



Number of businesses registered:

10,993



Number of individuals registered:

22,781

Demonstration Network

Improving suckler herd performance at Bryn farm

Bryn farm, near Cardigan, will investigate how monitoring and benchmarking can improve the herd's performance, efficiency and profitability. The main enterprise up until now has been to store cattle production but there are options to finish cattle on-farm through good grazing management.

Areas to focus on:

Key performance indicator	Current	Target
Number of calves weaned per 100 cows put to the bull	85%	>90%
Improve weaning weight	43% of dam's weight at weaning	50% of dam's weight at weaning

How will this be achieved?

Targeted use of home-grown feeds in rations for indoor finishing bulls



Rotational grazing of steers and heifers



Johne's testing to check disease status



The benefits of milk recording in a spring block calving herd

Elgan and Gareth Evans at Llwyn Goronwy, near Llanrwst, milk 320 Holsteins crossed with Jersey and New Zealand Friesians. Their aim is to focus on milk quality and breed cows that are 550kg liveweight and are capable of producing 550kg of milk solids per lactation.

They wanted to milk record but felt that the current reporting systems do not suit a spring block calving herd because milk solids are not recorded, despite 53% of the milk produced in the UK being sold on a solids contract.

Working with Farming Connect, they have manually inputted data into the recording system which has enabled them to identify the cows they want to breed from. They identified some cows producing 1kg milk solids per kg of liveweight but at the other end of the scale the poorest performing cow was 700kg liveweight and only producing 0.49kg of milk solids per kg of liveweight.

"We will be putting beef straws onto the bottom 25% of cows and see where we are when we have scanned the cows at the end of the breeding season and make a decision of which to keep and which to let go of," says Elgan.



Reducing damage in the eggs at Wern

Farming Connect's poultry demonstration site, Wern farm, has been exploring how, by using sensor technology, second quality eggs can be reduced. The trial monitored the impact eggs experience during transport from the nest box to the packing area, using the CracklessEgg™ device. The device, supplied by Lloyd's Animals Feeds, is shaped like an egg and has multiple sensors within it that measure the impact of force (G) an egg experiences during transportation. The device is linked via Bluetooth to an iPad, producing real-time readings as it travels along the egg belt.



Pictures show the crackless egg travelling along the transportation belts.

If a flock has 1% of second grade eggs, this is equivalent to £0.66/dozen eggs. Each bird lays 26 dozen eggs (312) per cycle. Therefore 1% of second grade eggs is equal to 17p per bird which over a unit of 32,000 birds equates to £5,449.60 per flock.

Even though Osian Williams has very low levels of second grade eggs, the exercise did show up areas where high forces are produced which could crack eggs. Adjustments to belts were made to rectify this and in some areas belt speeds were slowed down.

EIP

6

PROJECTS APPROVED DURING THIS PERIOD

working with

20

FARMERS AND FORESTERS



Feasibility study on squill production in north Wales

A project that finished during this period was looking into growing a novel pharmaceutical crop. Squill is a plant native to the Mediterranean and extracts from the bulb are used in many over the counter cough preparations. The project commenced in October 2017 and small trial plots were planted with the bulbs on six farms across north Wales. The sites varied in altitude and rainfall.

There is still much to learn about the agronomy of squill but generally the results of the biomass harvested shows that it can be grown in Wales.

Site	kg planted	kg harvested	% increase	Comment
1	14	34	243	
2	15	32	213	
3	14	35	250	
4	15	36	240	
5	14	34	243	
6	15	0	0	Serious pest damage

Analysis of the bulbs has shown promising levels of the desirable compounds and in this project the levels did not appear to be affected by altitude or soil type.

Further consideration needs to be given to the agronomy, mechanisation, harvesting and extraction of desirable compounds but the fact that the desirable compounds are already widely used in pharmaceutical products provides great optimism for this crop in Wales.



The bulbs are destroyed in the processing stages so it is important to create a sustainable model whereby some of the bulbs are retained to reproduce the crop.

