

Andy Leitch



Extra use of 'flyovers' using drones will find fallen trees

When Storm Arwen roared across large parts of Scotland a year ago, it left devastation in its wake – and hit woodland owners and the wider forestry industry hard.

Afterwards, modern satellite imaging was deployed for the first time after a serious national windblow incident. This was emerging technology, in an emergency, used in a new way – creating algorithms to spot changes in the tree canopy where trees had come down.

The technology was very good at spotting the epicentre of damage but didn't always pick up the full extent in affected areas where groups of trees were left leaning, or standing in fragments.

More 'flyovers' are planned to look more closely at remote areas, to give us a fuller picture, as well as further use of 'citizen science' – drone footage, photographs and other evidence collected by people on the ground to help create a clearer picture of the scale of the storm damage.

Initial estimates identified around 4,000 hectares of woodland in Scotland blown down. By spring this year, that estimate had doubled, to around 8,000 hectares (about 16 million trees) through refinement of the algorithm, using citizen science.

The final figure will be higher, as more windblown areas are constantly coming to light and damaged areas are cleared back.

It's now time for the industry, led by trade body Confor, and public forest body Scottish Forestry to reflect on lessons learned



WINDBLOWN: Many trees were brought down on the Seafield Estate in Moray during Storm Arwen last December.

from Arwen, and its ferocious (but less famous) followers Dudley and Eunice. Mapping windblown trees will be a big discussion point.

The lessons-learned meeting will discuss where things went well, and where the forestry and wood sector could do better.

The immediate focus in Arwen's aftermath had to be safety – removing trees that were a danger to the public. That was no small task.

Afterwards, there were huge challenges about how to remove windblown trees and find markets for the timber.

An unexpected glut of timber in the market is not

easy to deal with. You can't just turn on a tap and cut all the windblown trees down because harvesting resources were already committed across the country.

Timber is traded in 'short futures', so wood processors buy timber in advance to meet future orders and that programme of work was already planned.

Much of that had to be taken care of before moving on to the windblow.

Current demand for wood-based products is mixed, with markets for panelboard and particleboard, produced throughout Scotland, still reasonably strong. Panelboard is a building trade staple, used in wall

panels, floors, bathroom and kitchen units, so demand is relatively good. Domestic markets for pallets remain good and demand for wood pellets for energy is very strong in the UK and overseas.

However, demand for sawn timber is not so strong, as the surge in DIY projects during the pandemic – when people were at home much more – has tapered off.

Disposable income has greatly reduced with inflation, and increased fuel and energy prices.

As a result, markets for sawn timber are more sluggish and the effect of the Ukraine war on supplies, added to a fear of recession, don't help.

However, we are hopeful of an upturn in the spring; the forestry industry has always had to react to challenging circumstances and Storm Arwen was no exception.

Do we have lessons to learn about how quickly we activate contingency plans if this happens again? Could we have moved more rapidly to make strategic decisions about timber supply at a national level, for example?

There are also big conversations about how to prepare for the 'next Arwen'. In reality, storms like this might only hit every 30-40 years.

Some people say they will occur much more often, but Arwen was especially

devastating because of the unusual direction of a ferocious wind.

Trees learn to grow in a particular way to cope with prevailing winds, and can survive very strong blasts from specific directions. However, if a really high wind comes from another direction, that's a big problem – as Confor member Will Anderson, from Seafield & Strathspey Estates, wrote in these pages last December.

Talking about the damage on the Cullen Estate in Moray, he said: "What made Arwen stand out was not just the speed of the wind, but its direction. Moray and Aberdeenshire are used to strong winds from the west, but winds of real power from the north are far less common. This made Arwen, literally, the perfect storm – a once-in-a-generation weather event. To take down trees of the size it did was almost unbelievable."

Another key factor for foresters to consider is when to harvest productive trees to reduce the risk of windblow.

The taller a tree becomes, the more susceptible it is to being blown over by high winds, and we will have to give more consideration to that risk in the future.

Great Britain is an island nation and we're susceptible to storms, so we need to be better at coping when a massive one comes along.

There are big lessons for the forestry industry to learn from big storms like Arwen – but we will learn them and be better prepared next time.

■ Andy Leitch is deputy chief executive of Confor: promoting forestry and wood