we found two female bushes of yew growing about 10 metres apart poking through a tangle of thick vegetation including brambles and young trees which mostly appeared to be ash (Fraxinus excelsior). It is not possible to get very close as the surrounding vegetation on the clifftop overhangs the sheer drop and is dangerous to explore. It is obvious that these two bushes are not creepers and have distinctive stems although these were not fully visible from the viewpoint. Given that previous searches in the 1990's found this yew growth impossible to find is understandable as it may not have been as visible then as it is now.



A section of yew on the cliffs of Bernera (Photo: Paul Greenwood)

This is an extract from the *Argyll and Highland Field Research - Report 2021* for Scotland's Yew Tree Heritage Initiative (SYTHI) www.scotlands-yew-trees.org

## Searching for St Columba's Yew

Paul Greenwood and Bryony Smith



Second section of yew, showing the beach below the cliff on Bernera (Photo: Paul Greenwood)

As time was at a premium, both to recross the tidal narrows and then drive to reach the ferry back to the mainland, Bob had suggested he left to retrace our steps and then divert to reach the shoreline beneath the cliff, so we could obtain an assessment of the site from below as well as above. Although the area at the base of the cliff is surrounded to some distance by thick undergrowth, he could confirm what looked like a trunk was growing from the cliff and the bushes were the tops of stems and not separate trees. The yew is historically described as growing from a cliff overhanging a level area leading to the shoreline. Nearby was a shingle beach where boats could be easily drawn up and the topography of the site fits this description exactly. The fact that both stems are female, suggesting they are the same tree, is more supporting evidence that this was what we were looking for - St Columba's Yew but also the Holy and Noble Yew of Bernera.

Given the well-known propensity of the pre-Christian Druid culture to utilise yew trees or yew groves, it is possible this yew was known and revered by the Druids prior to the establishment of the mission of St Moluag and why archaeological investigation of the site is imperative. Since the visit Bob has advised he will organise the clearing of the dense undergrowth at the base of the yew over the coming months and this will enable a look for archaeological evidence (Bob has extensive archaeological experience investigating the history of Lismore) that a monastic cell or retreat was indeed here, as traditions maintain, during the period of St Moluag's and St Columba's missions.

## Spiritual relationship

That St Columba had a profound spiritual relationship with yew trees is found in part of a verse attributed to him and written before his exile regarding a yew in his native Derry:

"This is the yew of the saints
Where they used to come with me together.
Ten hundred angels were there,
Above our heads, side close to side.
Dear to me is that yew tree;
Would that I was set in its place there!
On my left it was pleasant adornment
When I entered into the Black Church..."

These words raise the compelling question that, if St Columba spent time under this yew tree on Bernera, did he experience angels 'within' it too?

#### Sole survivor

Leaving aside the anthropological significance to this yew, of most significance is that there is a yew on Bernera in the first place. Although Bernera and Lismore are unusual in that their geology consists mainly of limestone and not formed from the igneous rocks more typical of the west Highland region, this environment is exceptional for yews as it is fully exposed to the salt laden, Atlantic storm strength winds which continually batter the islands, and would typically induce slow yew growth. As Bob knowledgeably advised, trees are not traditionally popular in a long history of livestock farming on Lismore and Bernera "because they take up space" so yews may have been here and lost over many centuries. If so, that would make the yew on Bernera perhaps a sole survivor of a very ancient population. However, it could be the only yew there has ever been on Bernera and a result of avian seed dispersal however long ago. This is reasonable to assume, but is not quite so, as we found out.

## **Direct progeny**

On our return from the site we were excited to find another yew on Bernera, a tiny bush growing atop a steep cliff a few hundred metres to the north-west of the main site. Given the other yew is female, evidence suggests this bush is a direct progeny of the other and a result of avian seed dispersal.



Yew bush growing on a cliff top, Bernera (Photo: Paul Greenwood)

## **Further exploration**

It is genuinely compelling to consider that what is said to have been a huge yew 1,400 years ago began life on Bernera in such a way, germinating upon a cliff and, already, in this case, its life has been sculpted by the prevailing weather and possible nibbling by sheep. Not only has an example of yew regeneration apparently occurred on Bernera, since the felling by the Campbells, the unexpected discovery of this other yew is equally significant. This is evidence suggesting the Holy Yew of Bernera has probably produced at least one successful offspring thriving as best it can in such a challenging habitat. This raises the possibility that further exploration of Bernera may find more and Bob will be investigating this exciting prospect in due course.

