The Tree Register

Newsletter No. 24 2015/2016





The trees of Crathes Castle

Report from the Chairman

Colin Hall

Alan Mitchell Lecture comes to Scotland

Arboretum

I have been greatly enjoying reading Owen Johnson's excellent new book, Arboretum, which was published in December. This magnum opus is indeed a celebration of Britain and Ireland's extraordinary tree heritage, and full of fascinating information which lies behind so much of the data held on the Tree Register. We are very grateful to Owen who is donating part of the royalties from the book to the Tree Register. If you have not already purchased the book, you should order one now! Tree Register members can still get 25% discount and free P&P. Go to our website for details.

Alan Mitchell Lecture 2016, Edinburgh

National Tree Collections of Scotland and Woodland Heritage have offered to sponsor the Alan Mitchell Lecture this year, which will be held in Edinburgh at the Royal Botanic Garden on Thursday 9th June. The lecture "New Trees - Recent Introductions to Cultivation" will be given by John Grimshaw, the curator of the arboretum at Castle Howard. This is the first time we have held this popular event in Scotland, so we are looking forward to seeing many of our Scottish members (and others too!) at the event.

See the back page for details.



Tree Register Trustee the Earl of Rosse with his champion *Magnolia dawsoniana* at Birr Castle, Co. Offaly, Ireland

Growth of our Databases

Owen Johnson, and our tree hunters, continue to discover new champions with over 590 being added to The Tree Register during the year. In total some 7720 new or updated records have been added. The newsletters, admirably edited by Alison, keep you in touch with all this activity.

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

Roy Lancaster

Congratulations are due to Roy Lancaster who was awarded the CBE in the Queen's Birthday Honours list for services to horticulture and charity work. Roy has been a greatly valued trustee of the Tree Register since 2001.

Mark Flanagan

We were shocked by the sudden death during the year of Mark Flanagan. Mark, who was Keeper of the Gardens at Windsor Great Park, gave the Alan Mitchell Lecture in 2014 and led a much enjoyed tour of the Savill Garden for members on the day. Mark was a keen supporter of the Tree Register.

Volunteers

The Tree Register owes everything to our volunteers, so thanks are due to all those who have helped and supported us during 2015: to David, Owen, the Ancient Tree verifiers, all our other tree recorders, Tim Hills and the Ancient Yew Group, Alison Evershed, our newsletter editor, Clair McFarlan, our volunteer support officer, and Pamela Stevenson, our hard working secretary and, finally, to you our members for your continued support.

The Tree Register
Registered Charity No.801569

Patron

HRH The Prince of Wales

Hon. President: Tony Schilling VMH
Hon. Vice Presidents: Sir Ilay Campbell Bt. & Philippa Mitchell

Trustees: Rupert Ely, Maurice Foster VMH, Colin Hall, Tony Kirkham, Roy Lancaster CBE VMH, Thomas Pakenham, The Earl of Rosse, Lady Arabella Lennox-Boyd

> Director: David Alderman Registrar: Owen Johnson European Representative: Philippa Lewis Historic Yew Advisor: Tim Hills

Secretary: Pamela Stevenson Newsletter Editor: Alison Evershed Volunteer Support: Clair McFarlan



77a Hall End, Wootton Bedfordshire MK43 9HL Email: info@treeregister.org www.treeregister.org Tel:+44 (0)1234 768884

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

2

Registrar's Report

Owen Johnson

A detailed picture of performance!

With *Arboretum* now in the bookshops and (I hope) on members' shelves, I can now look back – prematurely I hope – on the fulfilment of that part of my life which I've spent studying and measuring Britain's trees. I can also look back on another year of exciting discoveries, as the Tree Register itself inches closer to our goal of incorporating every plant in Britain and Ireland that is exceptional for its age, stature, rarity or historical associations.

Referenced around the world

Through the course of 2015, I've added 7720 new sets of measurements to the database, 3180 of these for previously unrecorded specimens, bringing the grand totals to 296,573 record-sets for 211,070 individual trees - 179,000 of which seem moderately likely to be still living. The county champions list, which you can explore on our interactive website, is only the topmost tier of the statistics now available within the Register, which can be interrogated on request (by contacting info@treeregister.org) and which is regularly referenced by tree researchers around the world.

