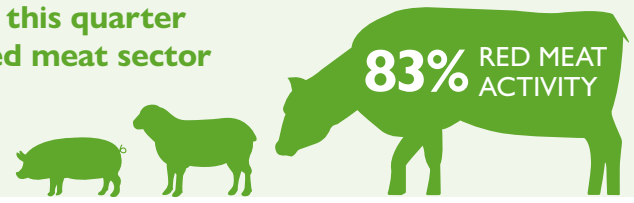
RED MEAT DASHBOARD

May 2022 – August 2022

FARMING connect cyswllt FFERMIO

% of all activity in this quarter relevant to the red meat sector



Animal Health & Welfare Workshops (relevant to Red Meat)

25 DIARY WORKSHOPS held with **315** ATTENDEES

- Flock Fertility Management
- Maximising Suckler Cow Productivity
- Parasite Control in Cattle
- Sheep Lameness
- Improving Post-Weaning Lamb Performance

Demonstration Network

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

The calving period at Rhiwaedog had spread from February to October, as two of the stock bulls had been sub-fertile. This caused problems with managing the calving period and grouping store cattle for sale. The calving interval was 392 days prior to starting the project.

In order to tighten the calving period, all cows were tagged with MooCall HEAT electronic tags, and a MooCall HEAT electronic collar was placed on the stock bulls. The collar uses information based on proximity, mounting behaviour and activity levels to determine when cows are in heat. When a cow/heifer is in heat, a message is sent through the app or by text to notify the farmer.

Any cows identified not cycling as they should were investigated further through a physical examination by the vet and treated accordingly or, if appropriate, ovulation was synchronised with CIDRs (progesterone-releasing intrauterine devices).

In 2021, this measure, in combination with pre-calving checks, resulted in a condensing of the calving period (from March to September), but with 84% of cows calving in the first four months. Just 5% calved in August, and 4% in September.

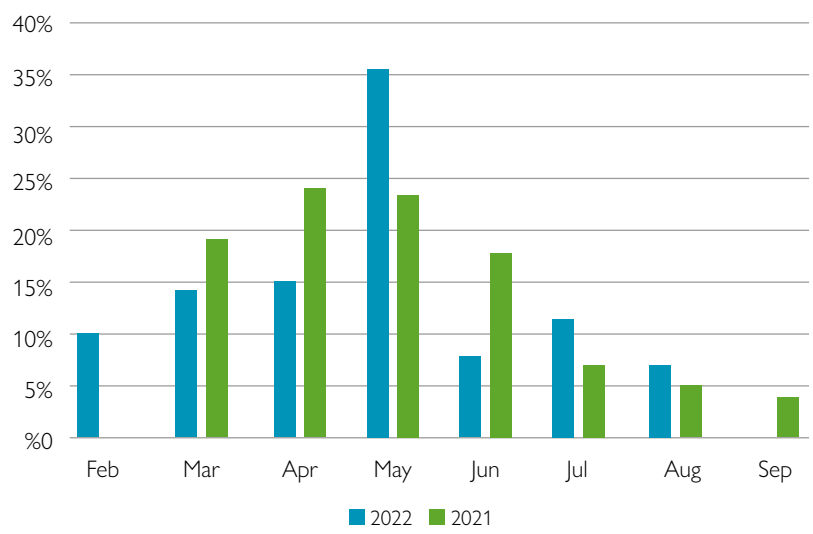


Figure 1. Results based on proximity, mounting behaviour and activity levels.

The technology was again used in the 2021 breeding season, and it has resulted in the calving period being shifted further– extending from February to August in 2022, with nearly half the herd (35 cows) calving in May.

Hendre Ifan Goch: Maximising lamb growth performance – trace element audit

Rhys Edwards runs a flock of 530 ewes and 180 ewe lambs with his parents, Russell and Eira, at Hendre Ifan Goch, which is a red meat demonstration site. The farmers were unhappy with the performance of their lambs and therefore, it was agreed for a trace element audit to be completed by Phillipa Page, Flock Health Ltd.

For the trace element audit, the supply of trace elements was looked at over a period of 12 months. This included water supply, forage samples, supplementary feed, available licks/feed blocks, drenches and boluses that were supplied to the flock. These amounts were then considered against the trace element requirement of the different groups of stock. It was then considered whether any supplementation was needed to address any deficiencies.

The results of the audit showed that there was no significant concern regarding the supply of the majority of the macrominerals, but the grass samples from 2020 that were used in the audit showed deficiencies in the supply of iodine, and marginal deficiencies in selenium and cobalt when assessed against the dietary requirements for the class of stock.