Paul and Bryony thank the Tree Register for supporting this expedition with a Vicky Schilling Bursary

## The 250,000th tree

David Alderman

## A Ginkgo in Wimbledon

The Tree Register reached an impressive milestone when we recorded the 250,000<sup>th</sup> tree on our database in June 2021. And it was quite fitting that it turned out to be a Ginkgo and one of the fattest recorded! When Charlotte Maclean contacted us about this Ginkgo in her family home in Wimbledon we were not expecting the tree to be quite so interesting! She explained how the house had been built on land that was the garden of the original Wimbledon House and that the Ginkgo dated to the period c.1750-1800. When trustee Tony Kirkham visited he confirmed that it was a bundle planting of male trees just like the one at Kew Gardens, seven miles away. Another thing these two trees have in common is that they both had a female branch grafted onto one of the male branches. The female branch on the Kew tree has since been removed (not, stressed Tony, authorised by him when he was head of the arboretum!) The female branch on the Wimbledon tree was fruiting heavily in the autumn and Charlotte remembers it being this way since her childhood. A connection between the two trees appears likely. The Kew tree was planted in 1762, having been transplanted from the original botanic garden started in 1759 by Princess Augusta, the mother of King George III. Tony suggested this tree could have been a copy of that one and planted soon afterwards.

The Ginkgo Lady

Despite probably being one of the oldest Ginkgo in Britain the tree is still relatively young for its species, as it can grow to over 3,000 years old. Despite evidence of some land-scraping when the new house was built, leaving the tree on a protective mound in the garden, the tree looks in good health. A smaller tree, presumed to be a seedling, grows nearby. Charlotte's mother still lives in the house and she has been known for many years, locally and by friends as "The Ginkgo Lady". Her drawing room looks out directly at the Ginkgo. Charlotte said, "When my parents bought this house in Wimbledon in 1969, it was with the understanding that they would care for this great tree. Hopefully we have not only done just that but that future generations will enjoy it as much as we have. I think trees know when they are much loved."

#### Finest in England

The sale particulars from 1969 described the tree as being "the largest Ginkgo biloba in England" and yet the tree has apparently been seen by very few people.

Charlotte says the family are "very proud" the tree has now been nationally recognised, and that it can stake claim to being the Tree Register's 250,000<sup>th</sup> tree!







## The definitive Tree Register

## A wealth of historical information

The Tree Register is a database that includes historical references describing the size of trees dating back to 1620. The earliest record relating to Cobham Hall, in Kent, where; "In 1620 a lime in the garden was trained to support three platforms, each big enough for 50 people." In 1636, a Wych Elm, near Uttoxeter, Staffordshire, was said to be the equivalent of 15.39m in trunk circumference, measured at the trees "kerf" - the base of the trunk where the tree was felled. This is the largest tree reliably recorded in Britain - measured by ten witnesses. John Evelyn's Silva (1646) documents for the first time many ancient trees, such as a 9.11m oak at Worksop Manor, Nottinghamshire, and subsequently by JC Loudon as having been 'felled' by 1837. Bringing this information together documents the history of many notable trees, past and present, that have grown in Britain and Ireland and that make up our rich tree heritage.

## First champion tree list

JC Loudon's *Arboretum et fruticetum britannicum* (1838) gives the sizes for some 1,800 trees, whilst *Trees of Britain and Ireland* by Elwes and Henry, (1906-1913), records specific details of over 3,600 trees, of which maybe less than 1,500 survive today. In the early 1950's the Hon Maynard Greville recorded 3,500 trees which, with the growing records by Alan Mitchell, the Forestry Commissions dendrologist, were combined and privately published as our first champion tree list. Today, many trees on the Register have been updated and measured many times over a period of up to 200 years. This now equates to over 365,000 sets of measurements on the database, providing us with an interesting insight and indication of growth rates.

