

THE MAGAZINE FOR FARMING & FORESTRY IN WALES

FARMING connect



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**Agri Academy
class of 2019
announced**

**Ceredigion sheep
farmer determined
to be the best she
can be**



**Cronfa Amaethyddol Ewrop ar
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Whatever tomorrow looks like, it's time to plan for the future now! Visit us at the Royal Welsh Show to have your say!

Farming Connect's focus at this year's Royal Welsh Show (22-25 July, Llanelwedd) will be to showcase the support, guidance, training and mentoring that's available to farmers and foresters in Wales through its unique 'one stop shop' multi-faceted programme. With most services either fully-funded or subsidised by up to 80%, this is an opportunity which more than 10,000 businesses have benefited from.

Eirwen Williams, director of rural programmes with Menter a Busnes, which together with Lantra Wales, delivers Farming Connect on behalf of the Welsh Government, says that with the current political and economic uncertainties, there has never been a more important time for the industry, especially business owners, to prepare for the future and ensure that every business achieves its potential across all areas of working.

"At this year's Royal Welsh Show, we will be launching the names and locations of the recently recruited demonstration site network businesses. "We hope you'll visit us at the Lantra Building (Avenue K) where our technical teams and regional development officers will be seeking industry feedback as we plan the next round of trials and projects for the new demonstration network to undertake as part of its three year delivery cycle. "Trial today the different systems you can implement with confidence and knowledge tomorrow" will be our mantra as we plan a comprehensive programme of open days and events to ensure the industry keeps abreast of up to date research, cutting edge technologies and innovative, more efficient and profitable ways of working," says Mrs Williams.

If you have any suggestions or ideas on how agriculture can contribute to the Welsh Government's target of a million Welsh speakers by 2050 and an opinion about the 'best things' in rural Wales, you should take a few minutes to visit the Farming Connect Agri-Booth, also in the Lantra Building.

Part of Farming Connect's 'laith y Pridd/Language of the land' initiative which encourages Welsh businesses to add value to their produce through use of the Welsh language and heritage, and is an opportunity to enjoy 'lights, camera, action' as you make your views known to help shape the future delivery of Welsh language services for the industry.

You have the opportunity to 'meet a mentor' each day of the show at 2.30pm, which Farming Connect hopes will encourage you to apply for up to 22.5 hours of fully-funded independent support on any particular challenges or concerns you might have. Visit the Farming Connect website to find out more about this popular initiative.

The stand will include information leaflets, podcasts and videos which will bring you up to speed with a wide range of topics, as well as booklets on farm health and safety.

"Unfortunately, farming has the highest number of workplace accidents than almost any other sector. We encourage you to take home our handy booklets, and if you or even just one family member spends a few minutes reading it and takes a few simple precautions, you'll have helped reduce the risks of an on-farm accident. Families may also want to seek out the popular 'kids' corner' which will run daily competitions to help children identify potential danger areas on farms," said Mrs Williams.



Beef farmer halves winter housing period by rotationally grazing cattle



Welsh suckler beef producers could halve their winter housing period and associated costs by establishing a rotational system of grazing.

James Evans has proven this is possible since putting the grazing system in place for the herd of 300 Stabiliser cattle he runs on a contract farming agreement.

He has shortened the housing period from six months to just three and reduced silage usage by 50%.

During a Farming Connect Knowledge Transfer event in Ceredigion, Mr Evans admitted that a decision to switch to organic production by the farm owners changed his attitude to grazed grass.

“Rather than accepting reduced profits and production by keeping things as they were, we decided to focus more on grass,” said Mr Evans, who farms at Partridge Farm, Bishop’s Castle.

He employed a grazing consultant as ‘a fresh pair of eyes’. “He made me realise that we weren’t utilising grass in the way we should be,” Mr Evans told farmers attending the event at Penrallt Farm, Llantood, kindly hosted by Geraint Evans.

A series of one hectare (Ha) paddocks was created by establishing a semi-permanent electric fence around the perimeter of the area earmarked for grazing and further dividing these with electric fencing.

Each paddock is grazed for two or three days by 40-50 cows and their calves.

Water is supplied to each paddock via a portable trough connected to above ground water pipes.

This system has helped overcome the challenge of supplying drinking water to each paddock.

“We have put pipework on top of the land and that allows us to have a portable water trough, which we can move around every paddock.”

All the breeding bulls are grass-fed when they are sold at 18 months and this creates additional interest among buyers, Mr Evans said. **“There is a demand for bulls that have been raised on grass and perform well on it. Farmers want genetics that have been proven on grass.”**

Sarah Hughes, Farming Connect Red Meat Technical Officer (South West Wales), who organised the event at Penrallt Farm, said Mr Evans had demonstrated that by focusing on grassland management, it is

possible for farmers to reduce their costs.

“In a recent benchmarking survey, the top 25% of farmers were monitoring their overheads, focusing on details and understanding their markets. Better utilisation of grazed grass is part of that,” she said.

The Farming Connect event was also an opportunity for farmers to learn more about BeefQ, a project that aims to increase the eating quality and value of Welsh Beef production through the testing and demonstration of an enhanced carcass quality grading system based on the Meat Standards Australia (MSA) model. This project is supported by the Welsh Government Rural Communities - Rural Development Programme 2014-2020 which aims to inform the formation of an eating quality assessment system in Wales.