Most abundant

Of those 211,070 trees, 79,490 are/were conifers; 35,154 belong to native species, nearly 90% of which are outstanding 'veterans'. 550 trees on the Register - nearly all of them conifers from western North America - are at least 50m tall, while 8,850 have trunks at least 2m thick. The most abundantly represented species is Pedunculate Oak (*Quercus robur*), with 9,262 records (rising to 14,352 when Sessile Oak (*Q. petraea*) is added, along with many wild oaks recorded in winter and not determined to the species level). The Yew (*Taxus baccata*) comes next with 6,667 records, followed by Giant Sequoia (*Sequoiadendron giganteum*) with 5,450.

Specialist collections

353 species, varieties and cultivars are now represented by at least 100 recorded examples enough to offer a detailed picture of the taxon's performance across these islands, and to provide growth-curves which can offer clues to the likely age of an example of any given trunk thickness. However, 2,097 taxa - nearly 30% of our grand total of 6,523 - have just a single record; most of these are cultivars labelled in specialist collections which cannot otherwise be identified with confidence. Well over half the kinds of tree in Britain are represented by fewer than five known examples, reminding us of just how many species could make perfect garden trees but are scarcely known at all and teeter constantly on the edge of local extinction.

Portraits of our greatest trees

Statistics by themselves, of course, tell scarcely half the story. The publication of *Arboretum* provided an opportunity to share a part of my burgeoning library of tree photos, thousands more of which can now be explored on the Tree Register website. One longer-term aim here could be to build an imagelibrary not only of portraits of our greatest trees, but definitive images of leaves, flowers and fruit for all the rarer species, about which on-line information is often currently lacking.

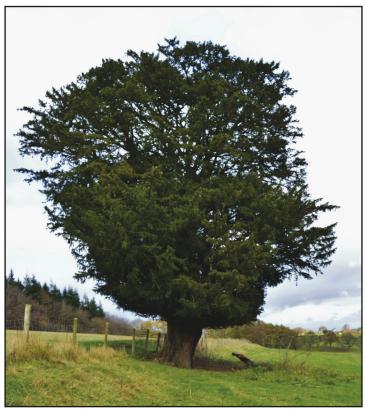
New discoveries

Of course I have no intention of retiring from my (honorary) role of Registrar. An immutable fact about trees is that, once you've recorded them, they carry on growing, or die or blow down, and I am sure too that we shall never run out of new discoveries which are simply waiting to be made.



Robinia pseudoacacia 'Aurea' discovered in 2015 by John Weightman at Cholmondeley Castle, Cheshire. One of only eleven ever recorded and now possibly one of only seven specimens surviving throughout Britain and Ireland. (Photo:David Alderman)

Marker and boundary yew



A typical countryside marker yew (Photo: Paul Wood)

It is 30 years since the publication of Andrew Morton's *The Trees of Shropshire*. His chapter devoted to the yew not only listed its many remarkable churchyard specimens but also dealt with trees found in the countryside. It spoke of 'remnant lines of yew trees' marking old routes and boundaries and of 'yews growing alone in fields'. Because of the difficulty of access to many of these non-churchyard sites, we know remarkably little about individual trees, their numbers or their possible ages.

Tip of the iceberg

That is until the arrival of Paul Wood in early 2015. Paul lives in the mid Welsh borderlands and has walked and worked in this area for more than 35



Left - Yew at Farlow Glebe, Shropshire, marking the site of a Norman church (Photo: Paul Wood)