## Computerisation

Up until 1994 Alan Mitchell had entered 107,000 tree records onto a hand-written card index system, before computerisation. For many of his own records he was assisted by Vicky Schilling and, in Scotland, some 20,000 were recorded with the help of Jim Paterson.

Our Registrar, Owen Johnson, has recorded over 100,000 sets of measurements, including more 'new' trees than anyone else in history. Our principal Irish recorder, Aubrey Fennell, has measured 14,000 trees for the Tree Register of Ireland Project, Tree Council of Ireland, Heritage Trees of Ireland, the Irish Tree Society and, as himself! There is no room here to sufficiently acknowledge more than 250 individuals who have contributed to the Register's records,

including those who continue to enthusiastically volunteer today and members of the public who submit records, without whom we could never keep the data as current as it is.

## Frequency

The most frequently recorded genus on the Register is Quercus, with 32,000 records made up of 650 taxa,13,000 being *Quercus robur*.

## **Redwood plantings**

Over 6,000 Sequoiadendron giganteum are recorded, a particular favourite of Alan Mitchell, who claimed you could feel the tape measure tightening when measuring specimens in the growing season! In 1994/5 we organised the planting of 100 Sequoidendron on estates across Britain and Ireland to celebrate our 100,000th record! Over the next few years we hope to discover just how well these have grown in their first 30 years.





Photos: David Alderman

## The mulberry at Lesnes Abbey in the London Borough of Bexley

**Morus Londinium,** unravelling the tale of London's mulberry tree heritage. Supported in 2021-22 by a Vicky Schilling Bursary, Peter Coles has re-visited one of his favourite trees to research further into its history.

The veteran Lesnes Abbey mulberry has to be one of the Capital's most photogenic trees, standing on a mound, flanked by the ruins of a 12th century monastery and nestled beneath ancient woodland. But the old farmhouse it probably belonged to has disappeared without trace.



The Lesnes Abbey mulberry (Photo © Peter Coles)

The Lesnes Abbey mulberry has inherited an enviable pedigree, simply by its location. Standing in the shadows of what remains of the dormitory and refectory walls of a ruined 12th century Augustinian abbey, one would be forgiven for thinking this impressive old black mulberry has the credentials of a really ancient tree.



Looking north-west, with remains of the dormitory walls (Photo @ Peter Coles)

Indeed, black mulberries were often grown in monastery and medieval gardens for their nutritious and famously fragile fruit, having been introduced to England by the Romans in the first century AD. All parts of the black mulberry have medicinal uses, which medieval monks knew all too well. So, Lesnes Abbey may well have had a mulberry in its infirmary garden, but, if so, it wasn't the present tree, as we will reveal.

## The Abbey

Lesnes Abbey was founded in 1178 by Richard de Lucie, who was Chief Justicier (a bit like Prime Minister) to Henry II. De Lucie apparently felt bad for not doing more to prevent the murder of Thomas Beckett at the altar of Canterbury Cathedral. Indeed, Lesnes Abbey is on one leg of the Pilgrim's Way from Southwark Cathedral to St Thomas's shrine in Canterbury and the abbey church was dedicated to St Mary and St Thomas the Martyr.

An imposing structure, Lesnes (or Lessness) Abbey was, nevertheless, one of the 'smaller' monasteries that Cardinal Wolsey supressed in 1524-5, to fund a new college – Cardinal College (now Christ Church) – in Oxford. This was a decade before his nemesis, Henry VIII, dissolved the monasteries (1536-4) to mark his rift with the Catholic church and the Pope – and fill his coffers with plunder.

Typically, supressed monastery buildings were first weakened so that they would collapse and anything valuable, including stones from the walls, salvaged for construction projects, such as roads and mansions. Over the following centuries, the remaining parts of walls, doorways, pillars and pulpits gradually got buried and overgrown, with just a few ruins poking up like bits of shipwreck, until the site was eventually excavated in 1909-13.

## No evidence for silk

Rather than link the mulberry to the medieval Abbey, an information display by the tree – installed some years after I first visited it in 2013 – claims that it dates back to the early 17th century, as part of James I's (failed) attempt to foster English sericulture – rearing silkworms on mulberry leaves to produce silk thread. The presumption of a heritage link to James I's silk venture is understandable. After all, the Stuart king did import thousands of mulberry saplings in the decade after he took the throne in 1603, some of which survive today.

