

telephone call in November last year reminded me of watching an arb team expertly knocking 50-year-old common lime trees back to the pollard knuckles in February of the same year. The place was Welwyn Garden City centre and the arb company Maydencroft Limited. Almost exactly one year later, I arrived at Maydencroft Manor in the village of Gosmore, near Hitchin, in Hertfordshire. This modern arb company was making use of the 16thcentury farm buildings set within the well-manicured gardens and grounds of the 15th-century manor.

However, it was the arb side of Maydencroft's business which I had come to find out about from arb contracts manager, Patrick Venables. Patrick is one of those arborists who is still very active, despite starting out in the 1960s and 1970s. He followed in his family's footsteps, as his father and grandfather were both tree surgeons. Patrick has only been at Maydencroft for two years, but with 44 working years under his belt, he has a wealth of experience to share.

Tom Williams gave essential ARB a rundown on the scope, structure and policies of the arb division at Maydencroft: "We work at the top end of the market and are not cheap by general standards. However, we found our niche, developed it quite quickly and continue to offer our clients real value for money." Their clients include utility companies and local authorities within a wide geographical

Manorial arboriculture at Maydencroft in Hertfordshire

DR TERRY MABBETT RECENTLY MET WITH TOM WILLIAMS, FOUNDER, OWNER AND MANAGING DIRECTOR OF A LARGE, BROAD-BASED COMPANY CLEARLY AT THE TOP OF ITS GAME IN A RANGE OF FIELDS INCLUDING LAND MANAGEMENT, FORESTRY AND LIVESTOCK FARMING.

An interactive tracking map showed arb teams working as far west as Berkshire, Kettering and at several sites in East Anglia. Maydencroft's arb division can muster 20+ staff from within its Hitchin and Windsor depots, and is well kitted out with a large fleet of vehicles and equipment including four Unimogs, two brand new N154E Valtra tractors, 3.5- and 7.5-tonne Isuzu lorries, a Botex forwarding trailer with crane, two brand new Liebherr excavators with Dymax tree shears, Seppi mulchers, and rotator grapples and a wide

range of chippers including Greenmech, Först, Timberwolf and TP models.

"The spirit in which Maydencroft was set up, and continues to operate, is that every single person is full-time, permanent and pensioned," said Tom, with all staff completing apprenticeships at Shuttleworth College, Capel Manor College, and soon BCA (Berkshire College of Agriculture). Ten per cent of Maydencroft's current arb workforce is on an apprenticeship, with all other staff qualified or in training to climb. Tom



Left to right: Luke Gilbert, Tom Ruffle (sitting), Dean Langley, Ben Mansfield, Alex Stacey, Luke Allwright, Dan Blackwell, Jamie Barton.





Arb contracts manager Patrick Venables (left) and arb team supervisor Tom Ruffle (right) at the roadside oak job in Welham Green.

says there is a 'spirit' of interchange of kit between the different divisions, so I enquired whether this in any way blurred the line between Maydencroft's forestry and arb work. "Not so," said Tom, "I have an absolute mantra which draws a fine but clear line – defining forestry as providing a product for the good of the woodland, and arb providing a service for the good of the community."

Maydencroft employs several arb consultants, as well as a full-time ecologist, Alison Hood, whose skills cover bat inspection and bat handling, together with the requisite climbing qualifications. Tom explained that these in-house skills allow Maydencroft to deal with on-site sensitive situations. "Indeed, we are

frequently brought in by clients because of this specialisation," said Tom.

It was now time to get out and see Maydencroft's arb division in action. The first job was on the outskirts of Welwyn and Hatfield Borough, although on this occasion the local authority was not directly involved. The land is managed by Savills on behalf of their equally well-known client, Tarmac. The target trees were three very large and lofty Lombardy poplars up against the boundary with a private residence. The householder had expressed concern when branches started to fall and, following representations to Savills, the landowner agreed to remove the trees

On site was a six-man team led by Lewis Johnson, who has been at Maydencroft for five years, after working for other arb companies in Hertfordshire, Bedfordshire and Essex. Equally experienced was Kit Johnson (no relation) who would normally have his own team. Kit joined Maydencroft one year ago after 20 years with Gristwood & Toms, and like Lewis has worked purely in arb with all tickets gained on site.