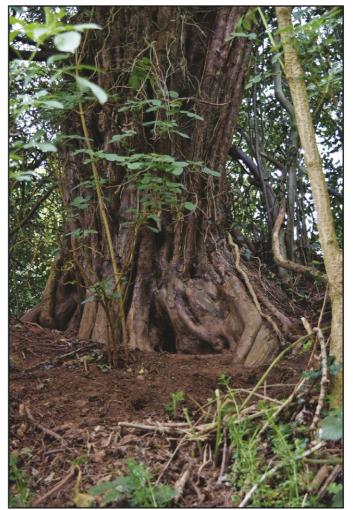
Right - Yew marking a lane to the church at Canon Pyon, Herefordshire (Photo: Paul Wood)

years. With a background in both farming and archaeology he has always been aware of the presence of yews in the countryside, whether in a field or the garden of a 17th century cottage. Over the years he has noted down the locations of yews seen on his travels and is now beginning to visit and document them. His first year's contribution to yew tree knowledge is staggering, having documented no fewer than 30 new veterans (yews with a likely age of 500+). These findings he describes as 'the tip of the iceberg'. To date most of his finds appear to either mark long established routes leading to a church or to a lost church site. Here are a few examples of his discoveries.

Marking the route

The ancient yew in Hope Bagot churchyard receives many visitors. Beneath the tree there emerges a spring whose waters have long been reputed to be a cure for eye ailments. It was known that several yews existed on the lane boundary leading towards the church, but when Paul examined these he discovered no fewer than four specimens that have probably been in situ for five or more centuries, marking the route to both church and spring. The Hope Bagot site has long been considered unique in respect of its many marker trees, but this is no longer the case. Ten miles south of Hope Bagot, at Stoke St Milborough in a lane opposite a sacred well, are found three veteran yews, while in a Herefordshire lane leading to Canon Pyon church there is also a line of three veterans.





A marker yew at Hope Bagot, Shropshire (Photo: Paul Wood)

The Pilgrims Way

One of the paths leading to Munslow church is an old bridleway called the 'Munslow Deans'. This path has in the past been referred to as 'The Pilgrims Way', an old route from Wenlock Abbey to Hereford. Two miles north of the church, at a hill called the 'Speller', is the site of a Middle Ages gathering for the local moot or court. Morton suggested that 'further investigating into this area could prove rewarding' and to date Paul Wood has discovered four veterans close to the church, with many more in the area still to be recorded.



Yew trees marking The Pilgrims Way in Munslow Deans, Shropshire (Photo: Paul Wood)



Marking a sunken lane at Birds Holding, Stowe, Shropshire

Hollow ways

At Farlow Glebe is a church built in the 1800s. Since it incorporates masonry from the original Norman church it was perhaps not surprising to find an old yew a short distance down the hill from the present church, no doubt marking the site of the original building. This site is also the focus of many tracks, hollow ways and lanes, and on one of these, Glebe Farm Lane, are found several more old yews.

Sunken lane

In Stowe, a few hundred yards west of the church, is an area known as Birds Holding. Here a veteran yew grows in a sunken lane. Is it a lone marker tree, or will it eventually be discovered to be one of many that lead to this remote church site?

For more information and photographs of these trees and sites, as well as other sites recorded by Paul Wood, go to:

www.ancient-yew.org

Information is found on the 'List of Yew Sites' and 'What's New' webpages.

The trees of Crathes Castle

Carol Pickthal

Crathes Castle is renowned for two core elements, its garden and its estate. It evolved over the centuries under the care of a single family, the Burnetts of Leys, until handing over guardianship to the National Trust for Scotland in 1951. The earlier generations of the family purposefully planted and established the landscape in the 16th century, whilst a continuity of attention from the subsequent generations of the Burnett family has further embroidered the original landscape.



Styphnolobium japonicum (13m height x 196cm girth @0.2m)

Manicured topiaries

The gardens and the wider estate have been developed over the years into a complex designed landscape containing both native and imported species of plants and trees, many of which are now fully mature. Some of the oldest planted trees at Crathes are the manicured Yew topiaries, dating from 1702. Latterly, the planting skills of Major General Sir James (13th Baronet) and Sybil, Lady Burnet, have left a legacy which future generations can all enjoy.



Prunus lusitanica (6m height x 250cm girth) Ancient hollow clipped tree from around 1740 in the lower walled garden.

