DEMONSTRATION NETWORK DASHBOARD

■ Red ■ Amber ■ Green

June – August 2018



RAG Score

Green Projects and events are on target

Demonstration Network

Innovation sites	8
Demonstration sites	12
Focus sites (Running Total)	105

Demonstration Network Events

June – August 2018

Description	Total Events (Annual Target)	Total Events (Undertaken)	Total Number of Events Undertaken since October 2017
Innovation Site events	32	6	42
Demonstration Site events	36	18	62
Focus Site events	54	29	74

1079

ATTENDEES AT
DEMONSTRATION
NETWORK EVENTS



Click here to learn more about projects and events on our demonstration network.

On Farm Projects

Focus on Managing Grass and Forage after the Prolonged Dry Summer

Reseeding costs at £600-£700 per hectare

Farmers at an open day at Moor Farm, Haverfordwest, were advised to assess root structure before assuming grass has died. Roots which are springy will have survived and the grass will recover, avoiding the need for costly reseeding. After grass production fell to zero during the dry period at Moor Farm, Andrew Rees has made up for lost forage by sacrificing two fields. He drilled one with an Italian ryegrass and rape mix and the other with a Westerwold and rape mix. He also bought a standing crop of spring barley and is optimistic that following the rain in August, he will get a third crop of silage.



Bridging the Forage Gap

Plan ahead to avoid winter forage shortages was the advice at a 'Bridging the Forage Gap' event in Builth Wells. On average, farmers only have two thirds of their winter forage requirements following the dry summer and with forage prices set to rise, planning now is essential.

Chris Duller explained how a 650kg spring calving cow will have a daily dry matter requirement of 9kg per day. "Feeding 20 cows for 150 days will require 27,000kgDM," said Mr Duller. "If the silage is 40% dry matter that's 67,500kg of fresh silage, although 10% wastage should be factored in which means that the amount of silage needed by those 20 cattle for the winter will be 74,250kg. If bales average 550kg that's 135 bales."

He also explained how grass growth can be maintained by applying 30-40kgN/ha once moisture levels have returned to soils. Target ryegrass and young leys as these will respond the best and provide an additional 600kgDM/ha throughout September.



Click the TV screen to learn more.

Increasing Home Grown Forage Supplies before Winter

Increasing home grown forage supplies has been the focus at Cai Haidd, Llanrwst. Like many farmers in Wales, Paul grows swedes as part of his Glastir agreement each year. These are grazed by pregnant ewes in January and February and provide an excellent break crop from grass to grass reseed. With an expected yield of ~8000kgDM/ha on a normal year, this year's crop looks like it will be only 50% of this figure at best. With a typical feeding value of 12-13ME and 10-11% CP, it is an expensive feed to replace with bought in concentrates.

Osian Jones from Oliver Seeds advised that winter hardy stubble turnips are his best option to fill this gap and should be sown before the end of August. "With an expected yield of around~4500 to 5000kgDM/ha when sown in June/July, those being drilled in August will only yield around 60% of the crop potential, which is equivalent to approximately~3000kgDM/ha. But with a typical feeding value of 10-11ME and 17 – 18% CP, it is a high quality feed source."

Focus on Reducing Antibiotic Usage

Goldsland Farm Focus Site is concentrating on ways to reduce the use of antibiotics in the dairy herd without compromising herd health and performance. The farm is also working with a local discussion group to benchmark their findings against other group members. The two key areas addressed so far are mastitis management in late lactation and the dry period and lameness control.

The amount of antibiotics used in 2017-2018 is as follows;

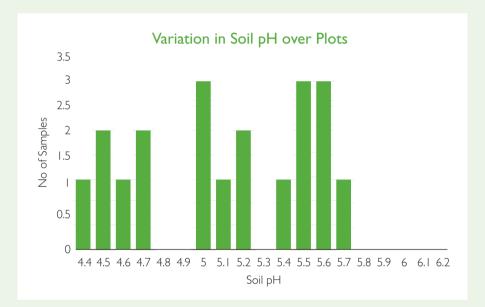
	Goldsland Farm	Group average
Mg/PCU (mg/Population Correction Unit)	16.7	23.2
DDD (Defined Daily Dose)	2.9	6. l
Mg/PCU of critically important antimicrobials	0.37	0.5

Focus on Nutrient Management Planning

Pant Du focus site near Caernarfon has been investigating soil nutrient levels with the aim of improving productivity in their cider apple orchard. The majority of fruit crops are tolerant to slight acidity and grow best at around pH 6.0-6.5. Results from the samples confirmed that although one sample had a pH 6.2, the majority ranged from 5.6 to 5.9. Following on, the first and immediate work programme conducted was to apply lime to increase pH levels to improve crop growth. Results also confirmed deficiencies in phosphorus, potassium and magnesium and this will need to be corrected over a three year period with nutrient levels being checked during the growing season, at the beginning of June and middle of August.