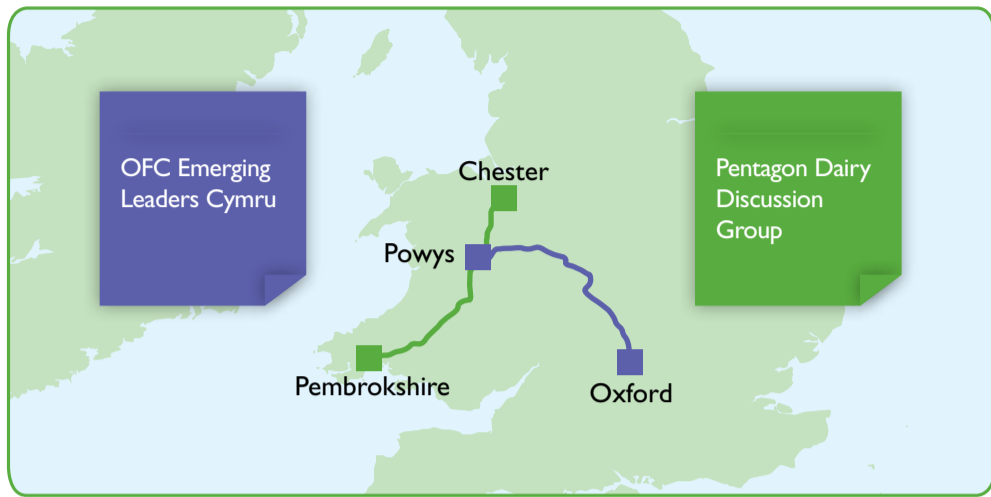
The bulbs are the greatest cost to the farmer at approximately £25 per kg. There is still limited information on harvesting and processing costs because the project was undertaken at such a small scale.

Knowledge Exchange Hub

Unmanned aerial vehicles (UAVs) – A bird’s-eye view in agriculture

With UAV technologies becoming more affordable could they become a viable option to help with daily tasks on the farm? Click [here](#) to read more.

Study Visits



2 study visits took place during this period.

In January, three individuals from Carmarthenshire, Gwynedd and Powys (**OFC Emerging Leaders Cymru**) were selected by the Oxford Farming Conference to participate in their Emerging Leaders Conference, which is designed to equip delegates with the skills, confidence and network to carve a leadership role within the agricultural sector.

At the end of January, the **Pentagon Dairy Discussion Groups** travelled to Cheshire to develop relationships with farmers outside of their own group and challenge their own farming practices. The main emphasis was to meet with farmers producing high yields of quality milk with low purchased feed costs, utilising high quality, home-produced forages.

Advisory Service

Number of business who have received support through the Business Categories of the Advisory Service during this period:



104 individuals received one-to-one support through the Business Categories of the Advisory Service during this period.



3 groups received support through the Business Categories of the Advisory Service for Joint Ventures during this period.

Feedback from businesses on the delivery of this Advisory service:

'It has helped us gain a better understanding of the process of planning and has helped us set a clearly defined plan with guidance on hand when required.'

Personal Development Plan Workshops

313 PDPS WERE CREATED DURING THIS PERIOD



These workshops provide an opportunity for businesses to take full advantage of support and guidance given by Farming Connect staff in completing their personal development plans (PDP) and any subsequent skills applications identified within the PDP.

Mentoring Programme

491 TOTAL MENTEES MENTORED **15** NEW MENTEES DURING THIS PERIOD

The most popular topics applied for during this period were:

CALF REARING



RENEWABLE ENERGY



CARE FARMING



ORGANIC DAIRY PRODUCTION



Discussion Groups



Case Study

David Thomas (Andersons Consultancy) facilitated a meeting with Discussion Group members on Heifer Replacement Costs.

Prior to the meeting each business had been asked to complete a data sheet. None of the group had calculated this cost before therefore it was interesting to see their reactions and interest in the topic.

