**Surrey** Owen Johnson, Assistant Registrar

#### A rich harvest

Eric Leigh with the original Cunninghamia at Claremont.

Surrey was Alan Mitchell's stamping ground, so updating the Tree Register's records was always going to be a busy and exciting project. Wisley, the Winkworth Arboretum and the Valley and Savill Gardens at Windsor each have no end of aspiring younger rarities, and there were plenty of doyens to be checked up on, such as the swamp cypress at Burwood Park, 27x180@1.2m (metres height x centimetres diameter), the pencil cedar at Painshill (16x149@1m, with a 15m rowan growing from the main fork), or the original Cunninghamia at Claremont (grown under glass for 15 years and still thriving after another 181 outside). The London plane at West Hall, West Byfleet, had not been visited for 40 years and has made good use of the time: there are three stems from 1½ to 2½ metres, with two more low branches, and it is 28x298@0.8m. A broad and very shapely red oak at the Oatlands Park Hotel in Weybridge, x166 in 1973, has stormed ahead to become a champion tree of 25x211@1.1m.



#### A systematic survey

However, although Surrey is so small and so well frequented, there was plenty still to discover. During the course of 2000, parks, cemeteries, churchyards, village greens and all the other sites likely to hold notable trees were systematically visited; 1150 Tree Register records were updated, but 2800 notable new trees added. A comprehensive picture of Surrey's county champions has been built up (extending to some 1110 taxa). A map of these taxa shows them clustering in the older towns and on the best soils for tree growth notably the lower greensand which crosses the county in a broad swathe. The benefits of tree measuring include the opportunity of inspiring numerous landowners to appreciate their trees by showing how rare or exceptional they are. A Hungarian oak on the edge of Great Bookham Common, implicated in a subsidence claim, turned out to be the second largest in Britain at 23x167@0.8m, providing good grounds for its preservation. Remarkable trees can crop up anywhere, particularly in towns such as Woking which have been built on the fields of once-famous nurseries.

Trees which are happily widespread in Surrey include the showiest horse chestnut, 'Plantierensis', conspicuous as a young street tree in Epsom and Ewell, and the weeping beech (perhaps because of the presence of the original 1827 introduction at Knaphill, which is one of the most resplendent trees in Britain, a vast and symmetrical Albert Hall of cascading, re-rooting and soaring growth). The county can also boast several of the grandest tulip trees: the Methuselah at Esher Place, now 21x288@0.9m, is believed to have been planted by Bishop Compton in 1685, while the glorious specimen at Kitlands under Leith Hill, 34x202 and dating probably from 1860, survived almost unscathed in a wreckage of 1987 storm damage. A sheltered inland county with plenty of sandy hills, Surrey also grows notably tall trees for south-east England. During 2000, ten trees were measured at 45m upwards, eight of them Douglas firs. At Polecat Copse, a National Trust woodland near Haslemere, two were recorded for the first time just as they broke through 50m and are in the full vigour of youth, with long straight leaders (though in the local climate a severe drought or a lightning strike is always liable to bring things to a premature halt).

#### Most notable new finds

Of the new finds, perhaps the most exciting has been a potential new champion Metasequoia – one of Alan's favourite and most-studied trees, ironically – beside the baths in Woking Park (20x129 with a wonderfully convoluted bole). The largest rowan I have seen, 14x76 with a clean trunk, stands beside Gatton Hall on a very chalky soil on which rowans simply should not survive at all, while a monkey puzzle at Whittington College, 25x120, has reached dimensions you would only expect in the west country. Just a handful of brand new champions could include Aesculus flava f. virginica at Weybridge parish church, 15x104@1.2m; Malus tschonoskii 16x57 at Alderbrook Park near Cranleigh and very healthy; an Austrian pine with a five-metre bole in Ashtead churchyard, 20x163; Prunus x schmittii at Randalls Park Crematorium, Leatherhead, 18x52; and Salix x sepulcralis 'Salamonii', 18x114 on West Hill Green in Epsom. Surviving elms, always of particular interest, are few and far between in the county, though a huge and apparently ancient European white elm at Rusham Elm, Shalford, with a swollen and slanting butt, is a healthy 18x163.