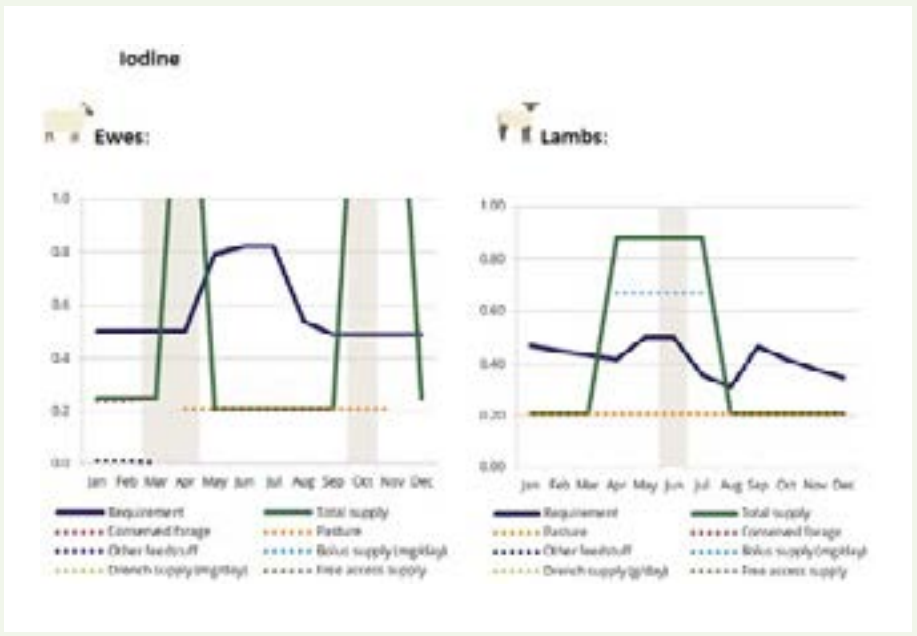


Figure 2. The results of the trace element audit.

The above graphs show that the iodine supply from the pasture is below the requirements for both the ewes and growing lambs.

The current levels of supplementation given to the ewes via a drench or bolus were adequate for selenium and cobalt, but iodine was not contained within these supplements. Therefore, it was advised for a pre-lambing and pre-tupping supplement to be used that contained iodine, selenium and cobalt.

Management Exchange

Becca Williams

With support from the Farming Connect Management Exchange programme, Becca Williams (who farms cattle, sheep and deer with her parents near Llandrindod Wells), researched opportunities for marketing meat directly. She has made contact with many industry experts during her Management Exchange. to learn more about Becca's learning journey and outcomes from her visits, please visit the website to read a full report from Becca herself.

Bryn Farm: Clover living mulches on arable land

The aim of this project was to demonstrate and validate clover living mulches as a viable, achievable and profitable option for arable farmers in Wales. At Bryn Farm, two fields were identified, both having been under similar historic management, and soil samples showed very similar results. Field management was undertaken where spring barley was sown on 31/3/2022, but one field was undersown with AberPeral and AberAce white Clover. To identify if the clover was having any effects on the barley, crop assessment was undertaken at the booting stage of the crop.

Field Variable	N	Control Mean	SD	N	Mulch Mean	SD	Test
Establishment Score	5	4.3	0.57	5	5	0	F=7.538**
Vigour Score	5	7.8	0.447	5	9	0	F=36***
Growth Stage BBCH	5	41.8	1.095	5	46.6	0.894	F=57.6***
Crop Groundcover%	5	83	10.368	5	97.4	1.342	F=9.486**
Crop Tiller Number	5	2.032	0.244	5	2.198	0.181	F=1.494
Crop Height, cm	5	55.4	3.362	5	69	2	F=60.444***
Rhyncosporium %	5	2.3	0.758	5	0.2	0.447	F=28.452***
Net Blotch %	5	0.4	0.894	5	10.8	4.087	F=30.903***
Clover Cover%	5	0.4	0.894	5	8.6	1.673	F=93.389***
Weed Cover%	5	58.2	15.43	5	10.6	4.45	F=43.931***

Statistical significance markers: * p<0.1; ** p<0.05; *** p<0.01

Figure 3. Soil sample results.

The field with clover mulch performed better than the control field, but had a significantly higher severity of the foliar disease net blotch. When the barley was harvested, the weather had been very dry over the summer, resulting in a bad drought on the farm. The clover population was very low, but since the rain at the beginning of September, the clover had started to regrow. This will provide beneficial ground cover until the winter oats are direct-drilled, and will also act as competition against weeds, improve soil structure, provide habitat and, depending on growth, the clover could be grazed by young stock.