Dr Eleri Price, of Hybu Cig Cymru – Meat Promotion Wales, said the project offered exciting opportunities for Welsh beef producers.

Visit: www.beefq.wales for further information.

James Evans’ tips for converting to a rotational grazing system

1. Get expert help. “Getting another pair of eyes on the farm is invaluable; often we can’t see what needs to be done because we are too close to our own businesses.”
2. Get used to spending money in different ways. Mr Evans invested £15,000 to establish a rotational grazing system, but this was a one-off payment. “It seemed a lot of money at the time even though we wouldn’t have thought twice about spending £15,000 on buying a few loads of feed or replacing a machine under the old system.”
3. Graze a paddock for up to three days then rest it. “Make them eat everything, and in time, you will improve permanent pasture that would have previously been deemed to be unpalatable.”
4. Good infrastructure will ease management.

GENETICS CAN INCREASE PRODUCTIVITY AND SLASH COSTS ON WELSH SHEEP FARMS



Pasture management can influence profitability on Welsh sheep farms in the short term but genetics will deliver long term gains, according to an internationally renowned sheep and grazing expert.

Murray Rohloff, who is in Wales to deliver a series of Farming Connect on-farm talks, says the removal of subsidies had forced sheep farmers in New Zealand to evaluate their systems.

Their focus on improving genetics had delivered the biggest gain – New Zealand uses less antibiotics in large animals than all but two other countries because farmers have bred livestock that are hardy and resistant to diseases such as footrot, worms and fly strike.

He advised farmers to take control of their future by selecting the right breeder.

“The direction your flock takes will reflect the policy of your breeder for as long as the progeny remain in your flock,” said Mr Rohloff.

A maternal index delivers seven times the profit of a terminal index if ewe lambs are retained for breeding, he calculated. “The animal hangs around the farm for several years doing the job.”

Before subsidies were removed in New Zealand there were 4,000 pedigree ram breeders, but now there are less than 600, with less than 100 of these supplying 80% of the market.

“He who delivers the goods sells the rams,” Mr Rohloff suggested. “These breeders are supplying genetics for sheep that are easy to lamb, have good rearing ability and enable production gains.”



To maximise the value of genetics, pasture must be well managed to ensure sheep have the best quality feed.

Pasture at a height of 10cm for more than 25 days will reduce profit in lamb production because it can lower quality by as much as 70%.

“Nutritive value declines with leaf age. For most grasses, a leaf older than 25 days of age plummets in digestibility and summer pastures have higher stem content which further reduces digestibility,” said Mr Rohloff.

Dead matter is responsible for 70% of the variation in pasture quality and, because it slows up movement of food through the rumen, it can be very limiting to lamb growth.

“In the first few weeks of life, lambs will be growing at 350g/day when quality is good, but on farms where grass growth is not managed well, that gain will have reduced to 100g/day at weaning, even 50g post-weaning,” said Mr Rohloff.

“Farmers will blame it on post-weaning stress, but it is more likely to be the result of stemmy pastures arising from insufficient grazing pressure.”

Grazing pressure prevents dead matter build-up and encourages legume content.

Late flowering grasses and high sugar ryegrasses offer a longer season of higher digestibility, Mr Rohloff recommended.

He advocates rotational grazing because it allows a farm to grow 30% more grass compared to set stocking.



“That is no different to being given a third more of your acreage for nothing,” he pointed out.

“I’m not saying everyone must farm like a Kiwi, but know how much dry matter you are growing and utilising. If you take control of your pasture, you can manage its quality and quantity at any given time.

“Don’t think lamb prices - think how much profit you are extracting from your grass.”

By coupling rotational grazing with feed budgeting, farmers can be proactive instead of reactive to seasonal variations.

Accurately measure pasture between seasons - 5cm is the equivalent of around 1500kg DM/ha in winter and spring pasture or 2000kg in summer and autumn; but up to 25% may be stem or dead matter.

Farming Connect Red Meat Technical Officer for South East Wales, Elan Davies, said efficiency improvements and possible changes to production systems should be a priority for the sheep industry going forward.



Internal parasites are one of the most common and important diseases that livestock farmers have to deal with on a daily basis. The Parasite Management Project will be monitoring parasite burdens on 10 focus sites throughout Wales and reporting the findings on a regular basis through the Farming Connect website and social media channels. The project will focus on the gastro intestinal parasites (roundworms) and how regular faecal egg counts (FEC) can be used to monitor worm burdens in both sheep and cattle. As well as reporting on the burdens found through the season, the project will also demonstrate how changes to worm control such as timings and choice of wormer treatments can improve the performance and health of the stock.