## Norfolk John White

The hidden poplar and tractor! (J. White)



#### The hidden poplar

It is often suggested, particularly by people who live to the west of Kings Lynn, that Norfolk has no trees. In this instance the misconception can perhaps be explained. The great grey poplar, Populus x canescens, (93cm diameter) at Illington is so well hidden that it is impossible to find without guidance from the owner.

#### Growing inside the barn

On arrival at the site the tranquil farmhouse backed by the billowing poplar and other trees looks an easy task for any TROBI Measurer. The tree seems to be behind the tractor shed. From there however, waist high in nettles, it appears to be round at the front!

Clearly this is a much loved stem and it is in fact right inside the barn. The roof has been crafted round the stem to give ample room for expansion and no nails or screws have ever been driven into it. The roots complete with sucker shoots live in the moist soil outside.

Cumbria Derrick Holdsworth

#### Fagus sylvatica 'Cristata' (D. Holdsworth)

### The crested beech

It is generally accepted that the Crested Beech (Fagus sylvatica 'Cristata') is a rarity. But around Ambleside this is not so. I could show you five within three miles of my house. There are also a couple in Windermere another five miles away, not to mention anything up to half a dozen self-seeded saplings, one of which pluckily grows in a pot outside my back door.

#### Distinctive graft and star-shaped leaves

For a long time I thought there was just one, the superb 'Champion' (28m x 106cm) growing at Wray Castle on the western shores of



Windermere. Identification took me a long time (it was before I became a taper). Whatever was this strange tree with its crumpled, almost star-shaped leaves and distinct graft about half a metre above ground? I finally cracked it and Alan Mitchell confirmed it when I accompanied him on his "re-measurement" visit to the Castle in 1987.

#### **Further discoveries**

Then I heard of one growing in an unlikely spot on the banks of the River Brathay on the outskirts of Ambleside barely two miles from Wray, young but healthy, almost concealed by surrounding hazel and sycamore, and a second one overhanging the boundary of nearby Brathay churchyard. Subsequently two more young trees were found on the Matson Ground estate in Windermere. Talking to the manager of the estate I discovered that the estate also owned the riverbank and the land adjacent to the churchyard where the previous two were growing (but not the Wray Castle site).

Intrigued by my findings, the manager later drew my attention to another two on the Brathay land, one of which was a magnificent specimen (30m x 81cm) which ousted the Wray Castle tree as 'Champion' for height.

Further enquiries revealed that the widow of a former Matson Ground head gardener lived in the gatehouse to Brathay church. She remembers clearly her husband going to a conference and returning with several cuttings of Crested beech which he planted around the estate. This explains its local frequency. There may be others still to be discovered.

## The rare `Brathay Purple'

The Brathay church tree requires special mention. Though small (8m x 7cm) it has purple fringed leaves! No similar tree is recorded. Allen Coombes of the Sir Harold Hillier Arboretum confirmed that this was a new variety and requested cuttings which were sent to Holland for propagation two years ago and are now ready for distribution. He and I agreed that this cultivar should be called Fagus sylvatica 'Brathay Purple' Watch out for it.

Meanwhile the good folk of Brathay love to decorate their church with branches from it. I have suggested they use it sparingly for the time being

#### Ireland

Frances McHugh, Project Officer TROI

## The Tree Register of Ireland

The Tree Register of Ireland project (TROI) was initiated in 1999 by the Tree Council of Ireland and the Irish Tree Society with the aim of compiling a central database of 'Remarkable Trees in the Irish Landscape' This project was funded by the Forest Service of the Department of the Marine and Natural Resources under the Operational Program for Agriculture, Rural Development and Forestry 1994-99. It is intended that the database of registered trees be built into the Forest Service's Forest Inventory Planning System (FIPS), thus highlighting our remarkable trees when sensitive felling licences are being issued. The production of county based lists of remarkable trees will also help Local Authorities target these trees for Tree Preservation Orders (TPO's). As a conservation measure, the project will be of immense significance in recording a largely overlooked part of our natural heritage.

