

Rich Townsend.



The well-known *Betula ermani* at the end of Mitchell Drive – Dan suspects its a hybrid.



A Holford-style grouping.



# A day with the Westonbirt Tree Team

Towards the end of 2013, Rod Leslie caught up with the Westonbirt tree team taking down a big *Leylandii* at Sand Earth on the edge of Silk Wood.



The team with their Stihls – Andy Bryce, left, Rich Townsend and Ken Waite.



Ken Waite feeds the Schliesing 235MX chipper.



Rich Townsend climbing and reducing *Leylandii*.

**TEAM LEADER RICH TOWNSEND WASN'T QUITE SURE WHY THEY'D BEEN PLANTED.** The edge isn't that windy and was already well populated with big conifers, including some fine Monterey pine. Probably just to create a bit of a boundary, he thought. The 42 rings we counted were perhaps the secret – the trees planted at the height of the *Leylandii* craze.

**W**ith the *Radiata* and a couple of fine *Acers* nearby, felling the *Leylandii* wasn't possible so Rich geared himself up to climb with spikes, delimiting as he went, taking the top off and reducing by a couple of lengths to leave a safely fellable pole. 'Big Rich' has just completed 25 years at Westonbirt. He leads a field team of just 5 to look after 600 acres and 15,000 individually identified trees. But it's a highly skilled and well-equipped operation these days, and one where curator Mark Ballard, himself promoted from the tree team, listens carefully to the advice from the guys on the ground – in contrast to Rich's early days – "We just did what we were told," he says.

As the limbs come down Andy Bryce, who also climbs, and Ken Waite feed the Schliesing 235MX chipper. The tree team were involved in selecting the machine. It's not the cheapest, they told me, but its powerful grip – no pushing needed – is a big plus for the operators. And it is quiet, a big plus for arboretum visitors, here for the peace and quiet. This is partly because, in contrast to machines that smash material against an anvil, this machine has a V-shaped slicing action and partly because it is soundproofed. Its six-inch feed diameter is more than adequate; bigger material goes to firewood sold on site and limiting material up to six inches also gives the right mix of woody and green for the chips' later use in the arboretum. They go on to the arboretum's cutting-edge pasteurisation facility where they are treated to eliminate the risk of disease and then used to mulch young plants as a key part of the 'Westonbirt system' planting method.

While Rich is finishing the *Leylandii* Andy and Ken told me how they came to Westonbirt. Just two years at Westonbirt, Andy had a successful career in insurance before retraining as an arboriculturalist. He worked in commercial arboriculture in Bristol before coming to Westonbirt. He explained how different the job is – very little pruning and reduction; the aim is not to touch the collection trees, to let them develop their natural form and size, so most of the work is removal of both collection trees and structural planting, such as the extensive oak overstorey trees which give protection to more fragile and shade-loving taxa like the world-famous Westonbirt *Acers*. Andy loves the climbing, the felling, and like Rich, working with really big trees.

Ken, in contrast, started life in forestry at Savernake as a contractor, getting a job with Forest Enterprise and moving across to Westonbirt when his job was cut. He has been at Westonbirt for three years and has clearly adapted well to the rather different work, his wide ranging skills highly valued by the team. He is passionate about the vital importance of free access to Forestry Commission forests. From his experience at Savernake, he talks appreciatively about what the beauty and relaxation of the forest environment does for the thousands of visitors he used to see and talk to during his daily work.

The tree team are sponsored by Stihl. Rich was using a 200T top-handled saw for the *Leylandii* and the team also have 260 saws and a 441 rear-handled saw out with them for felling and cross-cutting.

So what's the biggest tree you've felled? I asked Rich. Either a redwood or a huge oak, he wasn't quite sure, but it certainly stretched even the 36-inch bar on the arboretum's biggest saw, he said as he showed us it was THIS big – with outstretched arms and fishing jokes from Andy and Ken! Rich wriggled a bit like a fish on a hook, too, when I asked him what he was proudest of at Westonbirt – no way was he going to take any personal credit! But we were both happy in the end when he settled on the Holfords, the amazing founders of the arboretum. Thinking back to the mid-1800s when the arboretum was really getting going, there must have been at least 50 people working there and the Holfords giving instructions for quite big trees to be moved to just the right spot. What they achieved is still a marvel of man and nature; the way they combined trees of different colour, size and shape, bright autumn *Acers* perfectly offset by deep green conifers; the way they realised the importance of open space and didn't just pack the trees in, and the way they judged spacing for species newly introduced to Britain where the only evidence of mature size was the collector's notes.

Rich and Andy agree that the biggest problem at Westonbirt – and with any arboretum – is the big trees. But Rich also points out it is the big trees that really make an arboretum. When to remove, though, especially a spectacular favourite? We agree the Holfords would probably have been more ruthless than we are today, but I have to say I think Westonbirt is doing a pretty good job with this knotty problem. It's not just the actual removal; the big old oak overstorey trees are a particular problem, many well over 150 years old. A recent removal in Savill Glade opened up a neighbour and probably changed the airflow in the glade, resulting in a big limb being ripped off in the next storm.