Prominent specimens

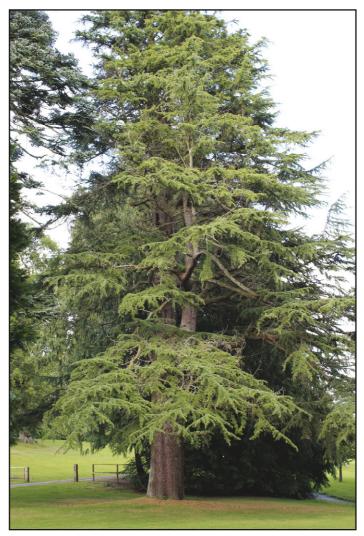
Understandably the rugged nature of the inclement weather in such a northerly region of Scotland has had an impact. Notable storms over the centuries have left an impression too. It was the major storm which occurred in 1953 which had the greatest impact in living memory. Widely referred to as 'The Great Storm of 1953', the vast majority of trees felled by the wind overnight were situated in Aberdeenshire. The wind strength caused havoc to the trees at Crathes and without stating the blindingly obvious, it is really quite amazing there are any trees left of any significant age. Many of the oldest deciduous trees were brought down by the storm however several prominent specimens, planted close to the Castle, survived. These included a number within the protection of the walled garden, a few at Caroline's gardens and the adjacent rockheads area to the west of the castle on either side of the west drive. Two clusters, one situated at conifer glade, beside the west drive at the end closest to the castle and the second at the back pinetum to north and west of the castle, also survived.



Zelkova x verschaffeltii (12m height x 179cm girth) a champion tree, below the visitor centre.

Assessment

During 2015 as the resident student, the head gardener at Crathes, Chris Wardle, set out a project for me to complete. Assess the tree collection at Crathes in relation to the Tree Register. The results of this is confirmation that Crathes has 3 British champions; (Betula dahurica, Eleutherococcus trifoliatus and Zelkova x verschaffeltii) and 16 Scottish champions.



Cedrus deodara (33.9m height x 496cm girth) in Conifer Glade

Conifer Glade

It is stated that "the conifer glade is the major arboricultural feature of value at Crathes", several of these trees planted during the period 1840-1860's have been measured in the past. Aberdeenshire champions here include a *Cedrus deodara* and *Pseudotsuga menziesii*. The *Cedrus* is a beautifully presented specimen (33.9m in height and 496cm girth). Also in Conifer Glade is an *Araucaria araucana* (21.6m x 243cm), *Abies procera* (36.5m x 458cm) and *Thuja plicata* (31.5m x 459cm). However, the most prominent tree in this area, due to its size and presence, is a *Sequoiadendron giganteum* (44.1m x 746cm).

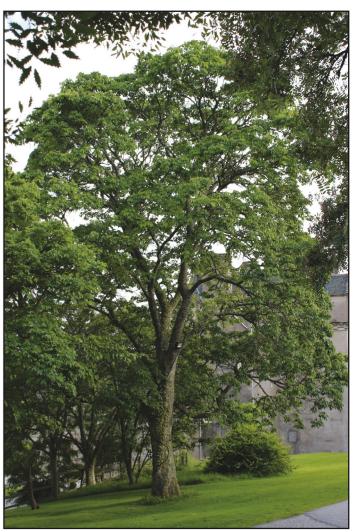
Historical evidence

The trees at Crathes have been reasonably well documented over the years. During the early 19th century, several large areas of plantations were established around the estate and it is known that during the 1850-60's, Sir James Burnett and his son Robert took a very keen interest in silviculture. Although many

documents may have been destroyed by a fire at Crathes in 1966, some surviving correspondence between the Crathes forester, John Allan and Sir James in 1862 and information in another document, a forestry report on pines in 1865, were lodged in the Library of Aberdeen University. Also surviving is a handwritten list of seeds Robert sent back from California in 1859.

