



2017 was a busy year at Marian Mawr with the usual activity associated with running a 400 cow dairy herd, as well as hosting a demonstration farm open day and numerous progression events with local dairy discussion groups. Looking forward to 2018, we hope to benefit from a farm tailored Nutrient Management Plan that will help us target future slurry applications and give us an idea of the soil fertility status of a new parcel of land bought last summer. We also hope by using this information we can demonstrate the ability to make plenty of high quality grass silage from the least amount of purchased inputs possible.

The staff leadership and management project that was the focus of our open day last year has started to bear fruit as our farm staff are far more aware of the herd key performance indicators (KPl's) and are gaining in confidence through the new role specifications and communication structure that we have in place.

Some of the first heifers that we genomically tested as calves are due to calve in May this year. I look forward to seeing if the small tissue samples taken from their ears as calves really will tell us earlier and more accurately how they are likely to perform in the herd.

Hopefully by the end of January, the high yielding group will be settled in to their new cubicle shed which will give us the capacity to expand our herd size even further. We hope this increase can be done naturally with our own replacements, and with the targeted use of sexed semen and genomic testing of females we can ensure that any heifer who enters the herd is there to perform and not just to make up the numbers. Careful consideration will be made to the most cost effective ways to increase slurry storage and plan systems that will meet regulations.

Investigating the effect of Compact TMR feeding at Llysfasi

Total Mixed Ration (TMR feeding) with a mixer wagon is now common practice on the majority of larger dairy herds, if they're housed all year round or just for the winter. Complex rations with multiple ingredients are often added to a skeleton of grass, whole crop or maize silage. Despite thorough mixing, cows still spend a large amount of time sorting for the pelleted or starchy portion of the mix causing ration variation from point of feeding. This issue is compounded further by the higher Dry Matter (DM) silages that are often made on farms allowing for even further sorting and a 'birds nest' effect along the feeding barrier.

The project at Llysfasi, a Farming Connect Innovation Site, will investigate the effect of Compact TMR (which has a specific wagon loading order) and adding a specific weight of pH neutral liquid, such as water or whey to bind any straights and compounds to the forage skeleton within specified mixing times. It is important that preparation protocols are followed closely as incorrect soaking of feeds can affect their rate of fermentation and cause the forage element of the TMR to form into clumps.

Since the introduction of Compact TMR feeding in 2014, almost 50% of Danish herds have either fully adopted or part adopted some of its key principles, leading to a 1,500-2,000kg/cow/year increase in milk yields. They have also seen additional health benefits such as less acidosis due to a reduction in sorting and increased lying time leading to some reduction in foot health issues.

The herd at Llysfasi will be split and managed in two equal groups of cows in line with their A2 Milk contract where there's an obligation for milk from both herds to be stored separately. One group will be fed the current TMR and the other fed Compact TMR for a period of 6 weeks beginning in early January. The project will look at behavioural and yield differences between the two groups of cows, along with rumination monitoring and faecal starch testing to monitor rumen health. Student involvement is key to the project as they will be responsible for monitoring differences in cow behaviour, cudding rates and dung texture.

Farming Connect will host an open event where Will Jones from KITE Consulting will present the findings of the project. Event details are:

21 February 2018 10:45 – 14:00

For more information about Compact TMR or about the event please contact Rhys Davies: rhys.davies@menterabusnes.co.uk - 07985 379880



What is EIP Wales and how can it help your business?

With the growing emphasis on fostering an efficient and innovative farming sector post-Brexit, European Innovation Partnership (EIP) Wales is offering up to £40,000 for groups of farmers and foresters to tackle on farm problems by trialling new ideas and sustainable technology. Ten projects have received funding through EIP Wales to date, which are developing the latest in technology, products and research.

Potato blight control using components of indigenous non-food waste plants

Control of late blight of potato can hit farm profits hard as the disease can lead to complete crop failure. Recent estimates show that the control of the common disease can cost the industry a staggering £70m across the UK in a bad blight year.