THE CHALLENGES

- Parasites significantly limit animal production/profitability
- Parasites lower immunity and affect overall animal health
- Poor realisation of increasing resistance to wormers (treatment failure)
- Pressure to reduce the use of blanket medicinal treatments in food producing animals

IMPLEMENTING ON-FARM CHANGES

Despite good success in raising awareness of wormer resistance, there has been a lack of real widespread changes to practices on farms. This project will see if it is possible to buck this trend by:

- Implementing regular monitoring of worm burdens through faecal egg counts using the FECPAK^{G2} platform. As well as allowing quick on-farm FEC results, the platform automatically collates the data and can share this in real time between the farmer, their vet and advisors.
- Implementing the latest advice and recommendations from SCOPS (www.scops.org.uk) and COWS (www.cattleparasites.org.uk) initiatives.
- Testing for anthelmintic resistance/efficacy and enabling farmers to manage situations where multiple resistance is present.
- Improving stock performance by better managing parasite burdens and resistance.
- Slowing down the development of resistance to other wormers – especially the new 4th and 5th generation wormers.

WHAT HAS BEEN FOUND SO FAR?

At the start of the project in March 2019, the sheep farms involved started investigating burdens in ewes around the lambing period. Most farmers think FEC is only useful for lambs in the summer period, but monitoring found a lot of variation between participating farms and brought about changes to their ewe worming strategy:

- James Powell, Dolygarn was able to avoid the blanket treatment of all the ewe flock and only wormed the management groups that showed high burdens.
- Irwel Jones, Aberbranddu had very low FECs in all groups before and after lambing and was able to put the dosing gun away despite no ewes being wormed since the previous April.
- In contrast, mob FEC results were higher for both Nicola Drew, College Farm and David Lewis, Haughton Hall, and most ewes were wormed at turnout from the lambing shed.
- Post-worming checks on the ewes by David Lewis has raised concerns and suspicions over the lack of efficacy from the long-acting Moxidectin wormer. This will be checked again in the summer as part of the resistance/efficacy testing.



Eurion Thomas of Techion discussing collecting cattle samples with Gareth Thomas, Tregynrig.

Testing of lambs started in May for most flocks. Although nematodirus is the first worm species of concern for lambs, FEC testing did show that the strongyle species of worms were already present by the time of the first lamb dose on many farms. Those who knew they had white drench resistance within the strongyle worms were able to use an alternative wormer group rather than the white drench that they would normally use against nematodirus.

The three sites focusing on cattle started monitoring youngstock four to five weeks after turnout to spring grass and will continue to do so on a regular basis throughout the summer.

Dairy farm aims to safeguard herd from *M.bovis* with custom-made vaccine

A custom-made vaccine in combination with herd management changes are helping a Carmarthenshire dairy farm protect calves against a disease that was responsible for deaths in large numbers of its heifer replacements.

Since 2015, David and Eirian Thomas had experienced a high level of calf mortalities at Wern Farm, a Farming Connect Focus site near Bancyfelin. Working with their local vet, they eventually linked the deaths to *Mycoplasma bovis* (*M. bovis*), a highly contagious bacterium that is a major contributor to calf pneumonia and is also associated with meningitis, eye and ear infections as well as arthritis, mastitis, abortion and infertility in adult cows.

M. bovis has no cell walls so doesn't respond to many antibiotics, but an autogenous vaccine given to dry cows and subsequently to their calves offered the Thomases an opportunity to protect their herd from this devastating disease.

They hosted a Farming Connect trial which involved creating a vaccine and inoculating the herd.

To create a vaccine, swabs can be taken from a calf's nose or direct from lung tissue of dead animals. The vaccine is farm-specific so is only effective on the source farm.

Cows were vaccinated at six weeks and three weeks pre-calving to allow a passive transfer of immunity to their calves. Calves were given the vaccine at two weeks and four weeks old.

Calf deaths from birth to weaning in January had been 63%, but the first of the vaccinated cows calved on 10 February and mortalities in February dropped to 32% with most of these caused by scours.

Mr Staak said: "It is early days, and I don't want farmers to think that vaccinating is a silver bullet for *M. bovis*, but it does seem to be working." He advises that vaccination should not be used in isolation – herd management also plays a key role in protecting cows and calves from *M. bovis*.

Farming Connect supported the trial because of growing levels of *M. bovis* infection in Welsh herds and a need to understand more about this disease.



Viability of sexed semen in the spring block calving herd

The use of sexed semen on spring block calving grass-based herds has been limited or non-existent since its launch in 1995. This is partly due to a focus on ensuring optimum days to conception along with days in milk (DIM) and achieving a tight calving period of between 6-9 weeks which is critical for a successful rotational grazing system. Therefore, a widely held perception of lower conception rates has meant that its uptake has been relatively low on large commercial scale systems where fertility is a main KPI.

There are many reasons why sexed semen should be used. Many dairy units that operate different systems have and use sexed semen successfully. Some of the benefits include:

- Targeted genetic improvement from the best cows and heifers
- More female calves from higher genetic merit animals
- Easier calving for improved subsequent fertility
- Improve public image and animal welfare issues of unwanted male Jersey cross calves
- Option to use more beef semen on lower genetic merit animals and increase calf sales

Although its benefits are numerous, the process of sorting can damage the sperm cells, and the total number of sorted cells per dose is markedly less than in a straw of conventional semen. Freezing and thawing will also slightly impair its viability as it would conventional semen. During the early years of its release in the late 1990's, it was suggested that sexed semen should only be used on maiden heifers. However, advancements in the sorting and handling stage has improved dramatically, and many herds now use sexed semen on older cows, providing there are no obvious uterine or metabolic issues.