I'm surprised, too, by some of the changes in arboricultural practice; painting over wounds and, even worse, filling holes with concrete are long gone, as are the big flush cuts that embarrass Rich from his early days – "We were told to do them," he says. Now, all the talk is of pruning points, minimising wounds and ensuring they don't form rot pockets. A monumental oak near the restaurant, one of the first great trees visitors see as they arrive, is causing particular problems – Andy and Rich don't see how it can be reduced but after much agonising the decision has been taken to try, so they're ready to give it their best shot. Wire bracing is now also being removed; whilst it looks sensible, in fact it changes the stresses in the tree and can simply shift the problem around rather than solving it. A very few historic trees are still given intensive care to extend their lives, but the main message now is to plant in the right place to give trees the room to develop and, of course, that is what Westonbirt is all about: enabling specimen trees to attain their full form and glory.

Back at the mess shed for lunch we meet up with team coordinator Andy Jane. He's spent the morning delivering diesel to the generators that power Westonbirt's Christmas light show, 'The Enchanted Forest'. After lunch, Rich and Andy are called upon to help out with seasonal events – we head off to put up entrance signs advertising Westonbirt Christmas trees. There we bump into Westonbirt student Cairn Hurst. He has just left Myerscough and is working for a year at Westonbirt, generously funded by the Friends of Westonbirt. The Friends in fact fund the tree team over £80,000 per annum – they funded the new chipper – and there are over 280 volunteers helping at Westonbirt, many of them supporting the tree team with work like weeding young trees and checking labels.

CPD is a big thing at Westonbirt. Curator Mark Ballard put the whole team through the American ISA qualification. Andy got his Arb Cert at Holme Lacey, followed it with a Tech Cert, is waiting for his Professional Tree Inspector results and intends to go on to do the RFS Professional Diploma.

Back at the office I meet up with Mark and the other half of the tree team. Database manager Sally Day is in some ways the lynchpin of the whole arboretum: every tree is an individual, GIS-mapped and with a growing record of management and performance. New planting and removals are mapped in relation to their neighbours. With labels frequently going missing, it is the database that counts. Someone who is giving Sally quite a bit of work – for the best possible reasons – is dendrologist Dan Crowley who joined the arboretum in 2013 and is already proving his worth.

Surprisingly, Westonbirt has very poor records. No one quite knows why but the romantic story is that the Holfords didn't like anything written down for fear of espionage – there was fierce competition between a number of super-rich landowners in the 1800s to get their hands on the latest discoveries from around the world. John White did a fantastic job re-cataloguing the collection, but even he was beaten by some specimens and he simply didn't have the time to go into the detail Dan is now applying. Dan's research suggests the stunning *Betula ermanii* at the entrance to Mitchell Drive may in fact be a hybrid – perhaps not such a shock for a birch of its size and vigour. Enquiring around the horticultural world, Dan has found specimens from the same known seed collection going under up to six or seven different names!

As we pop out to the nearby propagation houses it's clear propagator Penny Jones is very much in Mark's good books; against the odds, she's just saved a *Liquidambar*, nibbled off by rabbits and given up for dead, by propagating seven greenwood cuttings. This is no ordinary garden centre clone; it is from wild collected seed, 400 metres up Mount Heng in Hunan province, South East China!

I'm interested in the air pots produced by Caledonian Tree Company. Mark and Penny rave about the wonderful plants they produce – conifers go straight down, then round and round in normal pots,



Sally Day (left), database manager, Mark Ballard, curator, and Penny Jones, propagator, admire the rare *Acer coriaceifolium*.



The felling site with big *Radiata* specimen trees.



Rich Townsend – it was THIS big!

Penny says, but with these they develop an excellent fibrous root system. They recognise the pots are bulky and could be a problem for a commercial nursery, but Westonbirt plants out an average of just 300 trees a year and some of them – like the *Liquidambar* – have literally grown from seed brought back from the ends of the earth. Only the best is good enough.

I press Mark on the successful and thorough Westonbirt planting system. "That's the easy bit!" he says. "Selecting where to plant each tree is the difficult bit," but in the end he gives in. The planting site is deturfed and the hole dug. Planting is slightly proud, and Penny and the airpots have produced an excellent fibrous root system. One-metre black Netlon caging is secured by five stakes, the exact diameter depending on the size of the plant. The plant is then mulched with the pasteurised woodchip produced from the tree team's felling. Mark swears by it, as it suppresses weeds, is cosy in winter and provides nutrients as it rots. Then the label is attached and – crucially – the plant is mapped for Sally's database. The young plants are checked every year, weeded, mulch added, a bit of formative pruning, until deemed 'established' when they graduate to the 5-year cycle on which the whole arboretum is managed.

It's getting dark and I'm sorry to have to leave when there is so much more to see and discuss. "There's never a dull day at the 'Birt – and you can quote me on that!" Rich says, as we say goodbye.