This project is aiding the development of a natural biopesticide by using a chemical compound (saponin) sourced from common ivy.

"This trial could result in a brand-new market opportunity, to grow common ivy commercially, and to use its natural saponin to help organic growers reduce blight infestation."

The generated biopesticide will provide an effective, natural and potentially low-cost, alternative fungicide for potato blight. "This will reduce crop wastage through decimation of crops through potato blight, and as a direct result allow increased potato sales, improved turnover and improved profitability."

The project is being led by representatives from Sarvari Research Trust and Emerald Crop Science and Naturiol Ltd. and trial plots are located on two farms, Ty'n yr Helyg near Llanrhystyd and Henfaes Farm at Bangor University.



Trial plots of potatoes at Henfaes Farm, Bangor University

Assessing the potential of genomic testing dairy heifers to increase genetic gains and financial returns



Through EIP Wales, a group of North Wales farmers are aiming to maximise farm profits by accelerating the breeding progress of their dairy herds.

The reliability of traits being inherited from the traditional pedigree index is 35%. By using genomic testing to measure DNA for production, type, fertility and health traits this can increase the reliability to 70%.

"Bringing this modern innovation to farm scale will be very valuable to the industry by accelerating herd progression, boosting farm competitiveness and sustainability."

The project will fund the genomic testing of 410 predominantly Holstein-Friesian heifers to assess their genetic potential. The eight farms have listed the traits they're aiming to improve within their herd and progress towards these will be assessed over their first lactation.

The aims of the project are to:

- Produce a decision tree for using genomics
- Determine the correlation between genomic PTA's and actual performance
- Gain a better understanding of the herd's genetic profile, direction of travel and impact of breeding decisions for each participating farm
- Produce a cost benefit analysis of genomic testing for each farm scenario

"Through a small investment in genomic testing, breeding plans can be restructured to get the best output from the most valuable resource on the dairy farm, the herd."

The first task for the farmers will be to select the heifers to include in the test. In early 2018, DNA samples will be taken from the heifers before sending off for genetic profiling in time for first breeding at 13-15 months of age.

Learn more about EIP Wales

We are encouraging people to get together and discuss ideas, whether new or traditional that could improve efficiency within the wider industry. If you think your idea could be eligible for funding through EIP Wales get in touch for advice.

For more information on EIP Wales please visit the Farming Connect website: businesswales.gov.wales/farmingconnect/european-innovation-partnership-eip-wales

Feed ingredients are declared on the feed ticket and listed in descending order of inclusion, but feed compounders are normally willing to bring their feed formulations showing % inclusions of ingredients for viewing if asked.

Compounders will make strategic use of cost effective by-products from the food processing industry in ruminant compounds, but it is important to remember that the readily available energy has been removed from such products, such as wheat feed. It is therefore important to look for whole cereal inclusion, such as wheat, barley or maize at the top of the ingredient list and in the ration at 20% to 30% collectively to guarantee good readily available energy levels in the compound.

Metabolised Energy (ME) is not part of the statutory declaration on the feed ticket, and is calculated from the ME of the individual ingredients and their percentages within the formulation. This calculated ME should therefore be available on the formulation viewed from the feed compounder.

The quality of protein is more important than its quantity with probably the most important ingredient to look for in a quality sheep compound being soya.

The protein in soya is more rumen undegradable, enhancing digestion efficiency, and it also contains limiting amino acids such as methionine and cysteine which help to promote quality colostrum and milk production. At $\pounds 300+$ per tonne, soya is an expensive ingredient, and needs to be in the compound at more than 5% inclusion to achieve benefit. Although these compounds appear to have a high cost per tonne, they can be fed at a lower rate where silage quality is good, and so can represent better value for money.

Sopralin and SoyPass represent soya that has been treated to protect it from breakdown in the rumen and encourage more efficient digestion lower down the intestine.

Calcium, phosphorus and magnesium, plus trace elements and vitamins are a standard inclusion in a compound for lambing ewes, and provided feeding rates are reasonable there should be no need to provide further supplementation.

