Technology gives woodland owners the complete picture



Barle Valley Forestry uses the latest woodland surveying technology, software and specialist knowledge to provide owners and managers with reliable information about their timber stocks and woodlands.

Caroline Ayre reports.

n a beautiful day in early May, I met Steve Fox, managing director of Barle Valley Forestry, at Fingle Woods in Devon. Stood in a P92 Douglas fir stand, managed by the Woodland Trust as part of the future of Fingle Woods, Steve explained the beginnings and on-going fascinating work of the company.

Steve began his career in the early 1980s with the Forestry Commission in the south of England. He moved on to become a harvesting, marketing and forest management practitioner with training through the Forestry Commission's Training and Education Branch. In 1988, he left the Forestry Commission and dedicated the next 20 years to teaching forest management in both further and higher education, becoming a senior lecturer in 1998. After leaving the education sector he joined Tilhill as a forest manager, covering the south west of England. But Steve was finding that he was more and more office-bound and was spending less time in the woods. A conversation with his son Sam in 2011 about their shared passion for native woodlands was the start of what would become Barle Valley Forestry Ltd, with an initial focus on bringing unmanaged woodlands back



into management.

Steve explains: "It was a natural progression, bringing together our skill sets and experience in forest management, focusing on small-scale harvesting and primary processing to add value to local markets. My qualifications include a National Diploma in Forestry, and a Cert Ed and PGDip in Forest Product Technology, so you could say I am passionate about trees, inside and out!"

The company is very much a family business with Steve heading up the team as managing director, with his twin sons Sam and Tom.

Sam has been working in the forestry industry for over ten years. During this time, he has been responsible for Barle Forestry's harvesting and marketing operations. For the last two years, he has been responsible for contracts and compliance. He has extensive technical knowledge of silviculture practices, focusing on forest planning.

Tom has been working in the industry for six years, from felling and planting trees to technical surveying. He has spent time in New Zealand, working for a forestry and land management company, primarily focused on capturing data for the National Carbon Emissions Trading Scheme. Tom has also worked on the UK National Forest Inventory (NFI) and he is responsible for the company's field survey teams.

The family soon recognised that their key strengths were in mensuration so they moved away from harvesting and maintenance contracts to focus on forest surveying. The company offers a range of forest surveying services with a core focus on production and inventory surveys for forecasting and timber valuations.

The majority of their work is for the public sector, predominantly in Wales, and north, south and west England. However, as Steve notes, "we are seeing a slow but welcome renaissance in private woodland owners and managers who want to understand the health, resilience and productivity of the resources that they own or manage."

Creating and using accurate data to give confidence when making forest management decisions is the absolute cornerstone of the business. Steve explains: "The most important resource we have are our surveyors, with two teams split geographically to cover the UK. Each team is led by an experienced forestry technician, receiving regular technical support from myself. The work is hard and demanding, both mentally and physically. Our teams need stamina and concentration to ensure the data gathered is of the best quality. It is almost like a military discipline."

The family realised that they needed to move things



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forward when it came to gathering and processing data so they began to investigate alternative technologies and decided that Haglöf Sweden could provide them with the equipment and software they needed.

"They were at least five years ahead of the UK but the software was set up for Scandinavian forests," says Steve. "Although the principles were the same we consulted *The Forest Mensuration Handbook*, talked to foresters and went over to Sweden to discuss developing the software for the UK situation.

"We got our first set of calipers in 2015 and the Vertex IV ultrasound system. We have now moved on to the Vertex Geo which gives an extended range measurement and reach with a combination of ultrasound and laser. It also includes additional GPS mapping functions which feeds into our GIS software. We are continually improving our accuracy and being out in the field day-in, day-out we can really challenge the technology and suggest improvements."

Continuous development

What next for Barle Valley Forestry? Sam has been driving the continuous development of the company. He said: "One of the key areas we have identified for growth is remote sensing and monitoring using UAVs (drones). We have developed a suite of forestry specific services we can now deliver in partnership with Artio Geomatics – a specialist UAV mapping and surveying company working throughout the UK. These include topographical mapping, tree health monitoring, wind blow recovery assessments, 3D modelling and volumetrics."

www.barleforestry.co.uk

Barle Valley Forestry will be available to talk about their new technology at the Confor Woodland Show at Longleat, Wiltshire on 5 and 6th September 2019.