To date, almost 5000 trees have been added to the Tree Register of Ireland from 32 counties in Ireland. These include the champions of many species for both Ireland and Britain. A User-friendly Access Database was developed to hold the Tree Register of Ireland, which incorporates many photographs of champion trees. This database will be held by the National Botanic Gardens, Dublin where it will be available for public access. (This information will update the Irish records on the TROBI database and soon be available on our web site. Ed.)

TROI Project Director Frances McHugh (left) and Field Officer Aubrey Fennell with a huge burred oak at Charleville (TROI)

#### **GPS** location plus photos

Mark Twomey worked as Project Director from March 1999 to March 2000. Frances McHugh took up the post of Project Director on 1st of March 2000. Aubrey Fennell worked as field surveyor for a period of 9 months from Feb-Oct 2000. A Trimble Pro XR Differential GPS was acquired on loan from the Forest Service for the duration of the project. This equipment is used to record the co-ordinate position of each tree along with its dimensions. This data will make up the "Tree Register" database and it isintended that this database will be built into the Forest Service's Forest Inventory Planning System (FIPS). A digital camera is used to photograph the trees on the register. These photographs will be incorporated into the final database.



#### Base source from TROBI

The main source of information was Alan Mitchell's historical records held by TROBI. Alan Mitchell carried out measurements of remarkable trees in 145 properties in Ireland. In addition to the verification of existing records, new trees at approximately 180 properties have been registered that were previously unrecorded. Information about the location of these trees was received form correspondence from the General Public,

Coillte Foresters and Environmental Groups. Articles published in national and regional papers, as well as many magazines promoted the Tree Register of Ireland and encouraged people to inform TROI of important trees in their area.

## **Champion Trees of Ireland**

Among the many remarkable trees added to the Tree Register of Ireland, some particularly stand out. Some of our tallest trees are as follows:

56m Douglas fir, Powerscourt, Wicklow 54m Sitka spruce, Curraghmore, Waterford 54m Giant redwood, Luttrelstown Castle, Dublin

And our largest girthed trees:

12.09m Monterey cypress, Killyleigh, Co Down 12.05m Monterey cypress, Innishannon, Co Cork

The top 5 girth trees are all Monterey cypress. The next biggest girth is the Florencecourt Lime, which is 10.71m in girth. The largest Oak has a girth of 9.9m and is near Stradbally, Co Laois. This tree, however, is forked very low. A 9.11m-girthed oak in Charleville, Co Offaly has a better form.



The largest Chilean Fire Bush (Embothrium coccineum) in Britain and Ireland is at Clandyboye, Co. Down. (Tree Register)

Many trees of historical and cultural value have also been added to the Tree Register of Ireland. Examples of these are as follows:

'Silken Thomas Yew' in St Patrick's College, Maynooth

The Origina 'Irish Yew' Taxus baccata 'Fastigata' in Florencecourt Estate, Co Tyrone

The 'King Oak' in Charleville Castle, Co Offaly

The 'Brian Boru' Oak, Raheen Woods, Co Clare

#### Derbyshire

The Dowager Duchess of Devonshire, Patron

## **Trees of Chatsworth**

A garden of 105 acres is dependent on trees, old and young, deciduous and evergreen, formally planted and informally dotted about in the "wild" part, away from the house and the rules it imposes on its surroundings. Trees complement garden buildings - see the Wellingtonias (Sequoiadendron giganteum)

planted to celebrate completion of the Great Conservatory and the giant, small-leaved limes of the 1690's which accentuate the line of the Canal. Without them their neighbouring features would be diminished. Capability Brown's beeches are coming to the end of their lives: many have fallen and others have become unsafe - a condition which cannot be tolerated when 300,000 visitors walk beneath them every summer. But the oaks - outliers of Sherwood Forest and of immense antiquity - are very much still there.