POINTS TO REMEMBER:

- 1 It is always better to feed a higher energy compound at a lower feed rate so that the ewe can maximise forage intake and therefore increase total energy intake
- **2** Focus on the overall cost of feeding over the lambing period rather than price per tonne of compound
- **3** Evaluate different compounds on the basis of their formulation in terms of ingredients to assess value for money

The scheme, supported by Welsh Government, will aid accurate diagnosis, which is a prerequisite for appropriate treatment and successful control of ovine ectoparasites. Improved control of sheep scab is a priority of the Wales Animal Health and Welfare Framework: http://gov.wales/topics/environmentcountryside/ahw/wales-animal-health-welfare-framework/implementation-plan/?lang=en

Testing will be undertaken by the newly established specialist parasitology department at APHA Carmarthen VIC, which is also the centre of expertise for disease surveillance of extensively managed livestock.

Samples will be received in the normal way, via a veterinary surgeon and should be posted direct to Carmarthen VIC. They must be accompanied by full clinical history to qualify for free testing.

Samples can be submitted on a general submission form found on the Vet Gateway -

http://ahvla.defra.gov.uk/vet-gateway/surveillance/forms.htm

or through ADTS -

Samples

Ectoparasites

https://www.gov.uk/animal-disease-testing

If you have any queries, please contact the APHA Carmarthen VIC

Carmarthen Veterinary Investigation Centre Animal and Plant Health Agency (APHA)

Telephone: 01267235244

Email: carmarthen@apha.gsi.gov.uk

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Address: APHA Veterinary Investigation Centre,

Jobs Well Road, Johnstown, Carmarthen, SA31 3EZ



More than one way to feed a ewe #nutri7

Silage and concentrates form the basis of many ewe feeding systems in the run-up to lambing. For many farms this is a proven system. However, is it actually the best and the most cost-effective? Over the last 2 years, Farming Connect has worked with a network of demonstration sites throughout Wales and this has highlighted a number of alternative ways of feeding the ewe in late pregnancy.

These include:

- 1. Housing ewes in late winter and turning out to lamb on saved grass
- 2. Grazing swedes until 3-4 weeks before housing for lambing
- 3. Feeding a Total Mixed Ration (TMR) with treated soya (Sopralin)
- 4. Self-feed silage system
- 5. Feeding low-levels of a high protein concentrate along with silage
- 6. Rotational grazing throughout the winter period
- 7. Reseeding with high protein leys to reduce feeding levels of an organic compound

The decision on whether to modify or radically change from the current system needs to take into account a number of factors including:

- 1. Practicality
- 2. Risk of adverse weather at key times
- 3. Land type
- 4. Timing of spring grass growth
- 5. Access to buildings
- 6. Machinery costs
- 7. Labour



- Of course it's important not to forget about cost! It is important to look at the economic implications of any system in light of the impact that investment in feeding has on overall flock output and therefore on income.
- There are a number of factors to take into account when working out the true cost of a supplementary feeding system and these include:
- I. Cost of feed supplied per kg of dry matter (DM) provided
- 2. Overall levels of energy (Metabolised Energy) and Protein (Crude protein) supplied in the diet
- 3. Cost per unit of energy (ME) and protein (CP) supplied
- 4. Impact on rumen health and therefore animal health
- 5. Levels of nutrients supplied at various points in the lead-up to lambing to grow the lamb and to allow for ewes to produce sufficient colostrum
- 6. Investment in infrastructure (overhead costs)
- 7. Labour both daily and overall requirement for adopted system

Some basic testing, recording and benchmarking is also vital in making the best decisions for the flock. Metabolic testing of ewes about 3 weeks before lambing can ensure the ewes are receiving sufficient energy and protein in the diet. Recording lamb losses can help identify any problems with the feeding systems whilst comparing the physical and financial performance of the flock can help identify on-going improvements in any system.