During this year's breeding period, Cefnamwlch's 80 bulling heifers that were put forward for the project were synchronised for timed AI in two lots on the same day; 40 served to a high \$Breeding Worth (\$BW) Jersey bull and the other 40 served to the same bull as sexed semen. Semen was allocated randomly to allow a fair distribution of semen type, and straw thawing preparation was carried out under standard best practice protocols. An easy calving stabiliser bull was then turned into the group the following week as a sweeper.



Bells CM Conrad - The New Zealand Jersey bull used across the heifers for the project.

Results of this trial will be available after pregnancy scanning in July to record how many held to first service. For more information, visit the Farming Connect website.

Welsh dairy farmers urged to protect herd foot health with early lameness detection

Treating the signs of lameness in a cow as an emergency by swiftly dealing with the problem can prevent irreversible damage to the affected foot, specialists in cattle lameness advise. Lameness is a costly disease in Welsh dairy herds, but many causes can be prevented, according to vets delivering expert advice at a Farming Connect Master Lameness course.

Independent veterinary consultants Dr Nick Bell and Sara Pedersen said farmers must be prepared to respond quickly to the lame cow.

“The damage to the foot is usually irreversible, affecting the bone and soft tissues, making lameness an emergency,” said Dr Bell.

If cows are treated at the bruising stage, most claw lesions can be prevented.

“If we successfully treat cows with new digital dermatitis lesions then we can prevent further spread and minimise infection pressure,” Dr Bell explained.

Foot shape can be corrected to prevent some claw lesions, and with regular foot checks this can be done in the early stages.

“What is important at foot checks is to avoid over-trimming. We generally follow the five-step method,” said Dr Bell.

1. Correct the toe length – start with the inside hind claw or outside front claw and measure the appropriate length from where the claw horn goes hard; trim the excess sole from the toe to effectively steepen the foot angle and tip the cow forward onto her toe. Spare the heel and the side walls.
2. Match the other claw for length and balance - again, sparing the heel and side walls.
3. Dish out the site of the sole ulcer - deep and wide. Create slurry clearance space between the claws.
4. For corrective trimming for lesions causing lameness, create a heel height difference between the healthy and painful claw; apply a block and/or trim down the heel on the back two thirds of an outside hind claw if diseased.
5. Remove loose horn and sharp ridges – loose horn around a sole ulcer, white line or necrotic lesions needs careful removal. Remove fissures of heel erosion.

Prompt treatment and trimming will help alleviate lameness but prevention by eliminating risk factors should be the goal.

Ms Pedersen said long milking periods was one of the biggest causes of sole ulcers.

For any length of time that milking extends beyond two hours, lying times will be compromised, Ms Pedersen warned. She cited the example of one farmer client with excellent housing facilities but with each milking taking five hours. “Even though the farm had invested massively in providing cow comfort, there was a big problem with sole ulcers because there simply wasn’t sufficient time for the cows to spend lying down.”

Heat stress is another lameness trigger- a common problem in dairy herds during last summer’s hot weather; so steps should be taken to keep cows cool if hot conditions are repeated this year; this includes not keeping cows standing for long periods and in cramped conditions in collecting yards at milking.

Cubicle design is another area that should not be overlooked; improvements can often be made without major investment, Ms Pedersen suggested. “There aren’t many cubicle sheds on farms where adjustments can’t be made; the more comfortable the cubicle stalls are - the longer the lying times.”

Josh James, who produces milk from 200 Holsteins at Redwick, said lameness wasn’t a major issue in his herd but added:

“Until you achieve zero lameness, there are always things you can do to improve, and to help get to that point, I will be putting into practice some of the excellent advice we have been given on this course.”



Building for the future together

Becky Jones

Environment Consultant

When planning for the future, a farm business needs to look at its existing buildings, stores, tanks and lagoons and determine if they are in good enough condition to do their job. In many instances, routine maintenance can prolong the working life and avoid the unnecessary cost of building new stores and buildings. However, to consider the condition of a building, store, lagoon or tank, it is important to recognise the early signs of deterioration and structural failure. Is it compliant with the farm regulations (Silage Slurry and Fuel Oil Regulation; often referred to as the SSAFO regulations)? What can be done to extend the life of the structure and when does it need to be replaced? If a structure is to be replaced, what should it be replaced with and how?