Points of discussion included:

- the range within the group
- the cost of casualties and its impact on replacement costs and the business
- How to minimise the price gap between purchase and cull sales
- how to maintain a profit margin with a replacement rate of 20-30%
- how a replacement rate below 10% can lead to an ageing herd, higher casualties and less quality
- how to increase the number of cows per bull
- how to get a true representation by comparing replacement rates over a number of years

Some of the key points that the farmers are going to work on as a result of the calculations are:

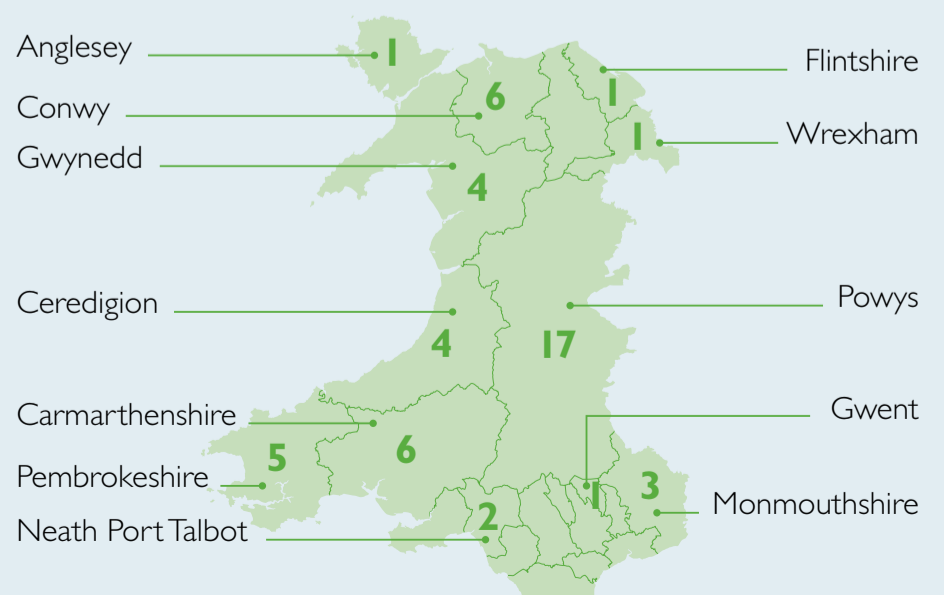
- Eradicate Johne's from the herd
- Try to improve condition of cull cows before selling them
- Replace cows sooner rather than letting them get too old
- Ensure pedigree cattle sell at a premium price to cover replacement costs
- Focus on minimising cow casualty numbers

Below is a table of data for the group:

Brecon Suckler Discussion Group	Herd Replacement costs		2018/19					Average
	1	2	3	4	5	6	7	
Farm number	1	2	3	4	5	6	7	
Cow replacement cost £/cow in herd	108	115	68	132	230	14	97	109.1
Bull replacement cost £/cow in herd	8	0	0	21	9	10	50	14.0
Total replacement cost £/cow in herd	116	115	68	153	239	24	146	123.0
Purchases/transaction in £ / cow	1,200	1,580	1,399	1,200	2,200	9,000	1,500	1,415.3
Cull Price £	800	1,151	858	610	1,200	754	1,016	912.7
Herd Replacement Rate	18.9	19.0	14.7	17.0	20.4	9.5	20.0	17.1
Cow mortality	1.35	4.76	0	3.77	3.08	0	0	1.9

Agri Academy

51 APPLICATIONS WERE RECEIVED FOR THE 2020 AGRI ACADEMY



Strategic Awareness Events

17 Strategic Awareness Events were delivered during this period:

Preparing for Lambing

Three meetings across Wales conducted by sheep specialist, John Vipond. 5 key points were focused on:

- 1) Ewe nutrition
- 2) Minimising lambing losses
- 3) Managing ewes in different levels of condition
- 4) Maximising use of home-grown resources
- 5) Better lambing outcomes.

Tenant Farmer Forums

Two meetings were held in Pembrokeshire with with George Dunn, Chief Executive of the Tenant Farmers Association, who highlighted the key changes on the horizon for tenant farmers, and focused on the following areas:

- 1) Different security of tenure year to year
- 2) Regulated rent
- 3) Fixed terms agreement
- 4) Open market rents
- 5) Agriculture only clauses
- 6) Landlord's reserved rights.