For more information view the **#nutri7** social media campaign and videos and visit **businesswales.gov.wales/farmingconnect**

Lower Eyton Farm:

Nutrient Management Planning Project Review

A Farming Connect project focusing on better use of home produced fertilisers shows how managing manure applications and testing soil's nutrient status can improve productivity and profitability on Welsh soils.

The project, located at a beef and poultry unit at Lower Eyton Farm near Wrexham, focussed on how farmers can make best use of their home-produced and available fertilisers. They are moving away from routine purchasing of fertilisers to a purchasing protocol based on soil status and crop requirement to ensure that the business is getting the maximum returns on investment.

WHAT WAS DONE

- I. Soil samples were collected over the entire farm (200 ha) which were used to determine the soil indices, quality and structure.
- 2. Both the farm poultry and beef manure were tested to determine the nutritive value.
- 3. A Nutrient Management Plan was constructed taking into consideration the above and recommendations were made to the current fertiliser applications.

PROJECT FINDINGS

From the soil sampling it was clear that there is a range of soil fertility across the farm land. The sampling showed that lime was required for 19 of the 35 fields assessed due to a low pH level. Improving the pH of soils increases the soil fertility

with more organic matter and soil nutrients available for crop uptake.

There was a risk of diffuse pollution due to high nutrient indexes present in the soils. Two fields on the farm had phosphate indexes of 4 therefore to lower the Phosphate (P) index the farm should avoid applying phosphate to these fields.

The Nutrient Management Guide (RB209) provides guidelines for crop nutrient requirements and the nutrient content of organic materials.

https://ahdb.org.uk/projects/RB209.aspx

There was a risk of nutrient losses from manure due to how it was stored. 60 tonnes of poultry manure is produced and available for use every 14 months. The manure is estimated to be worth £1,019 when compared with fertiliser prices.

Targeting applications of manure and balancing with additional fertilisers to meet crop requirement will ensure that valuable organic fertilisers are utilised efficiently. The farm yard manure produced from the 300 cattle housed for 5 months is estimated to be worth £4,580.

Balancing and appreciating both these assets will reduce the need to apply bought in non-organic fertilisers.

Applying the nutrients, such as nitrogen that are required in a straight format rather than a compound will reduce costs, with a straight format being less expensive to source than compound fertilisers.

RECOMMENDATIONS

The pH, Nitrogen (N), Phosphate (P), Potash (K) and Magnesium (Mg) of soil should be analysed every 3 to 4 years as part of every farm business management. This is especially important where large volumes of organic manures (both home produced and imported) are used on the farm. Target values to maintain for grassland are pH 6.0 and Index 2 for soil P. and 2- for K.

It is advised to use a targeted approach on a field by field basis to ensure that nutrient content matches crop need. Matching inputs to crop requirement will save and could even make the business money as well as protecting the environment. Target spring applications of organic manures where possible to maximise the available nitrogen for crop growth.

Where it is necessary to apply urea fertiliser it was advised to do so in the spring time, when temperatures are low and little volatilisation takes place. Using it outside of this period results in higher risk of leaching into the wider ecosystem, and a cost without return to the business.

Maintain an on-going field record of manure use, together with any inorganic fertiliser applications. Re-directing organic manures at lower index fields will help to balance soil nutrient levels on the farm.

ALWAYS REMEMBER

ALWAYS	NEVER
Ensure there is no risk of run-off.	Apply when run-off to a waterway is likely to occur.
Prepare and follow a manure management plan, and a nutrient management plan.	Allow silage effluent, slurry, manure or fouled water to enter a waterway.
Check waterways frequently, during and after spreading.	Apply liquid organic materials when heavy rain is forecast within 48 hours. Rainwater that runs off fields that have recently been spread with slurry may also cause pollution.
Leave at least three weeks between applications to avoid surface sealing and to allow the soil time to absorb the nutrients.	Apply more than 50m³ (50t) per hectare in any one application.
Ensure you have enough land available for spreading livestock manures produced on the holding. No more than 250 kg of total nitrogen per hectare per year should be applied. Be aware that in Nitrate Vulnerable Zones, on certified organic holdings and for those in other land management agreements, different requirements may apply.	Apply to land that is flooded or likely to become flooded.