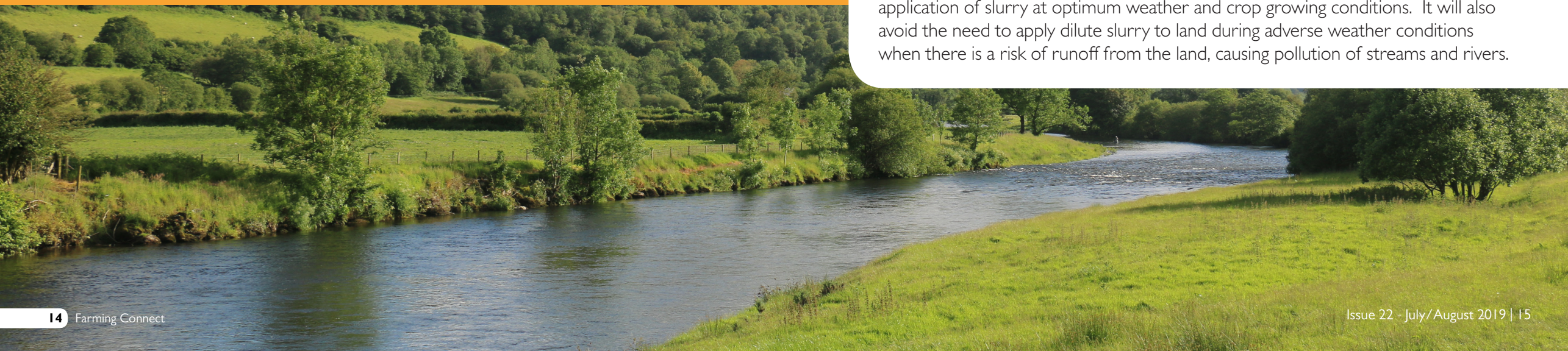
Working with many farmers across Wales through the Farming Connect infrastructure clinics, we found that over 90% of the farms that are looking for ways to manage their slurry have a contaminated rain water problem and not a slurry storage problem. Keeping water out of the slurry management system, by controlling contamination of rain, surface water and groundwater, is a cost-effective way to increase the working life of stores, lagoons, silage clamps and tanks.

By knowing the monthly winter rainfall for your farm and the dirty yard area, you can estimate the volume of rainwater that will mix with slurry on the open external yard over a month. This will impact significantly on the storage you need to provide which is for a four-month period to ensure SSAFO compliance or five-month period for farmers in a Nitrate Vulnerable Zone (NVZ).

Quantifying the amount of rainwater that is being contaminated with slurry and converting this volume into tanker loads can highlight what the collection of rain water is costing your farm business; costs associated with labour, fuel, machinery wear and tear, time and contractor costs.

Contaminated rainwater is classed as slurry and must be collected and contained in a slurry storage system in accordance with SSAFO regulations. Minimising the amount of rainwater being contaminated is often overlooked because the main priority for many farmers is to simply provide a bigger slurry store. However, making small, low cost, changes by diverting rainwater away from the dirty yard area can make a big reduction in the amount of slurry produced and the capacity of storage required. Intercepting and diverting clean water, prior to contamination with slurry and not having livestock on open external yards, will reduce the production of dirty water.

When all options to reduce the input of rainwater have been considered and undertaken, then calculations can be made to establish the appropriate storage capacity required for the farming system. It is important to remember to allow for a free board - 750mm for an earth banked lagoon and 300mm for other slurry stores, plus the rainfall falling on the store. The regulations require storage capacity for a four-month period to ensure SSAFO compliance or a five-month period for NVZ areas. Slurry is a very valuable source of nutrients, and the greatest amounts of nutrients are held in the solid fraction of the manure. Keeping rain water out of slurry will increase the slurry storage capacity of the slurry store and enable the application of slurry at optimum weather and crop growing conditions. It will also avoid the need to apply dilute slurry to land during adverse weather conditions when there is a risk of runoff from the land, causing pollution of streams and rivers.



Congratulations!

Agri Academy class of 2019 announced

Farming Connect has announced the names of this year's intake of 36 successful applicants selected to take part in its flagship personal development programme, the Agri Academy.

The numbers have increased a lot since the programme was launched in 2012.

"For many alumni, the intensive programme of mentoring, training and study visits, packed into three short study periods, has helped them achieve their personal ambitions and create significant new business opportunities.

"Many more, who had already achieved their career goals before coming into the Academy, acknowledge that the experience provides a unique opportunity to progress even further and meet their own personal ambitions," says Einir Davies, Development and Mentoring manager for Farming Connect.

The Agri Academy comprises three distinct programmes. This year's intake includes 12 candidates on the Business & Innovation programme; 12 on the Rural Leadership programme, which is a joint collaboration with the Royal Welsh Agricultural Society and 12 on the Junior programme, which is a joint collaboration with Wales YFC.

Each of the three programmes will involve a study tour, with Rural Leadership candidates this year visiting the World Trade Organisation headquarters in Geneva; Business & Innovation candidates will visit the Netherlands to meet some of the country's most innovative business people; while the Junior programme will be comparing different farming systems in Iceland during their autumn half term.



Rhys Beynon-Thomas, Rural Leadership Programme

Farm vet and part-time farmer Rhys Beynon-Thomas from Hendy set his sights on a career working with farm livestock at a very early age. Rhys, who works for a Carmarthenshire veterinary practice, hopes that the current uncertain political climate could also lead to new opportunities.

"I would like to put something back into the industry and hope that being part of the Agri Academy will give me the confidence to become a spokesperson for the issues I believe will ensure that Welsh farming continues to make its mark in a competitive marketplace."