Original introduction

An inspection of the 'Statement of Trees' by John Allan, a letter sent to his employer dated Jan 21st 1862, reveals many interesting points. Near the bottom of the first page it states "the Douglas near the Ice House is 36(ft) in height & the other one on the greens is 28ft in height" and "16 years", implying that the seed for this particular tree would have been sown in 1846. About the Sequoiadendron giganteum, John wrote; "The Wellingtonia on the Green is 8ft 9ins in height…9 Years", suggesting this Wellingtonia on the green is from the original seed introduction sown 1853. (cont. on page 8)



Tetradium daniellii (16m height x 188cm girth) above the castle

continued from page 7: The trees of Crathes Castle

Statement of Trees

Two years later, another document written in a similar hand to that of John Allan states "Wellingtonia Gigantea. Standing on the west near the Castle 12ft 3in in Height 21ft in Girth Round the branches 17in in Girth Round the boll at the surface of the Ground, Planted in 1858', Although assumed to be talking about the same tree as described in the 'Statement of Trees' dated 1862, it may not be, as there are two Sequoiadendron giganteum of similar age in Conifer Glade.

Athrotaxis champion

A letter from Kew, dated 23 August 1922 to Col. J.S. Burnett, does confirm that a specimen sent to them was that of an Athrotaxis laxifolia. Perhaps this is the tree which stands close to the outer west wall of the walled garden (11.5m height x 158cm girth) and the Aberdeenshire champion! (photo right)



All photos by Carol Pickthall with kind permission of the National Trust for Section 1

For opening times and more information visit www.nts.org.uk





Ancient Tree Hunt

Owen Johnson

Outstanding discoveries in Herefordshire

2015 was also an outstanding year for our partnership project, the Ancient Tree Hunt (www.ancient-tree-hunt.org.uk), with 1500 of its new records being for individual trees remarkable enough to enter the Tree Register. Many of these trees have been recorded by Brian Jones and his colleagues in Herefordshire. There was always a vague assumption that this county must be one of the richest parts of the globe for ancient and veteran trees, but the hard evidence is only now coming together.

World champion Rowan

The efforts of volunteer recorder David Griffith have already been blessed with two new national champions: a Rowan (Sorbus aucuparia) with a short, twisting trunk 143cm thick at 95cm, near a little-used footpath from Upper Kinsham to Lingen. and a knobbly pollard Field Maple (Acer campestre), 151cm thick at its waist at the same height, under Herrock Hill just north of Kington and again viewable from a public path. Since the Rowan near Kingussie which Amy Mitchell found in 2010 was by far the largest known in the world (137cm thick at 60cm in 2013), this was one record which I never thought I would see fall.



World champion Rowan (Sorbus aucuparia) nr. Kinsham, Herefordshire

Big bullace

The indefatigable Steve Young has also uncovered a champion Bullace by the Greensand Way below Ightham in Kent, its larger trunk 48cm thick. This little plum is commonly naturalised and has tasty fruit, but hardly ever gets big enough to measure.

Dating a Wild Black Poplar

Author and Tree Register Trustee, Thomas Pakenham, frequently encourages people to take ring counts of felled and cut trees, to add to our knowledge on growth rates. There was a good opportunity for this when Cannington Parish Council, in Somerset, had to reduce a big poplar (Populus nigra subsp. betulifolia) for

safety reasons. The tree was taken down to a high 6m stump, at which point its heartwood was almost solid to the centre. A slice of wood at this point was sent to Forest Research at Alice Holt, Surrey.

The total number of annual rings in the sample piece was 198. As its age had to take into account the growth from ground up to 6m, Forest Research estimated the tree was planted in the year 1800 +/- 10 years.

The size of the tree, measuring the stump, at the standard height of 1.5m above ground, is 6.4m girth (including some ivy). A second poplar, 5.85m girth, growing nearby, is probably a similar age and the two trees are amongst the largest recorded in Somerset.

Below - the remaining high stump and the sample obtained for analysis





Planted c,1800, the Wild Black Poplar (6.4m girth) at Cannington Somerset, before it was taken down to a high stump.