However, this is unlikely to be the reason that this tree was planted, not least because there is no evidence of any silkworm houses nearby or any history of sericulture here. Also, a 400-year-old mulberry would likely be completely hollow and, possibly, lying horizontally, sending up branches vertically as future stems (as this one probably will in decades to come).

## The Abbey farm

After searching the Bexley and Kent archives, it seems more likely that the mulberry was linked to one of two generations of farmhouse that once stood on the site and was grown for its fruit and shade, rather than its leaves.



Dominating the Lesnes site for centuries was an impressive 16<sup>th</sup> century brick and timber mansion, converted from one of the original monastery buildings – the Abbott's Lodging – in the angle formed by the dormitory (*dorter*), its latrines (*reredorter*), and the refectory (*frater*) at the north-west of the site. This would once have accommodated the Abbott, as well as frequent visitors and pilgrims. Immediately after the Dissolution, Ralph Sadler (Henry VIII's Chief Minister) lived here with his family for a while, until he sold the property.

Changing hands several times until it was bequeathed to Christ's Hospital in 1633, the Abbot's lodging was converted into a farmhouse, with some of the abbey's original walls requisitioned for outbuildings and to enclose an orchard. In 1845, a new farmhouse replaced the Tudor one until it, too, was demolished in 1933.

Georeferenced old maps enable us to locate the tree as standing close to the position of the western wall of these farmhouses, which shared the same basic footprint. This is corroborated by photos of the Victorian farmhouse and a 1757 drawing of the earlier house by Samuel Grim, now in the British Library. Both show a tree that could be the mulberry we see today – but what does the tree itself have to say?

## 18<sup>th</sup> century or Victorian?

The formulae for calculating the age of a veteran tree are quite complex, as trees grow quickly when young and more slowly with age, depending on soil and sunlight. Black mulberries are particularly difficult to age, not least because they typically have many burrs, which make it hard to get a true measurement of girth. However, after studying scores of old mulberries with approximately known planting dates, I've found that an increase in girth of about 1 cm per year, averaged over several decades, gives a reasonable 'ball-park' estimate. Signs of hollowing and dropped branches are other clues to a veteran tree – both of which the leaning Lesnes mulberry shows.



North wall of the 'frater' (refectory) showing the rebuilt farmhouse. The mulberry is beyond the wall to the left of the house. [British Library]

With a girth of just over two metres (225 cm), this rule of thumb would suggest that the tree was planted around 220-250 years ago, with, perhaps, the earliest date somewhere around 1770. Back then, the abbey had not yet been excavated and the visible remains were just a few remnants of walls, doorways and columns poking up in a field. This date would fit well with the Samuel Grim drawing of 1757, although a younger, faster-growing tree linked to the second farmhouse of 1845 can't be ruled out.

Interestingly, an 1855 guide to Erith mentions the socalled 'Abbot's Thorn' on the Abbey site: a tree 'of great age' measuring 6'6" (198 cm) around the trunk, with two stems and having a crown circumference of 60 feet (18.2 metres). It's not easy to confuse a thorn with a mulberry, but who knows?



A post-war postcard showing the Y-shaped mulberry, already starting to lean



The mulberry in 2021 (photo © Peter Coles)



The mulberry in 2021 (photo © Peter Coles)

## For more information visit: Morus Londinium www.moruslondinium.org

Morus Londinium is hosted by the Conservation Foundation and maintained by the voluntary contributions of Peter Coles

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## A dilemma for tree recorders?

Ted Green MBE

## Bundle planting and other multi-stemmed trees

The term bundle has been used to describe groups of trees, which, by design, have originated from two or more seeds or saplings grown in the same spot and their stems may fuse together. However, very similar looking trees, such as maiden trees, where the trunks have significant natural fluting or convolutions, or multi-stem trees, can develop in a wide range of circumstances in nature. Differentiating bundle planted trees from multi-stemmed trees can cause a lot of head scratching and discussion.

Planting of bundles has historically been a significant feature. The advantages for people are, for example:

In designed landscapes - bundles create a visual impact more quickly as a wide spreading crown is achieved at an earlier stage than a single tree. It is popularly believed that the Romans planted bundles but it was certainly appreciated in the 17th century and by later landscape gardeners and was promoted by John Evelyn.