Heledd Mair Jones, Business & Innovation Programme

Heledd Mair Jones and her partner are tenant farmers near Machynlleth. Heledd, a graduate of Aberystwyth University, combines studying for her MSc in Livestock Science alongside her current role working for one of Wales' leading agricultural suppliers as part of the sales team. Her first role after graduating was with Innovis. Sheep, especially genetics are her passion.

"I think the Agri Academy will open up a new world of ideas and I'm looking forward to receiving advice and support from experts, people in business, and like-minded ambitious people in a similar situation to us, wanting to start their own sustainable and profitable farm business."



Ifan Prys Thomas, Junior Programme

Young farmer Ifan Thomas, an agriculture student at Coleg Llysfas, lives at home at his family's beef and sheep farm in Pontrug, Caernarfon. He is an active member of his local Dyffryn Nantlle YFC and also involved in local community initiatives including the annual sheepdog trials.

"I hope that my experience as part of the Agri Academy Junior programme will introduce me to other ambitious young farmers, wanting to earn a good livelihood from the agriculture industry. I hope I can build on this experience and benefit from the networking and mentoring."



To hear from all this year's Agri Academy candidates, visit:
www.gov.wales/farmingconnect

The first EIP Wales project crosses the finishing line

Two years later and the first ever project to receive EIP Wales funding back in 2017, The Potato Blight project, is now drawing to a close. The aims of the project were twofold:

1. To trial the effectiveness of a new, environmentally sensitive biopesticide for control of late blight in potatoes. The project investigated the efficacy of the product Hederin, a saponin extracted from common Ivy that was developed by Naturiol Bangor Ltd.
2. To trial the use of OptiYield Diamond (OptD), a novel biostimulant based on phosphonate, developed by Emerald Crop Science, that could help plants grow more vigorously and potentially increase their resistance to pests and diseases and increase yield.



Henfaes Research Centre, Bangor University. Potato Blight trial plot can be seen bottom left.

Summary of the project:

Trials were carried out at two sites in 2017 and 2018:

- Tyn yr Helyg, an organic farm near Aberystwyth
- Henfaes Farm, near Bangor

Treatment and control plots were replicated and field data were collected by Sarpo Potatoes Ltd at Henfaes and by David Frost at Tyn yr Helyg. Treatments were applied to plots at weekly intervals just before and during the period when late blight attacked the crop. The effectiveness of the products trialled was assessed by measuring the progression of blight, the yield, and the health of the tubers in each plot post-harvest.

At concentrations of 0.2% and 0.3%, Hederin was able to slow down, but not halt, the progression of blight. However, it was less effective than standard fungicide treatments (copper containing 'Cuprokyt' at Tyn yr Helyg and Mancozeb/Shirlan/Ranman or Mancozeb alone at Henfaes).

At this stage, therefore, Hederin is not being viewed as a replacement for synthetic fungicides, but it could have a role to play in integrated disease management programmes, for example, in combination with resistant potato varieties or when mixed with other fungicidal products.

Opt D, on the other hand, tested each year at the Henfaes site, was consistently the most effective treatment. It outperformed the standard fungicide and Hederin, both in terms of controlling the spread of the disease on foliage and of controlling tuber blight and it resulted in the best marketable yield. When mixed with Hederin in the 2017 trials, there was some evidence that a mixture of products controlled blight better than either product alone. However, this will need to be investigated further.

Tony Little of ADAS, the Innovation Broker for the project, said: "This was a really interesting project. The process of bringing together growers, researchers and businesses to solve pressing issues with sustainable technologies was very rewarding."

More information available on:
www.gov.wales/farmingconnect



Ceredigion sheep farmer determined to be the best she can be

A career in high street banking and helping out with your husband's business in Hertfordshire doesn't necessarily prepare you for life as a sheep farmer in rural Ceredigion! So, when Helen Hall and her husband decided to retire to a 45 acre (18.2 hectare) smallholding near Rhydlewis in 2016, she knew she had a steep learning curve ahead.

Today, thanks to advice, guidance and training from Farming Connect, together with help from supportive neighbours, Helen is now a fully-fledged sheep farmer with a flock of around 70 ewes and lambs made up of Poll Dorsets, Balwen, Torwen, Suffolk crosses and the local Llanwenog breed.

"The training I've accessed through Farming Connect has been critical to my understanding of the business.

"I know what jobs I can confidently undertake myself and how to adhere to high standards of animal health and welfare. Importantly, I know when I need to bring in a vet or someone more experienced."

Having immersed herself in day to day farming as the flock steadily grows, alongside attending relevant Farming Connect workshops and open events, Helen discovered that fully-funded e-learning modules which she undertakes from her laptop, have given her a wealth of information.

"I use the e-learning modules much as you would college lectures; I make notes as I go through each short interactive session and quiz, which usually last between 20 and 30 minutes and which I tackle in 'bite size' bursts if I'm busy.

"If I need to refresh my memory, I either repeat the modules or refer to my notes, before progressing to the next level or signing up for a new course," says Helen.

Helen's local Farming Connect development officer, Rhiannon Davies, says it has been rewarding to see how Helen's determination to succeed as a sheep farmer has driven her appetite for acquiring knowledge and new skills.

Helen has a very proactive approach and has taken advantage of everything Farming Connect has to offer.