Some illustrious cultivars

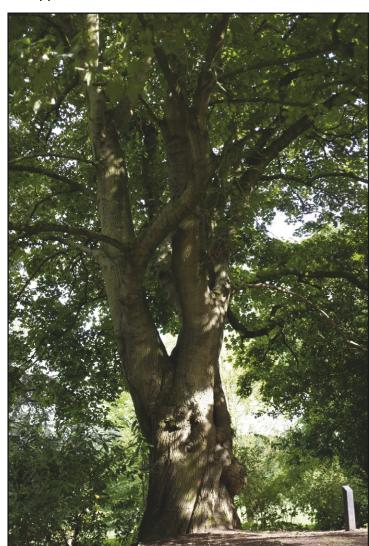
Rob Lynley's discovery of a 42-metre-tall Copper Beech in the Lake District (reported in the Autumn 2015 newsletter) set me thinking about whether there are other cases of garden forms and sports rivalling – or even outgrowing – the type of their species in Britain.

Competition

In theory, any purple-leaved tree should be at a disadvantage, because of the way the red anthocyanins mask the chlorophyll which is essential to growth. But as beeches produce so much more foliage than the needs of photosynthesis alone dictate - to shade their bark from hot sun and to suppress competition - this ceases to be an issue.

Luxuriant champion

The Norway Maple cultivar *Acer platanoides* 'Schwedleri' flushes rich purple in spring but fades to brownish green quickly enough for its vigour, too, to appear unaffected. When I first saw the veteran



Norway Maple Acer platanoides 'Schwedleri' in Darley Park, Derby (Photo: Owen Johnson)

at Darley Park in Derby in 2004 its trunk was 133cm thick and it was so big, and so hollow, that I really didn't expect it still to be there on my return eleven years later. But it's always hard even for experts to second-guess a tree's demise, and this champion remains as luxuriant as ever, its trunk thickness having grown to 136cm.

Exceptional stature

A very few cultivars were named and selected by nurseries on the basis of vigour alone. (The picture among trees differs from that of domesticated animals, where gigantism is frequent and non-fatal as a selected trait: Bull Mastiffs are really just wolves writ large.)

The Bird Cherry cultivar *Prunus padus* 'Watereri' is the outstanding example – one at Busbridge Lakes in Surrey was 22.5m tall last October, while the native form is a low tree at best. (The situation is complicated, in champion tree terms, in that a *P. padus* of exceptional stature, except in truly wild places, is always likely to have been planted as 'Watereri', even if it is no longer labelled and wasn't recorded as the clone.)

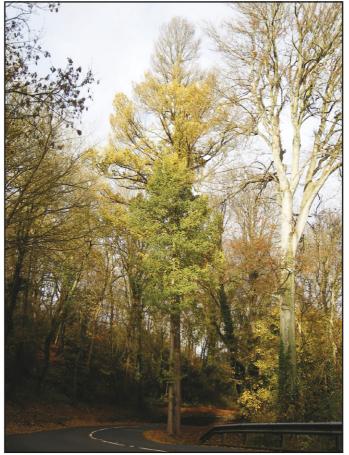
Daintier habit

Another species which is very seldom planted as its type is *Acer japonicum*, the Downy Japanese Maple. Of the cultivars, the autumn-colouring selection 'Vitifolium' is quite frequent and grows well, but in this case, one of the very few plants which is clearly not this cultivar and has smaller leaves and a daintier habit, above the Pinetum at Wakehurst Place, has made a more substantial single-boled tree than any, at 13m x 44cm in 2015.

Hybrid vigour

Double-flowered trees which can't set seed should theoretically put more energy into growth. This may be true of the Double Horse Chestnut (*Aesculus hippocastanum* 'Baumannii'), whose two representatives in Bath's Green Park are so imposingly vigorous that they seem likely in time to rival the biggest and oldest examples of the type, and it is also true of some flowering cherries like 'Kanzan'.

'Paul's Scarlet' is an especially vigorous double red cultivar of Midland Thorn (*Crataegus laevigata*). It may own its vigour to hybridisation with Common Hawthorn, but the same is always likely to be true of thorns recorded under *C. laevigata* for their vigour in the wild – none of which have been found as tall as the 'Paul's Scarlet' that was 12m in the Faversham Recreation Ground in Kent in 1999.