In traditional grazing areas, perhaps practiced for millennia - mixed species bundles may have increased reliability of annual mast production for feeding stock as the chances were greater that at least one of the species of trees would be producing seed in any one year.

## Sweet chestnut research

Recent research by Rob Jarman of very large girthed sweet chestnut in the UK found that most multi-stemmed trees were bundle planted clones. Presumably, these bundles were originally planted not only for landscape impact but also for food - either for man or animals, especially deer or pigs or both. There are similar examples of landscape mixtures of oak with beech and sweet chestnut, possibly as insurance for at least one of the species to provide autumn and winter food each year.



Research of Sweet chestnut in the UK by Rob Jarman found that most multi-stemmed trees were bundle planted clones. (Photo: Ted Green)



A lime avenue that was presumably felled and allowed to re-grow, in Sunninghill Park, Berkshire. (Photo: Ted Green)

As with apples and other fruits, we have varieties of sweet chestnut with different qualities such as sweetness, storage or cooking, which may have influenced the type of tree that was planted. Later this would have included grafting scions of a different variety or varieties onto a single stock tree.

## **Early harvest**

In the past I have encouraged the International Tree Foundation to practice multi-stemmed planting in the poorer regions of the world. Such multi-stemmed trees might not need such efforts for watering or tree protection as widely spaced single trees. Their growth would provide shade much earlier and harvesting and collection of fuel, fruit and tree fodder would be much easier.

# In natural conditions multi-stemmed trees or 'natural' bundles can arise in a variety of ways such as:

- (i) Seeds growing from wind drifts, in hollows and indentations or from debris racks piled up by water run-off and eddies.
- (ii) Seeds germinating from animal caches, especially wood mice and red squirrels, or birds such as jackdaws and other birds of the crow family.

Wood mice have been found to be very important movers of seed and have larders or caches. Forestry Commission scientists found wood mice moving seed up to 75m away from their source tree. In the USA, small rodents were found moving seed a similar distance and, whilst they were absent, another rodent stole the seed and, presumably, could move the seed a similar distance and that could be repeated possibly on and on.

Animals such as foxes and badgers and birds such as thrushes also move seed in their poo. In Belgium they discovered that crab apple pips may need to pass through a cow and out into the cow pat to then germinate successfully.

Although jays are well known as vectors or planters of acorns or sweet chestnut seeds, they will usually only bury a single seed in one location.

(iii) Damage or loss of the main leader or stem through browsing or chopping, which is then replaced by numerous new stems for example 'coppicing' like a beaver. In older trees the main stem may die through age or perhaps because of a fire and then the tree regenerates through production of a cluster of stems. This is frequently seen as a response to heathland fires by birch or oak.

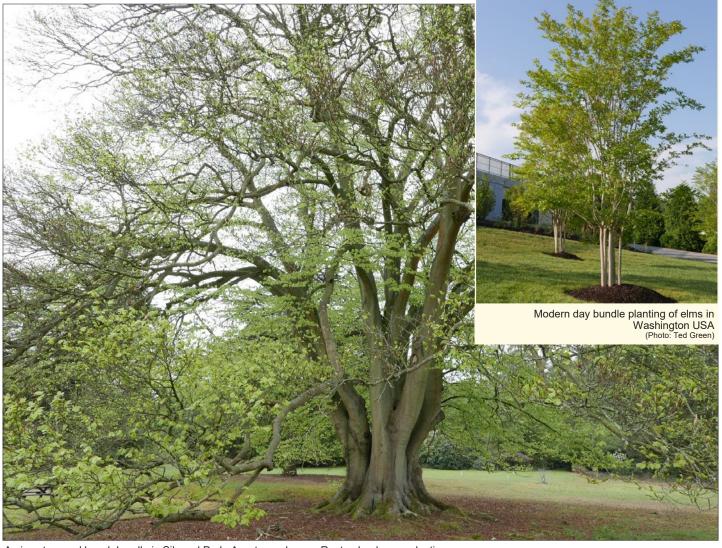
(iv) Alternatively, what looks like a multi-stemmed, bundle planted tree may be a feature of the natural development of functional columns in the expanding girth of a tree in late maturity. John White, when he was a Forestry Commission dendrologist, identified that as a tree's girth expands with age, it is still only able to lay down a similar volume of new wood. As a result, the growth rings become increasingly narrower in width, until, eventually, the trunk can separate into individual columns – see photo on right.