Helen has undertaken over 25 e-learning courses to date, enabling her to learn about topics including biosecurity, anthelmintics, managing liver fluke, sheep scab, lameness and lambing best practice.

"Her attitude of 'find out what you need to know first' means that she's rarely presented with a practical situation she doesn't know how to handle, including at lambing time."

"All individuals registered with Farming Connect can undertake e-learning courses endorsed by industry professionals, covering business, land and livestock, and with over 60 modules currently available on topics ranging from piglet survival to agri-pollution, this is an accessible option with benefits for all," says Rhiannon.

Accredited practical and business training courses, subsidised by up to 80%, together with fully funded e-learning modules, animal health and welfare and IT training are available to all registered farm and forestry businesses.

Helen's full story is available on the Farming Connect website.

- 1 Visit the Farming Connect website and select the Skills & Mentoring drop down menu
- 2 Click 'e-learning' and select the module(s) you want
- 3 Allocate 20-30 minutes for each interactive or tackle in 'bite size' bursts
- 4 Complete the module and quiz in your own time – revisit at any time
- 5 Put the theory into practice!



INNOVATION AND DIVERSIFICATION WALES

26/09/2019

You are invited to...

add value to your business, invest in your future,
be part of the success story

- **Meet** the inventors, manufacturers and distributors at the forefront of today's cutting-edge innovation and new technologies for farm and forestry businesses
- **Learn** how today's most successful diversification enterprises prosper in a competitive market
- **Transform** your ideas into reality by tapping into Farming Connect guidance, support, training and mentoring

10:00-16:00

South Glamorgan Hall, Royal Welsh Showground, Llanelwedd LD2 3SY
For more information, contact: fcevents@menterabusnes.co.uk
Free entry

If you or a loved one are
experiencing poor mental health:

- Persistent sadness or low mood
- Loss of interest or pleasure
- Fatigue or low energy
- Disturbed sleep
- Low concentration
- Low self-confidence
- Poor or increased appetite
- Suicidal thoughts or acts
- Agitation or slowing of movements
- Guilt or self-blame

DON'T SUFFER IN SILENCE



Call: 0800 587 4262
thedpjfoundation.com



Call: 0800 121 4722
tirdewi.co.uk

FCN | THE FARMING
COMMUNITY
NETWORK

Call: 03000 111 999
fcn.org.uk

R.A.B.I.
Cefnogi Teuluoedd Fferm
Supporting Farming Families

Call: 0808 281 9490
rabi.org.uk



Llywodraeth Cymru
– Sioe Deithiol Ffermio Cynaliadwy
Welsh Government
– Sustainable Farming Roadshow

Sustainable Farming Roadshow

- Discover how to improve the economic and environmental performance of your business
 - Start the Sustainable Production Grant application process
- Join us at one of these events for further information on the substantial level of services and support available for you.

DATE	VENUE
03/09/2019	Pontypridd Conference Centre, University of South Wales, Llanwit Rd, Treforest CF37 1DL
04/09/2019	Metropole Hotel, Llandrindod Wells LD1 5DY
05/09/2019	Queen Elizabeth High School, Llanstephan Road, Johnstown, Carmarthen SA31 3NL
10/09/2019	Kinmel Manor, St George's Rd, Abergele LL22 9AS
11/09/2019	Ysgol Gyfun Aberaeron, South Road, Aberaeron SA46 0DT
12/09/2019	Uwchaled Education Centre, Yr Alwen Road, Cerrigydrudion, Corwen LL21 9SW

Booking in advance is mandatory for these events.
Doors open for signing in at 7pm.
Events will close at 9.30pm.

Eligibility for the Welsh Government's Sustainable Production Grant (SPG), which can provide a grant of between £12,000 and £50,000, requires a partner in the business to attend a 'Sustainable Farming Event' organised by Farming Connect. The individual attending must be registered as a business partner with Farming Connect and Welsh Government Rural Payments Wales.

THE APPLICATION WINDOW FOR MASTER NUTRITION – SHEEP IS OPEN!

14/08/19 - Welshpool Livestock Market, Welshpool SY21 8SR

For more information, contact Lisa Roberts: 07399 849 148 / lisa.roberts@menterabusnes.co.uk

15/08/19 - Glynllifon College, Caernarfon, Gwynedd LL54 5DU

For more information, contact Gwion Parry: 07960 261 226 / gwion.parry@menterabusnes.co.uk

The application windows will close at **12pm 29/07/19**.
Apply via the Farming Connect website.