Farming Connect Advisory Service - 08456 000813



Benchmarking has led to significant improvements in output and profitability for Tynyberth demonstration farm

Tynyberth runs 550 breeding ewes on an organic hill farm at Abbey-Cwm-Hir, near Llandrindod Wells. Farmed by Jack Lydiate and his parents John and Lynne, the results of benchmarking were used to help set a clear direction for the business and identify any changes that were required. The home-farm is 300 acres of mixed clay and loam soil types at approximately 1,000ft. Another block of 200 acres is located about 4 miles away and whilst free-draining it runs to nearly 1,700ft. Male lambs are sold as stores direct from farm and all replacements are home-bred.

On becoming a demonstration farm early in 2016, a review of the business immediately highlighted that there was scope for improvement. One of the first issues Jack wanted to address was flock productivity. The scanning percentage in the flock of improved Welsh ewes was just 100% and there was a major problem with lameness.

LAMENESS

Working with his vet, Liz Jones of Ddole Road Veterinary Practice the FAI farm's five-point lameness reduction plan was put in place. Advising on the implementation of the plan Liz examined a selection of lame ewes and the correct treatment options were put in place together with a long-term control plan. In particular, the whole flock was vaccinated against foot rot and a policy was adopted that any ewes that didn't respond after two treatments were culled.

5 POINT PLAN: Reducing Lameness	RESULT
I.Vaccination 2. Early treatment with an appropriate antibiotic 3. Avoiding build-up of infection 4. Culling repeat offenders 5. Good biosecurity	10%

Scanning percentage was increased through improving ewe condition score ahead of tupping as well as getting to grips with liver fluke control. All the ewes are now routinely condition scored pre-tupping, with the aim of achieving the ideal body condition score of 2.5 - 3. Ewes below the required condition score were separated from the main group to graze the better leys. Again working with Liz Jones, faecal samples were collected from the ewes over the autumn period and a strategy put in place to ensure that the product being used at that time of year was fully effective. In the first year of becoming a demonstration farm and following advice from Liz, ewes were tested for trace element deficiencies. The results showed that the flock was very low in selenium so all ewes were given a selenium bolus ahead of tupping.

SCANNING %

IMPROVING SCANNING %	RESULT
Condition scoring before tuppingBetter control of liver flukeSelenium supplementation to breeding ewes	Increased from 100% in 2016 to ↑ 123% in 2017

"We sold 123 more lambs in 2017 than we did the previous year so that is income we didn't have previously"

Other changes as a result of working with Farming Connect include:

- Silage testing
- Identification of the most suitable legume type for a reseeding programme
- Soil sampling and nutrient management planning
- Moving lambing from mid-March to early April
- Habitat management to reduce exposure to liver fluke

Jack is keen to build on the improvements already made and through continuing to benchmark has set a number of targets for the sheep enterprise including the following:

	TARGET	CHANGE
Number of ewes to the ram	600	↑ Increased by 50
Scanning %	>130%	↑ Increased by over 10%
Rearing %	>120%	↑ Increased by over 15%
Average age of lambs sold (as stores)	5 months	↓ Reduced by 6 weeks

Lambs are sold as stores to an organic farm which takes them through to fattening. Romney cross Texel tups have also been introduced with half the flock tupped to this breed and the other half to a Welsh tup. The farm hopes to benefit from the prolificacy of this breed and improved store lamb prices and this will form the basis of the next Farming Connect project over the 2018 season. Crossbred ewe lambs have also been retained for the first time and again these will be monitored for a period of two years to understand whether they can increase flock output but also perform successfully at Tynyberth.

AN INNOVATION SITE UPDATE

The two main measures that underpin profitable lamb production on many upland sheep farms is animal performance and forage utilisation and this is no different on a Farming Connect Innovation site near Aberystwyth. Whilst Mynydd Gorddu is farmed by the Sheep Breeding Company Innovis Ltd, the sheep enterprise is managed under commercial conditions. Ewes are lambed outdoors in April and winter feed is provided by forage crops with no concentrates fed. With this in mind, understanding the importance of lamb growth rate and grass management led to the development of two Farming Connect projects over the last 9 months.