## Much discussion

At a Royal Forestry Society meeting, somewhere in Hampshire, the group stood at the junction of several rides beneath an incredibly large, multi-stemmed sweet chestnut at its centre. Much discussion focused on whether the tree was a coppice or a bundle plant? Looking at the surrounding extensive coppice stands, it was thought by many that it must be a lapsed coppice until an old forester spoke up and said it WAS a bundle, planted with the aim of drawing in the deer when it produced fruits. If anybody knows this tree, I would love to visit it again.



Stump of an oak pollard showing 10 natural columns (Photo: Ted Green)



A nine stemmed beech bundle in Silwood Park, Ascot - perhaps a Repton landscape planting. (Photo: Ted Green)

## **Commemorating the Platinum Jubilee**

Dr Owen Johnson MBE VMM

## Royal trees - Her Majesty's champions

The Tree Register is blessed in its royal Patronage, which undoubtedly helps our volunteers to secure access to many private estates. As the hon. Registrar, I'm also lucky enough to have visited nearly all the Royal Family's gardens, which can together boast more than 420 champion trees - some 6% of Britain and Ireland's total. The Register also holds hundreds of records of specimens which commemorate royal visits, coronations or jubilees – and which show how monarchs and princes have personally planted many more trees than most of us can claim to have done.

## Regal plantings

My local park, Alexandra Park in Hastings, is typical of many urban gardens in retaining a beech planted by Princess Alexandra herself during the opening ceremony in June 1882. Her spade had a handle fashioned from prehistoric timber preserved on Hastings beach, which promptly shattered. Despite this omen, trees planted by royalty tend to benefit from good soil preparation and aftercare and often survive as outstanding examples. In England the great majority of regal plantings are native oaks; the associations derived from these trees' usefulness to the Royal Navy and from their survival over great spans of time in former royal hunting forests and deer-parks were enhanced by Charles II's successful climb at Boscobel. A tree's longevity and stability will make it a ready symbol for inherited landownership; particularly in Ireland and the Scottish Highlands, there is a strong contrast between the welltimbered estates of royalty and aristocracy and the wider countryside where the commoners grazed their flocks and cut wood for fuel.

## **Surviving landmarks**

The Thorp Perrow Arboretum in North Yorkshire contains potentially the oldest royal tree: the Catherine Parr Oak is supposed to have been planted here in 1535 by Henry VIII's Queen. Many surviving oaks, like the Queen Elizabeth Oak (Sessile) at Cowdray in West Sussex, are claimed to survive as landmarks from Elizabeth's progresses around her kingdom, during which she stayed at innumerable grand estates to test the incumbent's loyalty. Much more convincingly, the garden at Longleat in Wiltshire retains an oak planted by George III, the 'Farmer King', in 1789.



Queen Elizabeth Oak in Cowdray Park, West Sussex

(Photo: Owen Johnson)

#### Legendary

Along with all those Queen Elizabeth Oaks are the King James Mulberries. Again, it seems unlikely that there is any real connection between the monarch and the majority of today's trees. James I of England - and VI of Scotland - was hoping to create an English silk industry and the legend that today's ancient-looking Black Mulberries (*M. nigra*) are relics of this event seems to have taken hold during the nineteenth century, when many of today's trees were planted. A few C17<sup>th</sup> trees nevertheless survive as remnants in the grounds of Jacobean country houses.



*Tsuga canadensis* 'Lutea'.

Champion golden hemlock in the Valley Gardens, Windsor.

