# FORESTRY DASHBOARD

October 2020 – September 2021



% of activity relevant to the Forestry sector:



OF BUSINESSES REGISTERED WITH FARMING CONNECT ARE FROM THE FORESTRY SECTOR

### **Demonstration Network**

Plas yn Iâl: Continious Cover Forestry (CCF) in Farm Woodlands

Project objectives:

- Improve overall woodland management that will contribute a sustainable timber supply towards the farm's energy needs.
- Prepare and implement a Continuous Cover Forestry (CCF) woodland management plan, combining results of both ground and remote surveys

#### Outcomes:

- The results gathered during the ground survey showed that the woodland volume is increasing at an estimated volume increment of 7.19m3/ha/ yr.This equates to approximately 90 tonnes of timber per year, having an energy equivalent of 178,365kWh/yr.Their wood fuel demand is approximately 28,000kWh/yr, which means that introducing Continuous Cover Forestry (CCF) as a silvicultural management technique could provide 76 tonnes or 150,365kWh of saleable timber annually.
- The main conclusion of the remote sensing trial was that it can provide very accurate stem counts for conifer plantations due to its ability to differentiate between different crowns. At Plas yn lâl, broadleaves are the dominant woodland type, therefore stem counts were difficult to calculate at times. Despite this, results provide evidence of the usefulness of remote sensing to assist in assessing transformation to CCF.

A webinar to disseminate the results of the survey was held on 25 March and an on-farm open event on 6 October 22 people attended the event.

### Fedw Arian Uchaf: Rotational Grazing

Geraint Davies runs an organic beef and sheep hill farm on the outskirts of Bala. His main objective is to improve the overall performance of the farm by introducing a new, innovative rotational grazing system. To reduce workload of continuously moving electric fence boundaries, the project is looking to assess the current matrix of hedgerows before strengthening existing hedgerows and plant new ones to divide fields up.

To secure the multifunctional benefits of trees in a farming system, the key objectives are:

- Completion of a hedgerow management plan to assess the asset and identify areas for improvement that will benefit the farm business.
- Use existing green infrastructure to create appropriately sized

#### Moelogan Fawr: Woodland establishment

The establishment of new woodlands is an integral component in the farm landscape and one which will provide a focus on sound and profitable financial foundation to the whole business. Llion and Sian Jones have embraced the opportunity through Glastir Woodland Creation scheme to establish abroad leaf woodland at Moelogan Fawr. The objectives being providing shelter, reducing overland flow issues in extreme weather conditions, creating resilience to climate change and sequestering carbon.

Monitoring establishment progress will show establishment rates, identify cost-effective methodologies and demonstrate best practice post-planting, which will contribute greatly to achieving the objectives for establishing a new woodland at Moelogan Fawr.

The aim of this project will demonstrate the importance and need of creating the right conditions by monitoring and evaluating tree growth for different methodology strategies with comparable data at the end of a 3-year project.



Figure 2. Moelogan Fawr farm.

The new woodland has been registered with Woodland Carbon Code and a calculation is made on the carbon that the 10 hectares (ha) of trees will sequester over a period of 100 years.

Key information to the calculations were:

- This is a 10ha mixed native woodland where no management is envisaged after establishment.
- There are no soil carbon emissions to account for as there is minimal ground prep on mineral soil.
- The project has fenced the gross project area (15ha) but is using tree guards on 40% of numbers. There are no forest roads being created.
- It is being planted over 2018 planting season and carbon will be claimed for 100 years from the last date of planting.
- Soil carbon accumulation is being claimed as this project is on mineral soil, previously pasture use, with no thinning or clearfell planned. Total pending issuance units for the project = 2,930tCO<sub>2</sub>
- It's important to note that a carbon footprint has been completed for the farm. Carbon units that have been calculated and verified should be considered within the carbon footprint calculations and target to achieve net zero. N.B. Verified carbon units can not be used twice i.e.

meadows/fields for a rotational grazing system.

• Agroforestry – incorporating concepts that integrate trees into the farming system that will improve the environmental and economic performance of the farm.

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Figure 1. Hedgerow management plan recording format.

within carbon footprint calculations for the farm and traded in the carbon market.

Future plans at Moelogan includes identifying further opportunities for more planting and establishing hedgerows/shelterbelts that will benefit animal welfare and contribute further to biodiversity, carbon storage and economic performance of the farm.

#### Knowledge Exchange Hub

The following technical articles have been produced by the KE Hub:



REGENERATIVE AGRICULTURE: BUZZWORD AND BEYOND



USING A NATURAL CAPITAL APPROACH TO VALUE LAND MANAGEMENT APPROACHES?



HOW CAN CHANGING LAND MANAGEMENT APPROACHES HELP TO ACHIEVE NET ZERO?

#### **Discussion Groups**



#### **EIP Wales**

#### Establishing trees in dense brackens

An EIP Wales project is investigating the best methods for establishing trees in dense bracken and early results are suggesting that tree choice may be an important factor. The project is using birch, rowan, Sitka spruce and oak saplings and trialling different mechanical methods of controlling the bracken. Weather conditions in the first year were not ideal for establishing trees with very wet weather around planting, followed by a very dry spring, but nonetheless, the birch and rowan has performed well with just 5% losses compared to 10% losses for the Sitka spruce. However, losses of oak saplings were much greater at 25%.

Where mechanical treatments had been used to control the bracken the birch and rowan had grown taller which was not observed with the Sitka spruce and oak saplings. The saplings will continue to be monitored with additional treatments of trampling and strimming to be carried out.



#### **Strategic Awareness Events**

#### **39 Events held**

Key topics included:



Tree health awareness – the pests and diseases threatening our woodlands in Wales

A focus on shelterbelts planning, design, planting and management

\*Strategic Awareness Event themes are often cross-sectoral that tend to attract farmers from all sectors.

#### **Webinars**



2 on-farm events with 37 attendees

#### **On-farm events:**

**Mountjoy farm** – Biodiversity survey presentation.

**Moelogan Fawr** – Presentation on woodland planting on the farm and providing key messages.



#### **Demo farm Live:**

Pentre farm -Presentation on the biodiversity survey undertaken at the farm. A video is available on the website: Biodiversity at Pentre farm

#### Mentoring

8% of mentees are being mentored on forestry/woodland issuess.

Topics discussed:



#### Training

There have been **five** application windows between October 2020 and September 2020 (excluding reapplications for Covid) with 866 instances of training delivered during this period.

Of this number, 33 instances were from the Forestry sector.

## Courses



#### to 380mm, Felling and **Processing Trees over** 380mm, Grey Squirrel Control, Severing Uprooted or Windblown Trees using a Chainsaw, Emergency First Aid at Work, Working at Heights Awareness.

#### **E-learning**

Some of the e-learning courses completed within this period relating to the Forestry sector:

#### **Surgeries**



"The woodland surgery we received gave us a better idea about what management options we have for our farm woodland area."

"During the surgery, we learnt what options are available for the woodland we have on the farm."

FARM BUSINESS **INVASIVE** TREE DIVERSIFICATION **IDENTIFICATION SPECIES** 

For more information on e-learning, please visit the website.



www.gov.wales/farmingconnect