TALKING TIMBER



GOOD REASONS FOR NOSTALGIA

The forester and the sawmiller have taken a complex journey of change through the decades and wood technology has played a key part in adapting, writes Morwenna Spear



Back in the autumn I joined many Bangor forestry alumni to celebrate 120 years of forestry within the university. I enjoyed meeting alumni from across the generations - right up to current students whose passion for forestry was inspiring.

Then, in December, I found myself in the thick of another celebration, this time for 15 years of the Wood Technology Group in the IOM3. Once again I was surrounded by insights

and stories from many generations of the timber industry perspectives drawn from diverse experience. It was great to hear that we all share similar concerns and hopes for the future of forestry, wood science and wood products, despite vastly different roles within the industry.

In the summer I spent a spell visiting the Northwoods in Minnesota's Arrowhead region. This was a scene of great activity in the 1890s to 1900s, because as the old growth forests further south in the US became depleted, the hungry sawmills looked north to satisfy their order books for old growth white pine. I learnt a lot about strategic choices, the clever positioning of a mill town at Winton to handle logs from multiple watersheds, all rafted down rivers and across lakes. There were tales of frozen logging roads and bawdy lumberjack camps, and incredible innovations such as the steam log hauler for extracting multiple sled loads without rails.

What of the changes in the forest? The years cutting old growth pine (which was easily milled due to great girth and knot free timber) did not last long. Reports of volumes harvested per year in the late 1890s are eye watering. Just imagine 11 billion board feet of logs passing through a river in a year! The forest was rapidly reduced to less desirable patches (too far from access) or less favoured species, or smaller dimension new growth. These issues sound familiar - similar discussions happen today - but the dimensions are very different. In the 1890s it would take four and a half logs to provide a thousand board feet of lumber. By 1904 it was reported that it now took 13 logs to do the same! Modern mills might baulk at the prospect of milling even the 'small' lumber that was unappealing to our early 20th century forebears.

Frederick Weyerhaueser was a German immigrant who, through opportunity, collaboration and savvy business choices found himself one of the few positioned to adapt to this small dimension resource, taking on 'pulpwood' and using it for paper, and board products. The timing coincides with the emergence of hardboard (initially demonstrated in 1898 in England but taken to industrial scale as Masonite in the US in the 1920s) and continued with the development of particleboard in the 1950s.

Morwenna Spear is chair of the Wood **Technology Group** of the IOM3 and research fellow at Bangor University's **BioComposites** Centre

Plenty of other innovations have followed, all harnessing the properties of wood in intelligent lay-ups or laminations. Perhaps it should be no surprise that now, in 2025, the Weyerhaeuser company's product range contains most of the innovative board and strand-based wood products available in the market.

Looking around as I travelled in the region, the oldest trees I saw were 110 years old, many much vounger. It is a very different scene now, with extensive protected land, state forests and plantations. The forester and the sawmiller have taken a complex journey of change, and wood technology has played a key part in adapting.

Now, in 2025 I am looking at another anniversary. For those of you who remember the Institute of Wood Science (the origins of the WTG), December this year will mark 70 years since the founding of the IWSc. Another chance to celebrate, and to learn!

Below. Land of lakes and white pine



Wood Technology Group

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