#### Paxton's contribution

When the 6th Duke (1790-1858) appointed the 23 year old Joseph Paxton as head gardener in 1826 a new era of planting started. Paxton was soon appointed head forester. He enthused his employer with a love of trees which coincided with the years of introduction of new species from the Americas and the East. Eight acres of the park were added to the garden in 1829 to create the pinetum and there they planted their favourites, many of which are still standing.

#### **Veteran conifers**

Approaching the Pinetum via the Grotto Pond you pass between some big Cryptomerias, ruddy-barked, feathery, delicate and always green. Like so many conifers which are hateful in youth, they are more than acceptable when fully grown. These make a frame for the tree which is a landmark on the other side of the pond - Pinus peuce, now over 140ft high (41.5m) and a champion of its breed. It is beginning to lean and after a windy night I am afraid I will get news of its collapse. Paxton planted many "Hemlock Spruce" (Tsuga heterophylla), now mature, and Monkey Puzzles, for long out of fashion and now back with a bang. One of these stands alone in the middle of a steep path, like an exclamation mark, an odd reminder of the sensation the Chilean Pine caused when first imported.

The 6th Duke wrote "A Douglas pine, the pride of California, came down in Mr Paxton's hat in 1829 and in 1845 it reached 35ft high". It is still healthy enough but has lost its head more than once in storms. A stout branch which sticks out at right angles makes a seat for adventurous children. There are good specimens of Pinus coulteri, Pinus heldreichi var leucodermis and Pinus strobus among others. I love the gloomy Brewer's Spruce (Picea breweriana), its drooping melancholy appearance and the contrast of the harsh dark green needles to the soft pale green of spring growth.

The Douglas fir that arrived at Chatsworth in a hat! (Tree Register)



Few people reach this, the farthest point of the garden, and the trees of the Pinetum are probably an acquired taste. But if you like to be alone, to see large specimens of Pinus ponderosa or rarities such as Chamaecyparis obtusa, the Hinoki cypress, one of the most revered of the five sacred trees of Japan (it is deemed to have a spiritual presence as well as a practical use for building), as well as a superb view over the ha-ha to the Old Park and the river, New Piece Wood and the next ridge which is Lindop, then it is worth the long walk. Returning by another path you pass a giant European larch which the 6th Duke said "was seen by the old housekeeper's father and brought in a pot from Welbeck as a curiosity".

#### The great weeping ash

Among the trees and shrubs planted in 1829-30 was an outstanding curiosity. A weeping ash, already forty years old, was dug up from a nursery garden in Derby and brought the twenty-eight miles to Chatsworth on a 'machine' invented for the purpose by Paxton. Eight tons of earth in a huge ball surrounded the 28-feet-long roots and the journey took three days. It travelled roots first and people hurried out of their houses to see the strange phenomenon rumble by. Twenty men were detailed to accompany it and they managed to manoeuvre it through the narrow toll gates without incident, but the gates and walls at the entrance of the

park had to be taken down to allow it to pass. In 2001 it is 50ft high (15m) and its girth is 8ft 10ins at 5ft high (85cm dia. @1.5m).

### **Plenty of variety**

Close by is the Tulip Tree (Liriodendron tulipifera) avenue which runs from the Lodge to the North Front door. It must have been planted when the Wyatville wing was built about 1827. They flower quite well, but the tops and sides have to be clipped in alternate years, as they are so close to the building. We have planted more to grow unhindered elsewhere. When is a tree not a tree? When it is a "willow" made of copper which spits out water from every branch onto the unsuspecting visitor. A 17th century practical joke, which looks very real in winter when its neighbours have lost their leaves, it is the cause of astonishment and amusement to our visitors.

From ancient oaks to a joke willow there is plenty of variety among the trees in our garden.