Strategic Awareness Events

16 Events with 356 attendees
Key topics included:

Suckler Cow Production

Rhidian Jones from RJ Livestock Systems, a consultancy business based in the Scottish borders, joined Farming Connect for a webinar discussing suckler cow production. During the webinar, the following topics were covered:

- Growing cattle from grass
- Grazing management
- Cow nutrition pre-bulling
- Suckler cow efficiency
- Fertility issues

Trace elements in the system – Beef Cattle

Daleside Vets and Farming Connect hosted a meeting together on the topic of trace elements in beef cattle systems. Pete Bone, a trace element nutritionist, held a discussion on the needs of beef cattle in terms of trace elements within their diet, and health problems that arise from a lack or excess of trace elements. The speaker discussed how to measure and monitor levels within a beef cattle 'ration', together with simple ways to ensure they are correct.

*Strategic awareness event themes are often cross-sectoral, and tend to attract farmers from all sectors, including the Red Meat sector.

EIP Wales

Is there something in the water? Identifying and addressing *Cryptosporidium* in sheep

Mike Lewis and Liz Lewis-Reddy, Brynhoveth Farm, near Llandrindod Wells, were among seven farmers in Powys who embarked on an EIP Wales study to understand the pathways of *cryptosporidium* infection in sheep, and identify measures to control and prevent the disease in their flocks.

Although the couple didn't believe they had an issue with infection in their sheep, by participating in the project, they were able trace the origins of cryptosporidium to control it in calves and to prevent it passing to their lambs.

Through the EIP Wales project work, sampling of livestock water sources on the farms was undertaken by Dŵr Cymru Welsh Water (DCWW), in early March before lambing, in mid-April, and in mid-June, after lambing.

The study showed that *cryptosporidium* was commonly detected on the farms involved in the project, but more frequently in water than in lambs. Mike and Liz discovered that the micro-organism was being introduced to calves through river water: the field where cows calve in the spring sits alongside a river that is prone to flooding in the winter, resulting in *cryptosporidium* in the water, contaminating the pasture.

The project has provided evidence to help inform measures around infection risk at the farm.

"We can't control what happens in the river, but we can limit the risk to our calves," says Liz.

Calves are given an oral preventative solution from 24 hours of age. The product reduces the viability of the *cryptosporidia* in the gut, and cuts the shedding of oocyst numbers, limiting the spread of the disease. Biosecurity measures at the farm are already very high, but management options recommended to all the farmers to limit the risk of cryptosporidium include:

- Steam cleaning buildings to kill oocysts
- Frequent cleaning and disinfection of livestock sheds; research has found that 3% hydrogen peroxide and hydrogen peroxide-based disinfectants are the most effective at reducing the viability of cryptosporidium oocysts. Disinfectants are less effective on oocysts that are in faeces, therefore, thorough cleaning of sheds is advised before disinfection.
- Frequent bedding down with straw
- Quarantining of scouring animals
- Ensuring lambs and calves quickly receive adequate quantities of good-quality colostrum.

Surgeries

40 SURGERIES HELD

Key topics included:

- Agri Pollution Planning
- Accountancy
- Business
- ICT
- Infrastructure
- RPW Surgeries
- Marketing and diversification
- Legal
- Planning
- Agriculture & Succession Law

"A business requested a Marketing and Diversification Surgery - they wanted some advice on a diversification project on farm. They intend to sell their beef in boxes to local people, and want advice establishing this business – and more specifically, the marketing."

Knowledge Exchange Hub

Technical articles produced by the KE HUB:

- SHEEP SCAB: UPDATE AND FUTURE CONSIDERATIONS
- FARM BUSINESS DIVERSIFICATION – A RESEARCH PERSPECTIVE

Discussion Groups

77 RED MEAT DISCUSSION GROUP MEETINGS held with **576** ATTENDEES

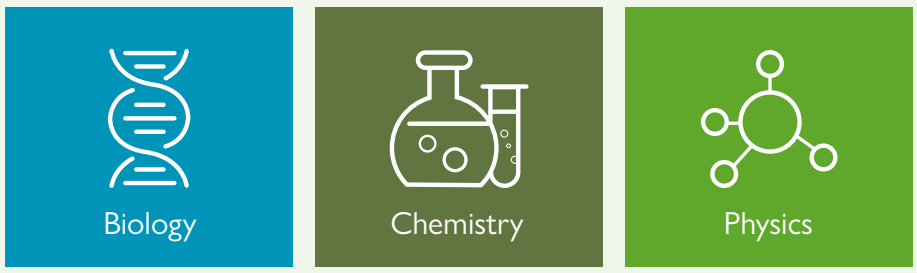
Case Study

Regenerative agriculture – Gower Beef DG

Ben Taylor Davies, also known as 'Regen Ben', was invited to speak to the group about regenerative agriculture and the importance of soil health for a far more sustainable future in agriculture within the UK.