MEISTR AR FAETH
MASTER NUTRITION

Events Timetable

Reducing agricultural pollution and improving water quality workshops

30/07/2019 11:00 - 14:00	Lower Eyton Farm, Eyton, Wrexham LL13 0SN
05/08/2019 11:00 - 14:00	Rhosbadrig, Ty Croes LL63 5NQ
07/08/2019 10:30 - 13:30	Shordley Hall Farm, Hope, Wrexham, Flintshire LL12 9RT
07/08/2019 11:30 - 14:30	Hafod, Blaencillech, Newcastle Emlyn SA38 9EP
16/08/2019 10:30 - 13:30	Fron Farm, Hendre, Mold, Flintshire CH7 5QW
19/08/2019 10:30 - 13:30	Plas Llanfihangel, Capel Coch, Llangefni LL77 7UT
Farming Connect Service Centre - 08456 000 813	

BVD Workshop

18/07/2019 14:00 - 17:00	Carmarthen Vet Centre, Llanllwch, Carmarthen SA31 3SA	Carmarthen Vet Centre 01267 220 404
19/07/2019 11:00 - 14:00	Park Veterinary Centre, Cardiff CF11 8DG	South Wales Farm Vets 01443 223751
29/08/2019 14:00-17:00	Pwll-y-Wrach, Cowbridge, Vale of Glamorgan CF71 7NJ	Camlas Farm Vets LLP 01938 553124

Sheep Parasite Control - Roundworms & Blowfly

18/07/2019 14:00 - 17:00	Priory Vets Cardigan, Unit 11, Parc Teifi, Cardigan SA43 1EW
Priory Vets Cardigan - 01239 612 479	

Staff Management Workshop

19/07/2019 10:00 - 15:00	Ruthin Farmers Auction, Rhuthun, Denbighshire LL15 1PB	Eirir Williams - 07985 379 905 eirir.williams@menterabusnes.co.uk
Focus on herd fertility and the value of Timothy for hill grazing		Lisa Roberts - 07399 849 148 lisa.roberts@menterabusnes.co.uk

Understanding Johne's Disease Workshop

14/08/2019 14:00 - 17:00	Afon Vets Centre, Penydre, Neath Port Talbot SA11 3HH	Afon Vets Centre 01639 642739
22/08/2019 14:00 - 17:00	Carmarthen Vet Centre, Llanllwch, Carmarthen SA31 3SA	Carmarthen Vet Centre 01267 220 404

Mulch Systems and Direct Planting in Organic Horticulture	
19/08/2019 17:00 - 19:30	Tyddyn Teg, Bethel, Caernarfon, Gwynedd LL55 3PS
Debbie Handley debbie.handley@menterabusnes.co.uk	

Improving pasture management and green infrastructure on the farm	
20/08/2019 11:00 - 15:00	Fedw Arian Uchaf, Rhyd Uchaf, Bala LL23 7SB
Dafydd Owen - 07985 379 903 dafydd.owen@menterabusnes.co.uk	

A key management tool-Body condition scoring	
21/08/2019 11:00 - 14:30	Moor Farm, Haverfordwest, Pembrokeshire SA61 1LN
Abigail James - 07399 970 988 abigail.james@menterabusnes.co.uk	

Farm Diversification - Mixed Vegetable Production	
26/08/2019 10:00 - 15:00	Tyddyn Teg, Bethel, Caernarfon, Gwynedd LL55 3PS
Debbie Handley debbie.handley@menterabusnes.co.uk	

Transitioning from set stocking to a TechnoGrazing system	
27/08/2019 14:00 - 16:00	Fferm Carreg Plas, Aberdaron, Pwllheli, Gwynedd LL53 8LH
Gwion Parry - 07960 261 226 gwion.parry@menterabusnes.co.uk	

Preparing for Tupping	
20/08/2019 19:00 - 21:00	Ynysau Uchaf, Pumsaint, Carmarthenshire SA19 8UW
Farming Connect Service Centre - 08456 000 813	

Social Media Workshop	
29/08/2019 16:00 - 18:00	Lantra, Royal Welsh Showground, Builth Wells, Powys LD2 3WY
Farming Connect Service Centre 08456 000 813	

Aberbranddu Demo Site Open Day	
05/09/2019 14:00 - 17:00	Aberbranddu, Cwrt y Cadno, Pumsaint, Llanwrda SA19 8YE
Farming Connect Service Centre 08456 000 813	

Farming the environment	
10/09/2019 9:30 - 16:30	Henfaes, Llanfairfechan, Gwynedd LL33 0LB
Geraint Jones - 07398 178 698 geraint.jones@menterabusnes.co.uk	

Improving grassland management and flock genetics on upland farm	
12/09/2019 16:00 - 18:30	Rhiwgriafol, Machynlleth SY20 8NY
Lisa Roberts - 07399 849 148 lisa.roberts@menterabusnes.co.uk	

Sustainable management of natural resources	
18/09/2019 11:00 - 14:00	Glanrafon, Llangernyw LL22 8PF
Geraint Jones - 07398 178 698 geraint.jones@menterabusnes.co.uk	

Managing Mastitis in your herd - Benefits of the Mastitis Control Plan	
24/09/2019 11:00 - 15:00	Longlands Farm, Redwick, Magor NP26 3DX
Imogen Ward 07985 379 819 imogen.ward@menterabusnes.co.uk	

SURGERIES		
(09:00 - 17:00) 1 hour appointments		
Succession Surgery	18/07/2019	Bangor
Planning Surgery	02/08/2019	Dolgellau
Succession Surgery	07/08/2019	Aberystwyth
Planning Surgery	16/08/2019	Haverfordwest
Succession Surgery	21/08/2019	St Asaph
Helen Lewis - 01970 631 425 helen.lewis@menterabusnes.co.uk		