Why a lamb weighing project?

- Faster growing lambs are more efficient in converting feed to weight gain
- Lamb value is directly related to their weight
- Able to monitor health and productivity

Why a grass measuring project?

- Getting the right sward height throughout the season maximises both quantity and quality of grass grown
- Demand from the number of animals on the farm can be compared against current grass performance and predict any excesses or shortfalls
- Grass growth can be better manipulated with targeted fertiliser applications or taking fields out of production e.g. through silage or forage crops

Some of the initial benefits to Mynydd Gorddu farm from the regular weighing and grass measuring include:

- ✓ A more refined worming strategy in-conjunction with faecal egg counts
- ✓ Better grouping of lambs post-weaning according to both weight and weight gain
- ✓ Better understanding of the autumn grass wedge and targeted fertiliser application
- ✓ The development of a grass growth curve for the whole season which can be used for longer-term flock planning





Anglesey sheep farmers leading the fight against AMR

Twelve months ago, demonstration farmer Arwyn Jones, of Plas, Llandegfan was getting ready for a lambing season with a difference. As part of the Farming Connect project on the farm, Arwyn was determined to reduce his dependence on antibiotics during lambing time on his intensive indoor system and maintain his excellent rearing percentage.

Working with independent vet Kate Hovers, Arwyn focused on optimising ewe health and nutrition pre lambing and implementing a strict biosecurity protocol during lambing. She also advises farmers to speak to their local vet to ensure that lambs have the best possible start to life. Following responsible veterinary advice and implementing an active animal health plan Arwyn reduced his use of antibiotics and achieved an improved performance from his flock.

Following a series of knowledge transfer events on the farm, local farmers became very interested in the project and were keen to implement a similar approach on their own farms and explore what additional management changes could benefit their own systems. With support from their local development officer Trystan Siôn, six neighbouring farmers and Arwyn came together and with guidance from Kate Hovers and Emma Jones ADAS they have applied for funding through the European Innovation Partnership Wales.

Their application was successful, meaning that this spring the work done at Plas will be developed further and expanded on 6 other farms across Anglesey.

The project aims are as follows:

- Promote responsible use of antibiotics to maintain the effectiveness of drugs and control costs
- Increase farmer confidence in ration formulation and management practices, reducing prophylactic use of antibiotics at lambing time while maintaining and improving health and welfare.
- Improve nutrition and management practices in order to improve vigour, reduce mortality and reduce investment in finishing.
- Empower the next generation of farmers to adopt alternatives to the use of antibiotics, helping them become more resilient.





BVD eradication on target in Wales with 15% of herds tested

Farmers have responded positively to the new industry led Welsh BVD eradication programme 'Gwaredu BVD' with around 15% of all herds in Wales tested since the project's launch in September.

With funding secured from the 2014-2020 Rural Development Programme Wales's bid to eradicate BVD has resulted in more than 2000 herds tested in less than four months; approximately 29% of these have tested positive for BVD antibodies, said the scheme's technical lead vet. Dr Neil Paton.

"Annual TB tests are expected to peak during the next few months, and it is hoped that we will see even more participation from farmers through their local vet." said Dr Paton.

BVD eradication programmes have been successfully implemented in Scotland and Northern Ireland, illustrating that BVD eradication is a real possibility in Wales.

The economic impact of the disease is a consequence of direct deaths due to abortions or from mucosal disease in older cattle. It also results in reduced performance and production when a PI (Persistently Infected) animal remains undetected within a herd.

Pls shed the virus and this suppresses the immune system of animals, resulting in reduced growth rates and fertility.

Bedwyr Iones of Gwastadanas, a Farming Connect Focus Farm near Beddgelert, has taken advantage of the scheme.