Wheatley Elm (*Ulmus minor* 'Sarniensis') by Paradise Drive in Eastbourne, (Photo: Owen Johnson)

Outperform

Of the many false cypress garden sports, only *Chamaecyparis pisifera* 'Plumosa' and 'Squarrosa' have (very slightly) outgrown the type of their species (Sawara Cypress) in Britain - retaining their juvenile foliage, these are also clones which do not waste energy in coning. 'Glauca' is a grey selection of White Cypress (*C. thyoides*) which at Bedgebury National Pinetum has also outperformed any of the country's rather few typical green examples.

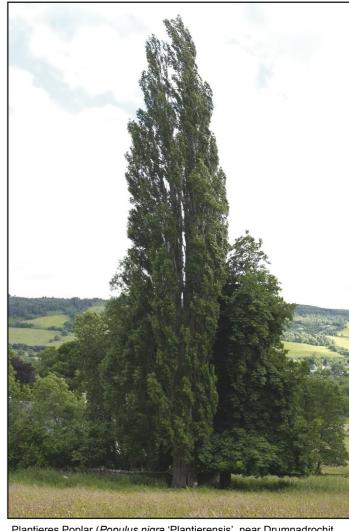
Fastigiate cultivars

Fastigiate cultivars generally grow as tall as the type, or sometimes a fraction taller, as in the case of the 38.5m Plantieres Poplar (*Populus nigra* 'Plantierensis', a cultivar of the Wild Black Poplar)



Wheatley Elm (*Ulmus minor* 'Sarniensis') by Paradise Drive in Eastbourne, now 35.5m tall. The tallest Fastigiate Thorn (*Crataegus monogyna* 'Stricta'), at Worden Park in Leyland, equals any known wild Hawthorn at 16m, last August. And *Juniperus sabina* 'Fastigiata' is a narrowly upright cultivar, 12m tall in the Sir Harold Hillier Gardens, of a thoroughly bushy species, the Savin.

near Drumnadrochit beside Loch Ness. Probably the tallest elm left in Britain is the narrowly conic



Plantieres Poplar (*Populus nigra* 'Plantierensis', near Drumnadrochit beside Loch Ness. (Photo: Owen Johnson)



Ireland tree measurer Aubrey Fennell (right) with members of the Tree Register and Head Gardener Seamus O'Brien, at Kilmacurragh Botanic Gardens, Co. Wicklow, admiring a *Cryptomeria japonica* 'Elegans'. Originally planted as one tree, as seen in early photographs, before laying down and now covering an area 41m x 36m (Photo: Sue Lancaster)

The Tree Register Alan Mitchell Lecture 2016

Thursday 9th June
The Royal Botanic Garden, Edinburgh



New Trees

Recent Introductions to Cultivation

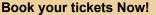


In association with the National Tree Collections of Scotland and the iCONic Project

Many members will be aware that every other year we organise a meeting and lecture to honour the memory of our founder, Alan Mitchell. The Alan Mitchell Lecture is the centrepiece of the day, given by a distinguished speaker on a subject of likely appeal to members and of particular interest to Alan.

This year our lecture is New Trees. We will meet at the Royal Botanic Garden, Edinburgh on Thursday June 9th and our speaker will be Dr. John Grimshaw, Director of the Yorkshire Arboretum at Castle Howard, North Yorkshire. John is a trained botanist and passionate gardener with wide interests in plants and horticulture in general, sitting on several RHS committees and written books (including New Trees) and numerous magazine articles.

We thank the RBGE and the National Tree Collections of Scotland (NTCS) for hosting this event. The NTCS are organising a coach trip from Edinburgh to Dawyck Botanic Garden, Peebles on Friday 10th June, available to all Lecture Ticket Holders at an additional charge. Details will be supplied with Lecture tickets.



It promises to be a very interesting and informative day and tickets for the event, which cost £15, are on a first come, first served basis. Tickets include the lecture, garden tour, light refreshments and participation in the Silent Auction of rare plants. If you would like to join us, simply phone

Tel:01234 768884 or email info@treeregister.org