Ben began his presentation by explaining to the group what regenerative agriculture was, and how he has become involved with it, whilst farming his family farm after a family accident, together with his application for a Nuffield Scholarship.

Ben reminded the group about the three key factors of good soil health, which are:



Ben asked the group to consider:

- Limited disturbance, whether that is mechanical, chemical or physical disturbance, as disturbance destroys the soil structure and the 'house' that nature is building to look after the living organisms within it.
- Armour. Always keep the soil covered at all times. Nature always works to cover soil and looks to provide a 'coat of armour' to protect the soil from both wind and water erosion, whilst also providing food and habitats for the microorganisms.
- Diversity. Diversity in habitats encourages ecosystems to function.
- Living roots. They feed and maintain the soil biology by providing its basic food source, which is carbon.
- Integrated animals, as nature cannot function without animals. Animals grazing the crops stimulate the plants to produce more carbon for the soil.

The group were interested to know more about Ben's farming system and the changes he has made to his farm, with regard to the livestock he keeps and the crops he produces. Ben explained about the different types of livestock he keeps (beef cattle, sheep, goats, pigs and chickens), and how they all work with each other with regard to pest control and crop rotations. He also showed the group the changes he has made to his wheat crops. Instead of only using one variety of wheat, he now mixes up to 144 different varieties in order to help reduce the mutating pests on the crop. This simple change to his system has saved Ben a £30,000 fungicide bill.

In terms of cover crops and natural farming methods, if you let Mother Nature do her thing, she is actually very good at producing her own soil. Ben explained that on his farm, he is producing roughly an inch of topsoil every three years with organic matter and regenerative farming methods.

There is no doubt that regenerative farming is becoming more popular, with many businesses trialling it in one way or another (especially with the rising input costs). This meeting provided an insight into the benefits of farming in this way, and allowed the group to ask questions freely and learn from someone who is leading the way.

Training

During this period, **160** instances of face-to-face training were delivered to the Red meat sector.

The most popular courses in each category were:	Total:
Emergency First Aid	10
Rough terrain telescopic lift truck	8
Sit-Astride ATVs, including loads and trailed equipment	4
Cattle Scanning	7
Cattle Foot Trimming	4
Advanced Cattle Foot Trimming Course	4

E-learning

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

- GRAZING MANAGEMENT
- LIVER FLUKE IN CATTLE
- CALF HOUSING
- ICEBERG DISEASES IN SHEEP

Click here to visit the website.

Mentoring

Over the Summer, we revisited sheep farmer William Williams who farms near Bangor to understand what impact his mentoring relationship with FC mentor Keith Williams, has had on the business. William reported that:

William Williams

"We are sub-dividing the land, based on Keith's suggestions, so that the land parcel shapes ensure even grazing patterns, and we have avoided making costly mistakes.

"The cell system has resulted in huge savings on fertiliser costs – we now apply around half what we did before.

"By the time the ewes were ready to lamb outdoors in April, the grass was in great condition.

"I found it hugely beneficial to talk directly to an experienced sheep farmer who has made the most of his own land by implementing a similar intensive rotational grazing system.

"Having Keith as a mentor has shown how we can always learn more, no matter how sure we are of our own abilities.

AGRISGÔP

An Agrisgôp group set up to look at setting up meat box schemes reached its pinnacle in May 2022 as they met for the final time and 4 members of the group set off to establish their new enterprises. The group focussed on how to be compliant with hygiene, labelling and food standards legislation in addition to looking at innovative ways of selling, marketing, social media and branding.

The current Agrisgôp progamme ended in August 2022 and since 2015 has supported **43** individuals to learn more about selling meat directly via box schemes.

Cronfa Amaethyddol Ewrop ar gyfer Datblygu Gwledig: Ewrop yn Buddsoddi mewn Ardaloedd Gwledig
European Agricultural Fund for Rural Development: Europe Investing in Rural Areas
Llywodraeth Cymru Welsh Government