HORTICULTURE DASHBOARD

May 2020 – April 2021



% of all activity in this quarter relevant to the horticulture sector

23% HORTICULTURE ACTIVITY

BUSINESSES REGISTERED with Farming Connect are from the Horticulture sector

Discussion Groups



Demonstration Network

Henbant: Establishing an agroforestry and regenerative agriculture scheme

The project at Henbant involved implementing a no-dig, bio-intensive, ecological approach using the principles of permaculture to have multilayered growing. An agroforestry approach to food production not only adds the advantages of sustainable land use but also contributes to animal health and carbon sequestration. Trees can modify temperature and wind speed with benefits for animal welfare, providing shelter and fodder. Agroforestry systems are believed to have a higher potential to sequester carbon because of their perceived ability for greater capture and use of light, nutrients and water than single-species crop systems.

The main grazing pasture (8 ha) was separated into 30-day sized grazing units divided by tree lanes, including some woody, highly palatable species for cattle to browse (willow, alder, lime, hazel, elder) and some with fruit lanes (apple, cherry, pear, plum, blackcurrant, aronia, sea buckthorn, raspberry) and support species (alder, black poplar, bird cherry, comfrey, elaeagnus, buddleia, broom). A new no-dig, ecologically intensive market garden with 1,000m2 of growing space was also established using a hundred 70 cm wide and 10m long permanent beds with woodchip paths. Every ten rows of the garden are subdivided with rows of fruit trees and perennial plants. Produce was sold on a Community Supported Agriculture model.



Figure 1.Top fruit tree lane with apple and currants



Figure 2. Market garden Area in July 2020 showing beds established and planted



Cae Derw: Diversifying into horticulture and establishing Pick Your **Own enterprises**

Support will be provided through the Farming Connect Mentoring and Advisory Services to develop a rented field adjacent to a main road into a growing venture. The aim is to use the no-dig method to set up an ecologically sound, financially viable market garden which will include fruit, vegetables, salad crops and flowers. This will be combined with a small number of top fruit trees using agroforestry principles, which will act as a wind break and add value. A pumpkin Pick Your Own (PYO) patch will also be included.

The main objective is to grow as naturally and ecologically as possible, using local resources such as compost from Ruthin and manure from the next farm. As well as encouraging PYO to promote local food production, it is the intention to sell directly to the local community through collections, the village shop, the butcher and post office. Nodig is a method that protects soil structure and soil fauna by aiming for minimal disturbance of the soil life, allowing important micro-organisms, earthworms and fungi to thrive.

Wool will also be trialled as a method of weed suppression.

The Cae Derw project aims to maximise the overall usage of the land by introducing several different enterprises, thereby minimising financial risk, and adding value where possible together with developing a multi-layered, sustainable approach.



Figure 3. Bulbs in the cut flower collared pallet section January 2021

Knowledge Exchange Hub

Technical articles produced by the KE HUB:

- SOIL MAPPING FOR PRECISE LAND MANAGEMENT
- BIOCHAR FOR CLIMATE CHANGE: IS IT A VIABLE STRATEGY?
- STRATEGIES AND TECHNOLOGIES TO IMPROVE FARM HEALTH AND SAFETY
- AQUAPONICS: CURRENT STATE AND PROSPECTIVES

Key outcomes:

- Agroforestry establishment will provide benefits in terms of revenue (potentially over £10,000 per year from mature fruit lanes), shelter, grazing management, and ecosystem enrichment.
- The market garden supported the sale of 27 boxes a week for 25 weeks giving an income of $\pounds 8,100$. Expansion to 40 boxes per week for the next season will give a total revenue of $\pounds14,400$ from the garden, enough to support one person with significant potential for further expansion.
- A market garden can provide an income beyond the minimum wage on a land area that would be considered insignificant for most farms.
- Social and mental health capital was built through community involvement in tree planting days, volunteer help in the garden and box scheme customers visiting weekly

Click here to read the final project review.



BIOLOGICAL OPTIONS FOR PEST CONTROL

Webinars



Improving knowledge and experience of integrated pest control on soft fruit in Wales to reduce pesticide application and wastage



Early high temperatures in 2020 led to a spike in pest numbers on the strawberries before the integrated pest management controls would normally be deployed, but the farmers quickly caught up with the release of parasitoid wasps. Plans have been made to start earlier in 2021 if required.

Working with the consultant, Chris Creed, from ADAS the group have developed an assessment tool to help them monitor the numbers of pests present and understand the thresholds that trigger the need for control methods. See figure 6 for an example of how aphids are counted.

Assessment I – Aphid Numbers

An example photo of Aphids on the underside of leaves.



For this assessment randomly select for young (smaller) leaves on a plant as this is preferred area where aphids inhabit. Make an estimate of aphid numbers on that leaf using the system below, it is not recommended to individually count them as

this will take a long time. Aphids will typically be on the underside of the leaf, but if you are seeing aphids on the runners (or stems) instead of the leaves then make account from there instead.

Estimate of numbers

On each of the four leaves make an estimate of numbers using categories below:

- Nil aphids
- 25- 50 aphids per plant
- I-IO aphids per plant
- >50 its power plant
- 10-25 aphids per plant

Figure 4. An example of how aphids are counted

Click here to read a factsheet produced on this subject.

Using photo selective films to enhance the profitability of leafy salad production in Wales

Recent developments in polytunnel films have produced films that can modify the light passing through them which can control certain growth characteristics. There has been limited uptake of these with small scale producers mainly through a lack of understanding of their capability. This project is looking at how they might benefit growers producing leafy salads.

Preliminary results from 2020 have shown that Lollo varieties of lettuce had different growth characteristics under the different plastics, with a



greater marketable weight under the UV blocking and diffuse films. This will be followed up in 2021 to see if the trend is repeated. It was also noted that where the marketable weights were greatest the colours were weakest and this will also be repeated to check whether there is a tradeoff for producing more crop.





Pick Your Own Group

Members of this group are interested in developing new and existing Pick Your Own enterprises on their farms. Some are already experienced growers and wish to expand and others are new to horticulture and will be developing their enterprise from scratch. The mix of knowledge and experience within the group will enhance the knowledge transfer within the group. There will be a mix of technical, business and marketing meetings to help develop skills and knowledge in these areas.

Vegetable Growing Group

Members of this group want to become more self-sufficient by growing their own vegetables on their land. Most have little or no experience to date so are new entrants to horticulture. The primary aim is to become more self-sufficient but some members may venture into selling their surplus veg commercially if the opportunity arises. The group are hoping to have a mixture of digital and face to face meetings.

Training

There have been **615** instances of training delivered during this period.

Of this number, 16 instances were from businesses including Horticulture as their primary or sub-sector.

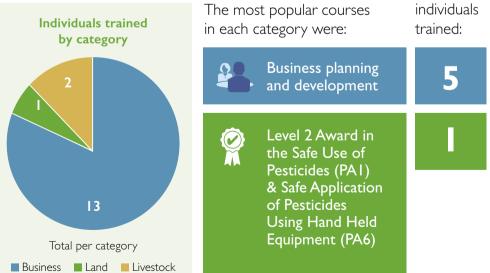


Figure 5. Example of tunnel at harvest. The tunnels were designed to have retractable sides to allow access for watering and harvest

Venture

HORTICULTURE OPPORTUNITY AVAILABLE



SEEKERS ARE LOOKING FOR HORTICULTURE OPPORTUNITIES



E-learning

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



Number of

Click here to visit the website.



www.gov.wales/farmingconnect