Follow-up surgeries on the topic of farm tenancies with George were offered to attendees.

Agrisgôp

Working together within a group, Agrisgôp members can learn new management skills, access specialist information and explore and develop viable futures for themselves, their families and their businesses.

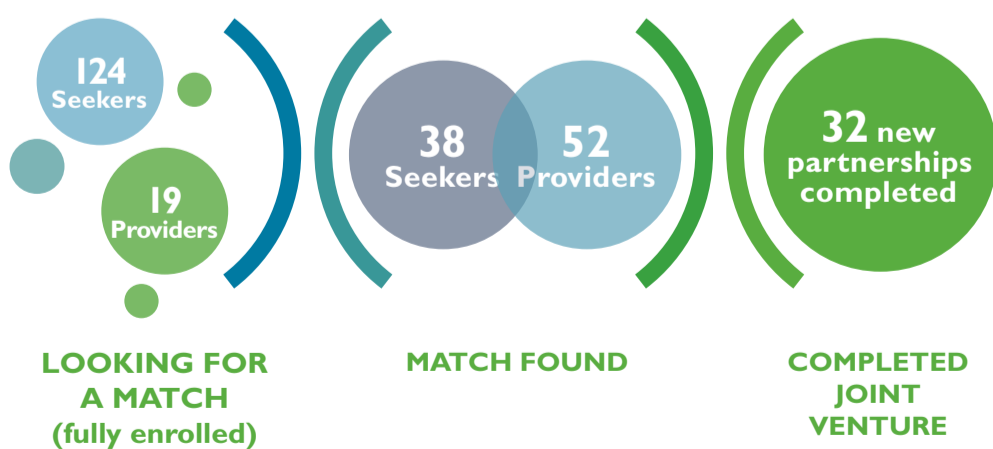
67 ACTIVE GROUPS with **548** MEMBERS attending a total of **61** MEETINGS DURING THIS PERIOD

Agricultural shows	Using social media
Reducing GHG emission	Marketing meat products
Sheep dog training	Water quality

Venture

582 EXPRESSIONS OF INTEREST SUBMITTED SINCE THE START OF VENTURE

232 ACTIVE PARTICIPANTS



49,216 ACRES OF LAND INVOLVED

Surgeries

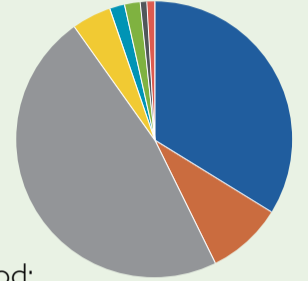
12 SURGERIES HELD with **61** ATTENDEES

4 different types of surgeries held during this period:

Marketing and Diversification	Tenant Farmers
Business Reviews	Planning

The chart shows the business that attended all of the surgeries according to their business sector:

■ Beef ■ Dairy ■ Sheep/Goats ■ Arable
■ Pigs ■ Poultry ■ Horticulture ■ Forage



Feedback from beneficiaries of Marketing and Diversification surgeries during this period:

"This surgery was a great spring-board for developing an idea."

"This surgery helped me learn how to start to progress our business from an idea into a plan of action."

"Helped me think about target sector, what I need to do next and the importance of getting the end product right."

E-learning

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

FARM HUMAN RESOURCES	FARM BENCHMARKING
PLANNING AND FINANCE	VAT – MAKING TAX DIGITAL

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

Training Courses

Course Name	Number completed during this period
Business Planning and Development	36
Marketing your Business	31
Book Keeping	29
Understanding your Accounts & Financial Statements	8
Financial Recording and VAT	6

ICT Programme

LEVEL 1	LEVEL 2	LEVEL 3
6-week training course = 45 individuals trained	One-to-one tutoring = 133 individuals trained	Workshops = 722 attendees

Workshop themes included:

- Creating a website
- WLBP Farm Records Facility
- Moocall – using calving & heat detection technology