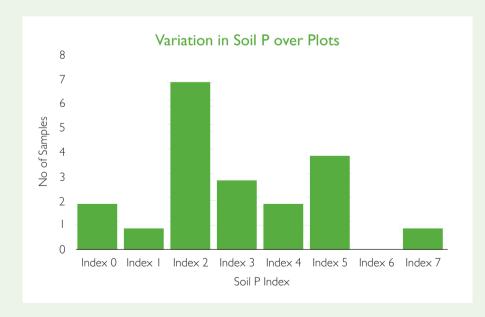
Analysing soils before and during the fruit growing season and managing nutrients accordingly ensures that adequate nutrient levels are present for crop growth. Not only will acting on soil analysis results increase productivity, but the discipline of soil sampling and analysis will result in better management decisions.

The value of nutrient management planning has also become evident at the Fruit Farm, Llanvihangel Crucorney near Abergavenny with this focus site looking to improve productivity and reduce inputs. The main crop is apples but a wide variety of soft fruits are also grown. Soil samples were taken to cover all the growing areas and the variety of crops.



All of the 20 samples (from orchard, soft fruit & vegetables) were below the recommended target pH of 6.5 and were limed as a priority.

Phosphorus levels were also checked. The optimum phosphorus index for crop yield is 2 for fruit and 3 for vegetables.



50% of the samples were at the correct index and advice was given specific to the crop being grown.

Focus on Dairy Cow Management During Dry Weather

When milk yields drop due to forage shortages, it is wise to consider whether once a day milking or milking three times in two days (every 16 hours) is more cost effective for the herd. Less frequent milking can improve body condition scores which lead to positive effects on conception rates. On the other hand, somatic cell counts can increase and producers will need to keep a close eye on whether this affects their milk contracts.

Welsh Pasture Project

The benefits of recording and monitoring grass growth have proved their worth this summer, helping farmers to plan feedstocks with limited grass supply. Using the information to manane forage stocks along with some strategic culling, a Welsh Pasture Project dairy unit have avoided using too much of their precious winter feed. They finally reached a position at the end of July where they could close off paddocks to take an additional silage cut.

Date	Average Farm Cover KgDM/Ha	Growth KgDM/Ha/ Day	Grass fed KgDM/head	Meal fed KgDM/head	Silage fed KgDM/head	Notes
11/06/18	2112	77	17	I	0	
18/06/18	2007	52.4	14	4	0	
22/06/18	2035	66.1	14	4	0	
28/06/18	2030	51.1	13	4.5	0	Culling
03/07/18	1982	45.4	10	5	2	
10/07/18	1844	20.5	8	5.5	4	Culling
16/07/18	1838	27/1	8	5.5	4	
24/07/18	1908	30.6	8	5.5	4	
31/07/18	2058	48.6	12	5.5	2	Paddocks closed off for silage

High dry matter levels in the grass has the advantage of satisfying cow's requirements despite the lower field covers. Analysis of grass in June showed DM% of 28.2 compared with 18% in May. A 600Kg cow requiring an intake 18 KgDM/Day made up of 3KgDM of concentrate and 15KgDM of grass would need to eat 83.3Kg Fresh Weight (FW) of grass per day at 18% Dry Matter, whilst if she ate grass of 28%DM she would only need to consume 53.2 KgFW. These figures collected through the Wales Pasture project showed how regular sampling helps to determine what level of supplementation is required. The lab report shows that protein and energy levels are good and the NDF levels are high enough to allow further supplementation to achieve good milk yields.

Click here to learn more.

Communicating the results

Communicating the results of work undertaken on the demonstration network is vital. Farming Connect use various ways to ensure maximum uptake of the knowledge gained in undertaking projects, including:

- Articles: 15 have been produced
- Blogs and Vlogs to provide site updates 4 have been prepared
- Social media
 Facebook posts: 50
 Twitter posts: 547
- Videos 7
- Web Page Hits
 Innovation Site: english 196, welsh 32
 Demonstration Site: english 362, welsh 52
 Focus Site: english 980, welsh 196