During his annual TB test, 10 heifers were tested during the initial TB test (TTI). At the reading stage (TT2) the blood tests were confirmed as negative.

Bedwyr received guidance from his vet, Stefan Totir, on maintaining his herd's BVDfree status through practical health planning and good biosecurity protocols.

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"The whole process was fast, simple and effective," said Mr Jones. "I can clearly see just how costly BVD could be to my herd, and strongly urge everyone to sign up to the scheme."

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The initial testing for BVD antibodies is fully-funded. If further testing is required £500 is available to help identify Pls.



Farmers should contact their vet for information on how to get involved.



Inspiring the next generation of rural leaders and entrepreneurs

Rural Leadership Programme

a joint collaboration with the Royal Welsh Agricultural Society

Business & Innovation Programme

Junior Programme a joint collaboration with Wales YFC



For more information and to download a copy of the application form, visit the Farming Connect website: www.gov.wales/farmingconnect



Richard Roderick

Investigating Profitable Suckler Cow Production, based on the maximum utilisation of forage

AIM OF THE EXCHANGE

The aim over the next five years is to make the business more resilient ahead of any changes in the future as a result of Brexit. We are aiming to focus on each component of the business and to make them profitable in their own right. A sustainable business will mean producing lamb and beef, mainly from forage, to ensure that the cost base for the production is kept to a minimum. As such the grasses grown and their utilisation are key drivers for the business.

The focus in the coming five years is to continue to improve the genetics of our beef and lamb with the aim of being able to produce a self-replacing herd/flock. In addition we aim to focus further on the optimum utilisation of the grass grown.

Over the past year or so we have been collecting data on the herd and intend to performance record all our animals. This will generate the EBV values for the herd, enabling selection for the most beneficial traits in future heifer replacements.

Through travelling to Scotland the aim was

to develop key performance indicators for the beef enterprise. Looking at a variety of top performing herds we would be able to determine these KPI's from the most successful farmers in the industry and to take that knowledge home and apply at Newton Farm.

The exchange would cover exemplary businesses in Scotland, Ireland and the North of England. The conditions for beef production are similar in those three countries and there are some farmers who are leading the way in finishing beef off forage. Determining key performance indicators for use back on my farm is a priority. The farms identified all have reasonably large beef herds and are predominantly based on forage systems.

OUTCOMES FROM THE EXCHANGE

The hospitality shown and the information shared by the farms visited was overwhelming and I cannot thank everyone I met along the way enough. Visiting another farm/producer is a privilege and each time I learn something new or a new way of doing something.

The Farming Connect Management Exchange programme provides an opportunity for individuals to either: undertake a visit to other farm or forestry situations within the EU, **OR** to host a suitably trained and experienced farm or forest manager visit to their home holding. The application window opens every June.

For further information contact Farming Connect on **08456 000 813** or visit **businesswales.gov.wales/farmingconnect**



GRASS

- ✓ Rotational grazing leads to an increase in output by 27%
- √ The mix of grasses grown especially clovers is essential
- ✓ Maintenance of correct pH values are essential to grass growth, requiring regular soil sampling
- ✓ Grazing height and "walking the wedge" are essential features of good grass utilisation
- ✓ Putting pressure on pasture increases the root mass, improving soil structure and humus in the soil. This leads to greater water retention and less run off
- ✓ Set up of water and electric systems is vital to success of rotational grazing
- ✓ In this respect the ability to hot wire the circumference of the farm in Wales is tricky as we have a huge number of hedges and greater vegetation growth

To read the full report visit the Farming Connect website.

