

Tree Production Capital Grant Case Study

Cutlers Wood Limited

Upscaling tree production through mechanisation to meet customer demand



In January 2022, AJ Paul launched a new venture, Cutlers Wood Ltd, a bare root tree nursery in Ipswich, Suffolk, growing a range of native and non-native woodland hedgerow species.

AJ has 25 plus years of experience in arable and precision agriculture as a grower of field vegetable and root crops. His farming business was already diverse, with livestock, vegetable and potato production, in addition to a large environmental scheme. However, AJ had always wanted to grow trees commercially. The challenge was how to incorporate production into an arable rotation on a 200-acre site, with the minimal use of pesticides and inorganic fertiliser.

Within just a few months of starting the nursery, 300,000 trees were growing on the farm. But the business was ready to take this up a gear. Due to customer demand, there was a need for upscaling production.

To achieve this level of growth and with the ultimate goal of eliminating the use of pesticides, AJ needed to move away from using hand processes for weeding and bundling, and instead mechanise as much as possible.

Supporting investments in expansion, automation and mechanisation of facilities and equipment

In May 2022, AJ decided to apply for funding from the government's Tree Production Capital Grant (TPCG). The TPCG provides funding to increase domestic production of tree seed and saplings, supporting investments in expansion, automation and mechanisation of facilities and equipment. This helps to improve nursery resilience, sustainability and increase the diversity of tree species produced, as well as the quantity of tree seed and saplings coming into the market to meet government's ambitious tree planting targets.

AJ was successful in his bid for funding. With support from the TPCG, the nursery purchased several pieces of equipment to increase productivity significantly whilst also improving the quality of the trees grown and ultimately their success rate. Each step of the growing and harvesting process is now able to be mechanised, which will significantly increase productivity and enable the nursery to satisfy customer demand and scale up as planned.

"Like many other agricultural businesses, we were looking to diversify. Tree growing forms part of a conventional arable rotation, reducing the risk of a buildup of tree pests and diseases in the soil. However, the capital outlay required to reach a commercial scale of tree production would not have been possible without the support of the Tree Production Capital Grant. The initial funding will help the nursery reach a positive cashflow earlier and so allow further investment to improve quality and quantity of production."

AJ Paul,
Director, Cutlers Wood Ltd



Equipment purchased included:

- **A camera guided hoe** – this has enabled efficient weed control through accurate imaging following rows and covering large areas, moving away from a reliance on hand weeding which is a very labour-intensive process
- **An undercutter** – to sever the deeper roots, encouraging a more fibrous root system to develop and improving the quality of the trees when planted out
- **A stone burier bed-former** – this has made drilling of the larger seed much easier. Some of the land is stony but the Stone burier processes soil, burying stone and debris. This also improves the effectiveness of camera-guided mechanical weeding, covering the stones with a fine and clean soil layer creating a very well formed, stable and porous cultivation bed
- **A lifter** – this has mechanised the lifting of trees so this process can be carried out more accurately and efficiently
- **Tractor front linkage** – the above pieces of equipment can be attached to the nursery tractor using the front linkage. This allows equipment on the front and back of the tractor leading to half the number of passes up and down the fields and reducing the impact on the soil and trees
- **2 x binders** – these dramatically reduce the time taken to create bundles of trees for distribution
- **Fencing** – this has successfully prevented deer and badger from entering the nursery and destroying seed and saplings
- In the second year of funding, AJ also purchased a **cold store** ready for the 2023 harvest. The aim of this is to harvest trees at the optimum period and store them in perfect atmospheric conditions until the point of sale. This maintains a high quality of tree and enables the land to be rotated with other arable crops



Camera guided hoe



Undercutter



Stone burier



Binder



Lifter

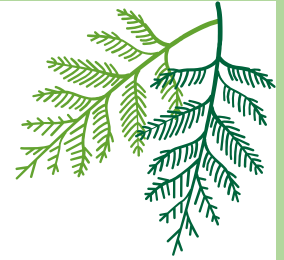
Increasing biosecurity

Biosecurity is also important to the nursery, AJ already has access to field fleece from the farm and netting to protect the seed and saplings from flying pests when they are most vulnerable. The nursery is also situated a good distance away from any other collection of trees which will also limit the chance of disease contamination.

The Future

“One way the nursery is increasing biosecurity is through the collection of local seed rather than purchasing all seed from external sources. Furthermore, as the nursery grows, the large number of trees produced will contribute to the UK industry importing fewer trees, improving biosecurity. The use of mechanical weeding has also dramatically reduced our reliance on chemical control.”

AJ Paul, Director,
Cutlers Wood Ltd



Highlights

- As of November 2023, circa 1.8 million trees were in the ground, with plans to harvest around 1.2 million over the winter
- The nursery is now growing circa 20 species, predominantly native and from UK sourced seed. The main production is centered around Hawthorn, Hazel, Oak, Sweet chestnut, Hornbeam and other hedgerow species. AJ is also growing a small area of novel species with a focus on climate resilience
- The nursery is growing a fantastic crop of Wild Cherry and Chestnut and achieving good germination rates and growth on most species
- There is a dramatic improvement of soil condition as a result of the minimal use of herbicide and no insecticides. Despite the inevitable challenges of weed control this has reinforced the nursery's goal of pushing as far as possible towards organic production



For more information

If you would like to find out more about funding to increase domestic production of tree seed and saplings, supporting investments in expansion, automation and mechanisation of facilities and equipment, please visit Tree Production Capital Grant on GOV.UK.

www.gov.uk/guidance/tree-production-capital-grant