(Photo: Owen Johnson)

## Victoria and Albert

Rufford Abbey Country Park in Nottinghamshire has a cedar supposed to have been planted by Charles II in 1660, but which looks much younger. Among the less common trees which the royal family had the opportunity to plant, Howick Hall boasts a county champion Algerian Oak (Quercus canariensis) planted by Queen Victoria in 1851, probably from the very first acorns of the species which had been sent to her by King Louis Philippe in the 1840s. At Haddo House in Aberdeenshire a pair of Giant Sequoias (Sequoiadendron giganteum) were added in 1856 by Victoria and Albert, again from Europe's first major seed importation. The best Daimyo Oak (Quercus dentata) in the north was planted at Harewood House in West Yorkshire by Queen Alexandra on 8<sup>th</sup> July 1908, while the second-biggest example in Britain of the dainty Chinese hornbeam Carpinus turczaninowii was planted at Highdown in West Sussex by Queen Mary in 1937 as a cutting from the original champion example here, which was itself grown from Farrer's 1914 introduction of the species. A fine weeping beech (Fagus sylvatica 'Pendula') at Drumlanrig Castle in Dumfries and Galloway was planted by the late Duke of Edinburgh to mark his visit in 1990. A promising Oregon Ash (Fraxinus latifolia) was added to the Westonbirt National Arboretum by Prince Charles in 1982.

#### **Coronation Plantation**

One of the most ambitious coronation plantings was made in Windsor Great Park in 1937, straddling the Berkshire/Surrey border. The Empire Grove - it's recently been renamed the 'King George VI Coronation Plantation', in a very genteel English kind of historical whitewashing - consisted of sixty oaks, planted by representatives of various subject peoples, but these oaks - probably thanks to the influence of the Deputy Ranger at Windsor, the horticulturalist Sir Eric Savill include a variety of exotic species. Sadly no attempt was made to fit the oak to the country it represented, even in the case of territories like Malta and Palestine which have their own native hardy Quercus, though the American Black Oak (Q. velutina) which was assigned to Barbados has a trunk which arches up from the horizontal and has managed to look a little bit like a coconut palm. Some forty of the oaks still survive and include four national champions, among them a particularly fine Quercus petraea 'Muscaviensis'. (In case you're wondering, Moscow never was part of the British Empire. This tree was planted by a representative from Zanzibar, and belongs to a cultivar deriving from the Muskau Arboretum in Germany, with largely unlobed leaves.) Within the Empire Grove, Quercus robur - the 'English' oak - was reserved for the United Kingdom's representative and for the young King himself; it may come as some comfort to the former subject nations that the latter tree is the real runt of the grove. For the subsequent coronation planting in the Great Park in 1953, near the Village, all the Commonwealth representatives were given 'English Oaks' to plant.

## Kings and Queens of Scotland

In Scotland, meanwhile, royal trees tend to be anything other than oaks. At Scone Palace in Perthshire, King James' Sycamore is supposed to have been planted by the King on his only 'hamecoming' in 1617. The ancient Queen Mary's Thorn in St Mary's Quad at St Andrews University in Fife was planted in 1563 as a scion from a hawthorn at the garden of James Stewart, the Regent of Scotland during Mary's imprisonment. Queen Mary's Pear at Mary Queen of Scots' House in Jedburgh is a 1934 replacement for the sixteenth century original. Leith Hall in Aberdeenshire has a Scots Pine sourced from the battlefield at Culloden and planted by a later Queen Mary in 1928.

## **Mount Congreve**

A Monterey Cypress (*Cupressus macrocarpa*) was planted in 1907 by Princess Marie-Louise of Schleswig-Holstein at Mount Congreve in Co. Waterford for the baptism of Ambrose Congreve of that estate. Ambrose went on to create one of Ireland's finest gardens here, and lived until 2011. Marie-Louise was a grand-daughter of Queen Victoria, and most of our 'royal trees' are relics of visits from scions of this one extended family. One noteworthy exception is King Cole's Tree, a *Eucalyptus parvula* planted in east London's Meath Gardens in 1988 on the site of the grave of the native Australian cricketer Bripumyarramin - also known as King Cole - who died of pneumonia on tour here in 1868.

## Gift to Her Majesty

Among the kinds of tree with royal names, **Queen Elizabeth**® ('Evelyn'), a vigorous, erect selection of the native Field Maple, was in fact named in Oregon in the 1980s by J. Frank Schmidt and Son; England's largest



The champion *Quercus petraea* 'Muscaviensis', representing Zanzibar in the 'Empire Grove', Windsor Great Park. (Photo: Owen Johnson)



A 2003 Golden Jubilee planting of *Acer campestre* 'Queen Elizabeth' at the entrance to a new development in the south-east of England.