'Starting out' was Jack Rhodia, currently on an apprenticeship (Level 2 Arb) at Capel Manor College in Enfield, while Greg Coppenhall, having completed his Level 2 Arb at Shuttleworth College in Bedfordshire, was main climber for the day. Jim SHone, who has only been with Maydencroft for two months, came to the company from Bartlett Tree Experts in Bedford, while Kurt Langley (two years with the company) is a convert to arb from countryside management – he switched courses after hearing Tom Williams lecture at Shuttleworth College.

With introductions over, it was time to see some action. This site was clearly one of those 'tall trees in a tight place' situations, and as tight as I have ever seen before. The 50-year-old trees occupied a strip of level land no more than four metres wide, bounded by panel fences on one side, with a sheer drop down to a fishing lake on the other. With three very tall trees to be taken down piecemeal, smaller debris chipped, and larger wood stacked by the team, all on this very narrow strip of ground, it wasn't going to be easy. Access from the house and garden was difficult, with just enough space to bring in and manoeuvre a narrow-access tracked chipper (a Först TR6), but insufficient to allow cost-effective removal of the logs. Two trees were already down, and we

watched while Greg set about the third, peeling off the upright branches one by one using his Stihl 201T top-handled saw. The climb was crisp and clean, but not as easy as expected given the closely spaced branches all the way to the top. Kurt explained that while Lombardy poplar provides plenty to hold onto, the downside is very tight V-shaped unions in which a foot can easily get caught.

Lewis and Kit mentioned the recent Lombardy poplar tree failures in Hertfordshire, with trees coming down and demolishing several cars at a time.

The historical reasons for this would become clearer later when we met local tree officers, but for the time being, and as a long-time botanist. I was more interested in how intrinsic tree morphology and anatomy were affecting things.

Greg said this tree's early rapid vertical growth with limited spread had made it popular for amenity planting, but had several downsides, including sacrificing strength for rapid growth and its vulnerability to stem breakage in high winds. "The genus Populus, including Lombardy poplar, produces some of the softest hardwoods on the landscape, causing ageing poplars to fail at all points up the tree profile," said Jim.

"I have recently seen Lombardy poplars failing at all heights - at the base, midway and at the very top, with no obvious signs of disease. Once a crack or crevice appears in the trunk, which is common in fast-growing species, water gets in and the inherently weak wood begins to soften. Microbial activity may come in later, but disease does not appear to be the primary reason for the problem which is caused by inherent softness and weakness of the wood," added Patrick.

Lewis puts the inherent weakness and potential hazards of Lombardy poplar down to its notoriously weak and spacy V-shaped unions and he ably demonstrated this on a log which came apart at the union with one good blow. Jack claimed he had already noticed how the soft and brittle wood of the Lombardy poplar wood 'behaved' when trees came down on hard surfaces, shattering into pieces to cause lots of clearing up for the

I noticed how the sawn up logs were positioned to make room for more, albeit with difficulty, given the limited space available, so I asked the team about its removal. Kit explained how the client, who appreciated the cost of removing such a large amount of timber from this limited access site, had agreed for the logs to be left in situ. When asked how long he thought it would take for the logs to rot away, Lewis said: "If you came back in ten years' time, much of this would be well on the way to humus." While Kit added: "Lombardy poplar rots readily while the trees are standing, so there should be no problem for them to rot rapidly on the ground."

I came away with a good feeling, having learnt a lot, with two things standing out. First was how a combined force of two normally separate teams had worked so well together - until told I had assumed they worked in unison every day. Secondly, and equally important, how working within such a knowledgeable and highly experienced team must be a truly invaluable on-site training experience for apprentice arborists like Jack Rhodia.

