

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

 **59%**
DAIRY
ACTIVITY

 **1,748**
DAIRY FARMS REGISTERED
WITH FARMING CONNECT

Demonstration Network

Mountjoy: Evaluating the benefits of heat detection technology to provide gains in suckler cow fertility

At Mountjoy, only 10% of cows are dried off with antibiotics thanks to exceptional mastitis controls and an overall infection rate of just 7.8 cases per 100 cows. Historically, farmer William Hannah had routinely tubed all cows with antibiotics at drying off but he now uses it selectively, treating only cows that need it. In 2020, only 38 of the 370 New Zealand-type Friesians were dried off with antibiotics – a saving of £1,350.

To achieve the current level of 7.8 mastitis cases per 100 cows, the national average is nearer to 50 cases, cows that have had more than two cases of mastitis are removed from the herd.

Preparation for drying off starts three weeks beforehand with milk recording data used to identify cows with cell counts higher than 250,000 cells/ml. This totalled 18 cows in the 2020-21 season. These are earmarked for drying off with antibiotics before the main herd together with cows that have had more than one case of mastitis, those with teat end damage or warts or with infections in their uterus; these are all double tubed. In the five days prior to drying off the main herd, concentrates are reduced from 4kg/cow/day to just 1kg. Silage is replaced with high fibre hay or haylage to reduce milk yield. In the latest drying off period, average daily milk yield was reduced from 14 litres to 7 litres. Mr Hannah will have monitored the weather forecast in the week leading up to drying off, to ensure that it can be done on a dry day to reduce risk of bacteria transmission in water.

Nantglas: Increasing milk from forage

Iwan Francis, who farms Nantglas, feels he isn't utilising his grass well enough, either from forage or grazed grass. The aim of the project is to improve the total yield from forage and grazed grass from the 200-split block calving New Zealand type herd.

Soil samples were taken on-farm to ensure that the nutrient levels were accurate. Grazing consultant Nigel Howells, discussed the results with Iwan and advised the following:

- Summer grazing block for the youngstock needed lime to improve quality and quantity of grass grown to raise the pH levels from an average of 5.5 to over 6.2.
- This block would also need 20kgs of P205 (Phosphorus Pentoxide)/ha to be at an optimum level, to help with root development.
- It was discussed that due to the pH levels, the quality of silage made off this block was poorer than and resulted in to use supplementary feeding to maintain livestock growth.
- Looking at the results for the grazing block at Nantglas itself, nearly half of the soil samples had low phosphate levels and nearly all had low potash levels. This could be as a result of the farm protocol of using cow slurry and farmyard manure (FYM) on the off-farm silage blocks which have a higher demand for these nutrients.
- Due to Pica issues last year, fresh grass samples will be taken and a corresponding soil sample of the same field the cows would be grazing. Mineral and trace elements will be analysed from these samples to see what nutrients are available in the soil.

Webinars



24 DAIRY
THEMED
WEBINARS

held
with



1194
VIEWERS

Examples of webinars held include:

Preparing for
spring turnout



Top tips for
silage making



Using the Spring Calving Index (£SCI)
to breed profitable cows for a spring
block calving grass based herd



Discussion Groups



38 DAIRY
DISCUSSION
GROUP MEETINGS

held
with



568
ATTENDEES

Number of Dairy Discussion Groups: 14

Case Study

A discussion group meeting was held with the St Clears Dairy Group on metabolic profiling of dairy cows. Speakers at the meeting were David Staak and Alice Jackson of Market Hall Vets.

David began by stating that metabolic profiling is done by taking blood samples of cows and is a useful tool in indicating dietary shortcomings. David described a cow's diet in three stages:

- Diet on paper
- Diet mixed
- Diet the cow eats

David mentioned that there can be big differences between the diet on paper which may be perfect, to the diet the cow actually eats due to many factors such as incorrect mixing of ingredients, insufficient trough space etc.

Metabolic profiling assesses the following:

- Energy status
- Effective rumen degradable protein (ERDP)
- Digestible undegradable protein (DUP)
- Magnesium status

It can help prevent a number of conditions such as:

- Poor fertility
- Lameness
- Mastitis
- Milk fever
- Staggers

After an explanation of which cows should be sampled and what exactly the blood is tested for, both speakers then went through five example data sets providing information on the herd to begin with (herd size, calving system, feeding system etc) and the issues and reasons for undertaking metabolic profiling (e.g. poor fertility, less yield than expected, milk fevers). They then moved on to the analysis of the results and recommendations were provided to the farmer. Common issues that needed addressing included not allowing dry cows to get too fat, the need to increase trough space and improving quality of silage and diet.

Maximising udder health for improved herd performance through dynamic testing

Preliminary results from this EIP project indicate that identifying and rectifying overmilking can improve udder health and the performance of the cows. Four dairy farmers from Carmarthenshire have been working with their vet, Dr Sotirios Karvountzis to investigate the benefits of a dynamic testing routine. This is a test of the parlour's performance and, by checking that units are removed on time, the pulsation rate is correct and liners fit correctly as well as monitoring cell counts and antibiotic use, a complete picture of the physical performance of the parlour and how this is affecting cow health can be determined.