(Photos: David Alderman 2022)

and oldest grow at the Savill Garden at Windsor and in the garden of Buckingham Palace, and were gifts to Her Majesty. Also at Buckingham Palace are three fine examples of a golden-leaved Norway Maple (*Acer platanoides*), whose origins remain mysterious; they have been dubbed 'Golden Jubilee' but not yet propagated for sale. *Magnolia campbellii* 'Queen Caroline' was named at the Royal Botanic Gardens after George II's consort, the first royal incumbent at Kew Palace; it is a particularly good flowering form from a 1904 introduction of seed from India

The Sweet-gum *Liquidambar styraciflua* 'Royal Lodge' was named by John Anderson, the Keeper of the Gardens at Windsor, from a specimen in front of the Royal Lodge whose autumn colour always excels; it is not yet commercially available but one scion was planted in the nearby All Saints' Chapel by Princess Beatrice on 17<sup>th</sup> July 2020, the occasion of her wedding.

## **Royal Parks**

As primus inter pares, the Monarch has long felt obliged to indulge and excel in that particularly British aristocratic passion for trees – for allowing parkland timber to grow old and waste, and for cultivating garden specimens from around the temperate world. There is also a long tradition of sharing these trees by opening the grounds to the public. The Royal Botanic Gardens at Kew have their origins in an 18th century royal collection, a time when a wide range of introduced ornamental trees was just becoming available, while the Royal Parks themselves now contain many of London's finest plantings.

## Remarkable collection

Frogmore at Windsor - with restricted open days in summer - has an American Incense Cedar (*Calocedrus decurrens*) surviving from the first introduction to Europe and planted in 1857 by Prince Victor of Hohenlohe-Langenburg. Nearby, the private Bagshot Park has four champion trees surviving from the garden created by Prince Arthur in the later 19<sup>th</sup> century.

The Palace of Holyroodhouse benefits from Edinburgh's Dutch Elm Disease control programme and retains the only two known mature examples of the weeping elm *Ulmus x hollandica* 'Wentworthii'. Sandringham's eight champions derive from plantings through the middle 20<sup>th</sup> century, while Buckingham Palace's 24 were nearly all planted by the current Head Gardener Mark Lane, who has built a remarkable collection in the garden. This is particularly strong in American oaks, which thrive in the warm summers and heavy soils here, but other highlights include the first She-oak to have been successfully grown to tree-size in north-west Europe, a specimen of *Casuarina cunninghamiana* featured in last autumn's e-news and 14.5m tall after just 14 years' growth.

Other distinctly tender trees which are growing well in the garden's warm summers include a splendid Camphor Laurel (*Cinnamomum camphora*) and a young *Itoa orientalis* from Myanmar, with its giant evergreen leaves. But the lion's share of the royal champion trees can be found in Windsor Great Park, where Sir Eric Savill was encouraged to create an extraordinary series of woodland gardens, starting in the 1930s at the Savill Gardens and extending south across the Valley Gardens and north to the Chapel Wood Arboretum, as well as in the extensive private grounds of the Royal Lodge. This was at a time when few landowners had the resources to create important gardens, and many of the trees here are now in their prime.



Liquidambar styraciflua 'Royal Lodge' (Photo: John Anderson)

#### True passion

Although most royal landowners have been content to leave the design and planting of their estates to employees like Savill, Prince Charles himself has a true horticultural passion and has created a private garden at Highgrove whose informality and intimate scale contrast with the grander or more public landscapes of the official royal residences. Highgrove's beech collection includes the champion of the diminutive purple-leaved *Fagus sylvatica* 'Frisio'.

## **Experimental**

Windsor Great Park remains England's foremost assemblage of large and ancient oaks, and of the rare insects associated with such trees. In more recent centuries, the royal estates were often the locations for experiments in forestry practice, and Dunster Woodlands in Somerset now includes several of England's tallest trees within a plantation of Douglas Firs (*Pseudotsuga menziesii*) made in 1874. Underneath these, a much younger Dawn Redwood (*Metasequoia glyptostroboides*) is also a champion for height, having reached 36.5m by 2017.