The second job was at Welham Green at the southern end of Welwyn & Hatfield Borough, featuring a massive English oak





Climbing arborist Greg Coppenhall peeled off the upright branches one

with a veteran pedigree. Sadly, the tree was deteriorating and in too precarious a position to leave intact. It was a hedgerow tree flanking a road which had quickly graduated from quiet country lane to fast and busy through road of the same gauge. The tree was on land belonging to Hertfordshire County Council Highways, who had contracted Welwyn & Hatfield Borough Council to survey it several years ago. It was initially decided to reduce the specimen by 20 per cent, but such was the speed of deterioration in the intervening period that it was decided to monolith the

By the time we arrived the team of eight (three separate teams combined into one for the day) had almost finished cutting. This had clearly been a fine tree, although the wide, healed-over scar stretching right up the trunk, probably caused by a lightning strike, had contributed to the

tree's early demise. I asked the team to measure the tree, which weighed in at DBH (diameter at breast height) of 145 cm, translating into a CBH (circumference at breast height) of over 400 cm. Standard tables suggest the tree was closing in on 300 years of age.

This had been a big, one-day job with eight guys and a fleet of equipment including Unimogs, the Valtra N154E tractor, Botex trailer and crane and chipper and traffic control installed to protect the team working on a busy but narrow road.

The light was already fading, and I had just enough time to meet the team.

- Arboriculture team supervisor Tom Ruffle, with 10 years at Maydencroft.
- Luke Allwright, with three years at the company and a diploma in forestry & arb from Capel Manor; Dan Blackwell with three years at Maydencroft and climber for the day. Both men normally manage their own teams.
- Dean Langley, second climber, came into arb from forestry; Jamie Barton with four years at Maydencroft and doing Level 4 Arb at Capel Manor.
- · Luke Gilbert with three years at Maydencroft, who completed Level 3 Horticulture at Capel Manor but decided to change and is currently an arb apprentice; Alex Stacey, with four years at the company and one of the many arb apprentices training at Shuttleworth; Ben Mansfield, with just six months at Maydencroft and now on Level 2 Arb at Shuttleworth.

From Welham Green we drove north into Welwyn Garden City centre to meet with tree officers Oliver Waring and Emma Griffin and landscape & ecology officer Mrs Chris James of Welwyn & Hatfield Borough Council, who gave us the broader perspective on the risks presented by Lombardy poplar trees in the area.

The county of Hertfordshire was a focus for the construction of 'Garden Cities' and 'New Towns', starting in the 1920s and continuing through into post-war years. Lombardy poplar was very much in vogue at the time, with thousands

of trees planted all over this part of Hertfordshire. They are all 'coming of age' at the same time and starting to cause havoc with branches, parts or even entire trees coming down and causing damage to property. Consequently, Welwyn & Hatfield Borough Council has decided to step in and pre-emptively fell its own 356 mature Lombardy poplar trees. This is at considerable cost, but only a fraction of what it might be if somebody gets hurt by falling tree debris, and clearly offering potential work for local arb companies like Maydencroft.

ARB CONTRACTS MANAGEMENT

There had been no time to discover the nature and scope of Patrick's position as arb contracts manager at Maydencroft. Still looking forward after 44 years on the job. Patrick's big current project is digitisation of arb work planning and operations, including risk assessment and working at height. With information integrated into a tablet, arb teams will be equipped with 'drop-down' identification charts covering invasive species like Japanese Knotweed, Giant Hogweed and Himalayan Balsam.

The long-term plan is for Maydencroft to develop 'in-house' apps to identify trees, tree pest and disease symptoms and causal agents. "Everyone may well know

The team at Welham Green were using a Forst ST8 woodchipper. We speculated about synchronisation

the bracket fungus *Inonotus hispidus* (shaggy bracket) commonly found on ash trees, but there are dozens more of these Basidiomycete fungal pathogens out there and they are not always easy to distinguish," explains Patrick.

Talking of his experience on the 'frontline' fighting oak processionary moth (OPM), Patrick said: "In my experience, OPM movement and spread is season-led. When everything comes together during a particular spring, the insect 'takes off' and becomes impossible to contain."

of oak bud burst with hatching of first instar larvae from the egg stage, and the need to apply BTK (Bacillus thuringiensis subsp. kurstaki) when OPM larvae were still sufficiently young and susceptible to be killed by ingestion of this biological insecticide. However, we both agreed that the window of control opportunity for OPM, with its dual tree and public health dimensions, has long gone and that this insect pest is now impossible to contain. let alone eradicate from the UK.