Overmilking occurs when the milking units are in place for too long and despite there being no milk flow, the vacuum level will be at full strength. This can often be simply rectified by adjusting the automatic cluster removal (ACR). Another area where improvements can be made is with the pre-milking routine. This is an essential part of the milking routine because it stimulates the cow to let her milk down. By following the same routine the stimulation results in the release of oxytocin which results in milk let-down. Pre-milking preparation and its timing is very important because if timing from teat preparation to unit attachment does not coincide with the milk let-down, there will be a temporary cessation of milk flow which is referred to as bi-modal let-down.

All of the changes being made are leading to improved udder health and fewer cases of mastitis and hence a reduction in the amount of antibiotics required.



Figure 1. Milking unit

Animal Health & Welfare Workshops

17 WORKSHOPS held with **171** ATTENDEES

Antibiotic resistance	Bovine TB
Rearing healthy calves and maximising profit	Youngstock health

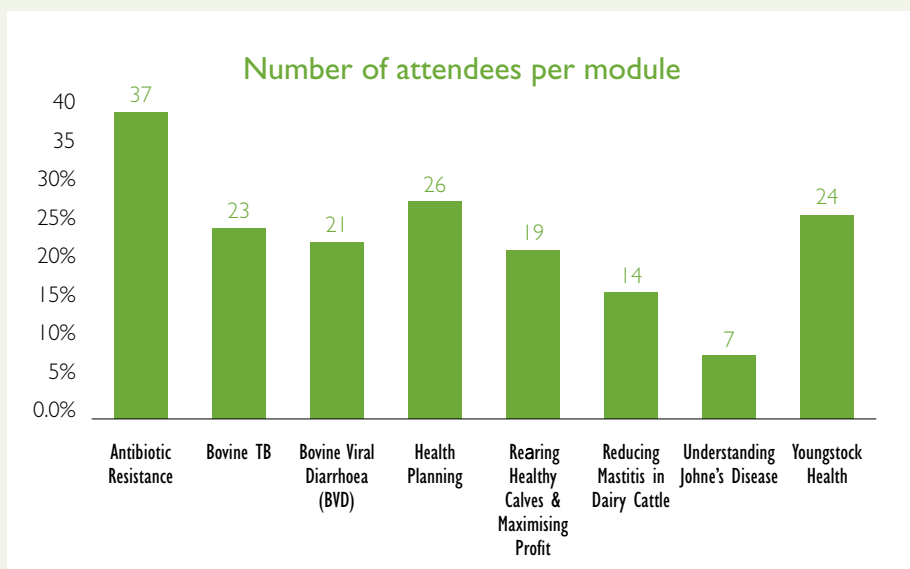


Figure 2. Number of attendees per AH&W module

Surgeries

12 SURGERIES HELD

Key topics included:

Legal	Marketing and diversification
Planning	Business

16 businesses that attended these surgeries were from the dairy sector. 7 of these businesses wanted to look at diversifying the farm either by selling their produce or converting buildings that they aren't currently utilising on the farm.

Mentoring Programme

107 DAIRY FARMERS currently being mentored:

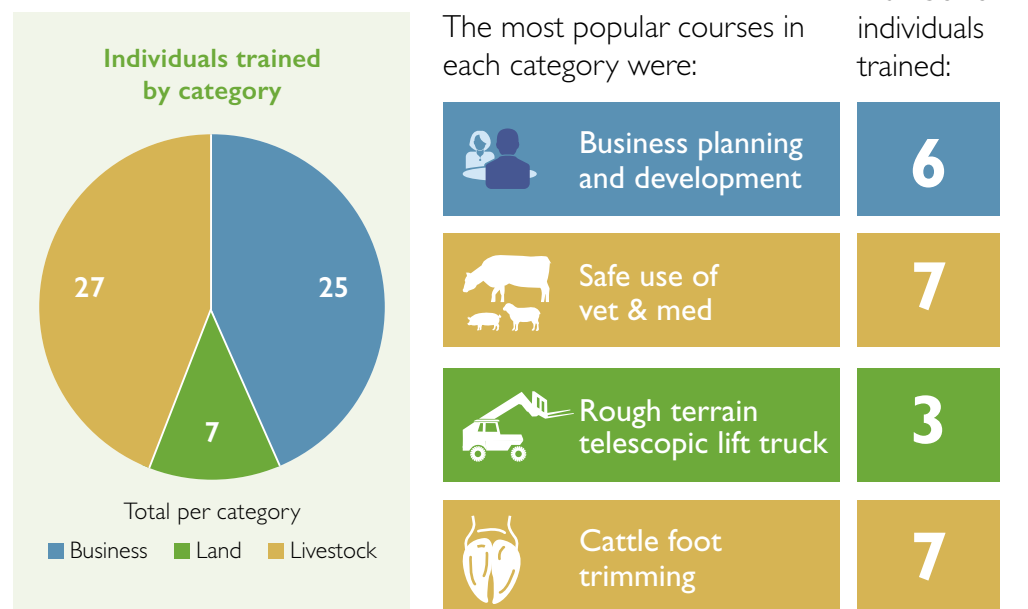
Key topics included:

Converting to dairy farming	Organic dairy production
Grassland management	Succession

Click [here](#) to access the full Mentor Directory

Training

During this period, **188** instances of face to face training were delivered to the Dairy sector:



E-learning

Some of the e-learning courses completed within this period:

EYE CONDITIONS IN CATTLE	JOHNE'S DISEASE IN CATTLE
DISBUDDING CALVES	CATTLE LAMENESS

Click [here](#) to visit the website.