CATTLE

- ✓ Can be outwintered on deferred grazing quite happily with cows fitter and with reduced labour costs
- √ This is of course breed dependant. The breed chosen must fit with the farm
- ✓ Genetic improvements over time help with EBV's too – AI is the quickest/safest way to improve genetics
- ✓ Kilos grown per hectare is a key measure
- ✓ Highland cattle make excellent conservation grazers but need to be crossed to be economically viable

KEY PERFORMANCE INDICATORS

- ✓ Cows confirmed in calf as a % of those put to the bull
- ✓ Live calves as a % of those confirmed in calf
- √ % of cows calving in first 6 weeks and second six weeks
- √ The weaned weight of calves as a % of the cow's body weight
- ✓ Days to slaughter
- ✓ Weight gain per day over life

Events Timetable

DATE	EVENT	VENUE	CONTACT
25/01/18 19:30-21:30	Farming for the future Booking is essential	Llandinam Village Hall, Llandinam SY17 5BY	Canolfan Wasanaeth 08456 000 813 cyswlltffermio@menterabusnes.co.uk
25/01/18 19:30-21:30	Staff Management - Attracting and retaining good workers	The Grosvenor, Cardigan, Ceredigion, SA43 THY	Menna Williams 07399 600 146 menna.williams@menterabusnes.co.uk
25/01/18 19:30-21:30	PDP Event	Machynys Golf Club, Llanelli, Caerfyrddin, SA15 2DG	Gwion Parry 01248 660 373 gwion.parry@menterabusnes.co.uk
29/01/18 19:30-21:00	PDP Event	Eagles Hotel, Llanrwst, Conwy, LL26 0LG	Gwion Parry 01248 660 373 gwion.parry@menterabusnes.co.uk
30/01/18 19:30-21:30	Farming for the future Booking is essential	Reichel Hall, Bangor University, LL57 2TQ	Canolfan Wasanaeth 08456 000 813 cyswlltffermio@menterabusnes.co.uk
31/01/18 18:00-20:00	Winter forage crop options for sheep and beef	St Marys Golf Club, Pencoed, Vale of Glamorgan, CF35 5EA	Catherine Nakielny 01970 631 406 catherine.nakielny@menterabusnes.co.uk
01/02/18	Farming for the future Booking is essential	Bala Golf Club, Bala, Gwynedd, LL23 7YD	Canolfan Wasanaeth 08456 000 813 cyswlltffermio@menterabusnes.co.uk
01/02/18	Vaccinating to increase profitability of your poultry unit	The Elan Hotel, Rhayader, Powys, LD6 5AF	Jodie Roberts 07896 996 841 jodie.roberts@menterabusnes.co.uk
01/02/18	PDP Event	Cardigan Rugby Club, Ceredigion, SA43 IPH	Gwion Parry 01248 660 373 gwion.parry@menterabusnes.co.uk
06/02/18 19:30-21:30	PDP Event	The Castle, Llandovery, Carmarthenshire, SA20 0AP	Gwion Parry 01248 660 373 gwion.parry@menterabusnes.co.uk
08/02/18 11:00-15:00	Plant handling, storage and hedgerow planting best practice	Llysfasi Coleg Cambria, Ruthin, Denbighshire, LL15 2LD	Geraint Jones 07398 178 698 geraint.jones@menterabusnes.co.uk
12/02/18 08:00-10:30	Future of forage in the uplands	Clwb Peldroed Penrhyncoch, Aberystwyth, Ceredigion, SY23 3EH	Lisa Roberts 01970 631 406 lisa.roberts@menterabusnes.co.uk
13/02/18	Improving Soil Productivity	Lower Eyton Farm, Wrexham, LL13 0SN	Jodie Roberts 07896 996 841 jodie.roberts@menterabusnes.co.uk
21/02/18	Compact TMR - a different approach to mixing dairy rations	Llysfasi Coleg Cambria, Ruthin, Denbighshire, LL15 2LB	Rhys Davies 07985 379 880 rhys.davies@menterabusnes.co.uk
21/02/18 19:30-21:30	Diversification Seminar	Fforest Inn, Llanfihangel- Nant-Melan, Powys, LD8 2TN	Gwion Parry 01248 660 373 gwion.parry@menterabusnes.co.uk
22/02/18 19:30-21:30	Diversification Seminar	The Hand Hotel, Llangollen, Denbighshire, LL20 8PL	Gwion Parry 01248 660 373 gwion.parry@menterabusnes.co.uk