

## Estate flourishes through the storm



A family-owned estate business is using the vast experience of its forestry team to create a bright and sustainable future. And the estate is at the heart of its community, too

hile Storm Arwen brought misery to many households across Dumfries and Galloway last November with power supplies cut off for days, for Castlemilk & Corrie Estates the storm had a greater impact: the loss of 100ha of commercial woodlands, which is equivalent to two and a half years of production for its Dumfries and Gallowaybased forestry business.

However, thanks to the estate's long-term forestry management plan, Estate Director James Buchanan-Jardine is confident that it can ride out this loss and continue to keep his six-strong forestry team busy for the next decade to sustainably fell 40ha of timber per year over its 2,000ha of woodlands.

Castlemilk & Corrie Estates is a familyrun rural business comprising a 28,000acre patchwork of lands around Lockerbie with interests in property, sheep farming and forestry.

As the prevailing winds in the area are normally from the south-west, the northwesterly Storm Arwen took everyone by surprise. James explained: "We hadn't anticipated that a storm like that would have such a localised effect on our land. Our estate is linear in shape, from the south west of Lockerbie stretching up beyond to the north-east, so the storm just crashed through the middle of it and laid waste to a lot of our woodlands. However, we are lucky in that we have a lot of relatively small parcels of forestry, so we can absorb the hit and replant to make sure that our rotations can recover."

The two largest Sitka spruce plantations within the estate are the 600ha Whitecastles forest and the 200ha Birkshaw forest. These, together with many smaller areas of forestry stands, support the majority of the estate's annual 40ha felling regime, which generates 15,000-20,000 tonnes of high-quality timber for sale to sawmills in South Scotland and Northern England as well as for the estate's fencing materials. In addition, the estate also manages Turnmuir forest, which consists mainly of Scots pine for amenity woodlands for the public to enjoy.

The estate has a long history of commercial forestry with records going back 200 years, which makes fascinating reading for Woodlands Manager Andrew Brown, who oversees six woodsmen, an admin assistant and a summer placement forestry student.

Andrew said: "Castlemilk Estate is unusual in Scotland in that it has been able to retain a dedicated timber team who do all the replanting, beating-up, respacing, and traditional thinnings as well as the fencing on the farms, supplied from our small sawmill.

"Some of our woodland team go back a generation on the estate and this gives us a great continuity of skills and experience, as well as knowledge of the woodlands. We've got one guy who has worked here for 44 years, so he is one of the rare people in forestry that has actually seen a full crop rotation. Similarly, one of our contractors has also worked with us for a long time, so 40 years ago he was felling trees in a forest with a chainsaw and now he's back in the same woodlands using a mechanised harvester - that level of continuity is valuable to us and our relationships."

The estate records are not just of historic interest, as Andrew explained: "The old compartment records are amazing and are actually a very useful resource because we can see what was doing well two or more rotations ago, so when we are making tree species selections we have that background knowledge.

"It is interesting that before the 1960s, planting was based on the traditional 'gentleman's mix' of Norway spruce, larch, Scots pine, and Sitka, which then moved in the late 1960s and 1970s to a net-discountedrevenue Sitka model. In the last 15 years, due to climate change and the proliferation of tree diseases, we have now moved back towards where we started: planting a wide range of different conifers, particularly Douglas fir on the better ground, along with Norway spruce, while still maintaining a Sitka focus where it is Thank you for sorting out the fallen down trees. ROPN P2

Children from the local primary school at Kettleholm drew pictures to thank the estate's forestry team for clearing up their forest classroom after the storm

The estate also benefits from good soils and Andrew said that its Sitka spruce has such good growth that it is literally 'off the charts' in terms of conventional metrics. This unique situation was recognised early on in the 19th century when James' great grandfather decided to experiment with different species to improve the commercial stock on the estate - a passion that continues today, as Andrew explained: "The estate has always done a lot of research into forestry and seeing what works via experimentation. For example, Södra, Sweden's largest forest owners association, visited us in 2011 to view our Improved Sitka spruce experiments, which date back to 1987 and are also some of the earliest in the private sector. As a result of this cooperation, they sent us the first batches of Improved Norway spruce in Scotland. This variant was very impressive and combined some of the speed of Improved Sitka spruce with the straightness and timber quality of Norway spruce.

"Recently, we discovered some data from United States that suggested Tamarack may have some resistance to Phytophthora ramorum so arranged with Maelor nursery to collect some seed in the US and we have planted out several small stands of Tamarack

to see how it will fare in our conditions."

Every decade, the estate produces a 10-year forest management plan and for the 2023-2033 iteration it went out to public consultation for the first time. James explained: "Part of the point of this forest plan is to get rid of some of the mystery around both us as an estate and woodland management in general. It's a good way to try and educate people as to why we do things this way in commercial forestry and what the process is. Hopefully, that will go hand-in-hand with people understanding the dangers of walking through a woodland undergoing felling."

While the forest plan focuses on the commercial assets, there are also non-commercial woodlands which need management for local amenity use, including a number of community partnership projects, such as the nature reserve set up around the old curling pond at Eskrigg by Jim Rae – Andrew's old biology teacher.

Andrew said: "For the last 30-plus years this has become an important local and regional resource for school visits, red squirrel enthusiasts, wildlife photographers and visitors as the development of a network of integrated paths means that the public can

now walk from Lockerbie High Street right into the heart of the forest without crossing a major road."

Another partnership is the forest classroom the estate established in a small wood, which the local primary school at Kettleholm uses once a week. After some trees were brought down by the storm, the estate's team went in to clean it up for the school; the children said thank you by sending pictures they had drawn of the forestry team in action, which are now proudly displayed in Andrew's office.

Storm Arwen, together with the other threats associated with climate change, have brought home the need to plan resilience into the estate's forestry business, such as design of timber felling areas – coupes – and the sequence in which they are felled.

Andrew explained: "Most storms are from the south-west here – the outliers like Arwen excepted – so we divide our main forests into blocks with a decent edge to the south-west and then start felling in the north-east and work in that direction. We also spread our felling coupes out into relatively small 5-15ha areas so we are not felling entirely in one forest, and look to have a 'normal' distribution of ages of timber across the estate to provide a sustainable annual cut of around 40ha.

"The estate's heritage of experimental planting also has an important role to play as we are continuing to introduce a wide range of new conifer species on restocking, particularly more 'windfirm' species, a wider range of species to reduce risk of disease, and introducing wider rotation ages by design as different species will have different rotations, as well as providing a wider range of timber products e.g. redwood for the future."

James added: "Thanks to Andy's forest management plan, we have the optimum level of plantings and maturing stock at different ages to maintain a constant annual felling rate of 40ha. It's a very sustainable model and it's how we've been able to keep our forestry team together for years and benefit from that continuity, which also provides long-term jobs in the community.

"We could fell more timber but we need to balance the needs of the land and the communities we live in. The reason we can have this business model is because we're a family-owned business: we don't have to answer to shareholders so we're not forced to push the boundaries of profitability. We've been here 200 years and I fully intend for us to be here for another 200."

the Milk and Corrie Estates April 2022

Forest Plan Scoping Consultation



The estate published its forestry plan on Facebook as part of its community engagement programme