Isle of Man

Frank Harrison

#### **Dating landmark trees**

A major landmark on the road from Douglas to Peel in the Isle of Man is the Memorial Hall at Union Mills, built in the Arts and Crafts style (in 1903). Until recently there were three fine Chile Pine (Araucaria araucana) towering over its front lawn; now, unfortunately, there are only two. In August of last year one had died and was removed. According to the owners, Braddan Parish Commissioners, the cause of death was drought. I had measured these trees in February 1998 and the dead one, a male, was then 14.5m x 56cm dia.

After it had been felled I obtained a section of the trunk and counted the annual growth rings. In one area it was difficult to differentiate separate rings even with a magnifying glass but I estimate it covered a period of 5 years giving the tree an age of 93 years. The section was from near the base. The I.O.M. Examiner newspaper had also recently published a photograph of the hall taken soon after it was built which showed no sign of the trees. This also confirmed a reasonably accurate planting date of 1910. The two remaining trees, both female, which I think it reasonable to assume had been planted at the same time were, in 1998, 19.25m x 61cm and 15.25m x 62cm.

# Scotland

Alistair Scott

## The Madrona in Scotland

Once seen, never forgotten - the trunk of a maturing Madrona (Arbutus menziesii). Other than some of the tall rhododendrons and the Cyprus strawberry tree, there is nothing like it. Think of brick-red, subdued orange and quiet green, in complex combinations, on a smooth, strokable surface.

The stunning bark of the Madrona (A. Scott)



I saw my first Madrona in 1975. It was and is, at Innes House, by Elgin, in the warm, dry, lowlands known as the Laigh of Moray - drier than London and as warm as anywhere in Scotland. It was planted by Colonel Edward Tennant in 1930, during a phase of his life when he became very active in planting trees and shrubs. He lost a lot but what survives contain some major surprises. I wrote up the trees of Innes in The Garden, July 1982.

My second was the tree growing, appropriately, at Castle Menzies. It is as robust and healthy as the tree at Innes though neither is what you would call sheltered. It appears to have been planted about 1870, as part of the arboretum established by Sir Robert Menzies, 1844-1903, from seed collected by Jeffrey, Browne and others in California and British Columbia. At over 70cm diameter this may be the fattest in Scotland, though one of the two trees at Carberry Tower, near Musselburgh, must run it close. The Innes tree, at over 17m, may be the tallest. Many of the measurements however, are elderly and need updating.

#### No stranger north of the border

I know other good Madronas at Crathes Castle on Deeside, Crare Gardens in Argyll, Marchmont near Greenlaw (one book has this down as Arbutus x andrachnoides) and in the Royal Botanic Gardens, Edinburgh. The Tree Register also has records for trees at Pollock House, in Glasgow and the Dundee Botanic Garden. So I do get a bit jumpy when I read, in more than one account, that it does not grow in Scotland. It would be strange if it did not, given a natural distribution up the west coast of North America, either as a tallish constituent of the coastal forests or a near shrub in the mountains. They need, in their early years, a dry root zone and some protection from cold wind and frost. A number from Californian seed germinated by Peter Cox at Glendoick, east of Perth, were planted out under dapple-shade and are forming their first flowers after about 25 years. Scottish foresters are very conscious of the variation of performance of North west American trees here, due to provenance or the part of the natural range from which particular trees came. A priori, we would be looking to Washington or British Columbia, rather than California for the 'best fit'.

The Madrona was described by Archibald Menzies, 1745-1842, naval surgeon and botanist with the Vancouver expedition, after whom it is named. It was introduced, almost inevitably, by the energetic David Douglas. I am surprised that there appear to be comparatively few Madronas on the Scottish west coast, even though it is a favourite tree of James Taggart at Linn. This may be mere ignorance on my part. I hope to increase my knowledge over the next years.

(Since Alistair wrote his article, Scottish recorder Donald Rodger has discovered another fine specimen Arbutus menziesii, in the car parking area of an office block called Trinity Park House in Edinburgh. Ed.)