WELSH PASTURE PROJECT

END OF YEAR REPORT 2024

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Ariennir gan
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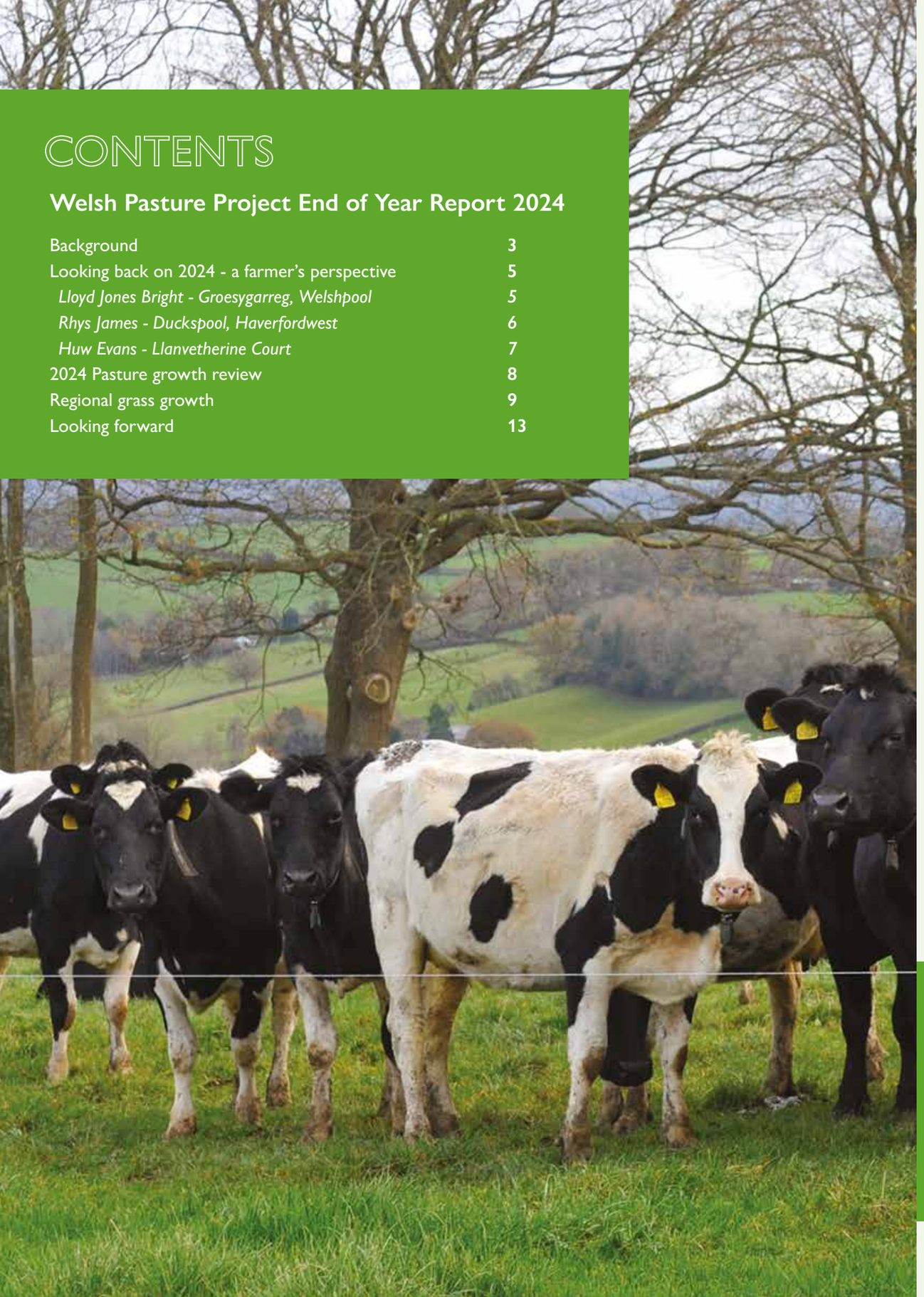

BACKGROUND

The Welsh Pasture Project provides regular information on regional pasture growth rates and pasture quality to enable livestock farmers to make informed, proactive grazing management decisions. It involves 19 dairy and 20 beef and/or sheep farmers who are measuring their pastures and providing feedback on growth trends.

With Wales' reliable rainfall, pasture is our "competitive advantage" in the local and global milk and red meat market. It is the most sustainable source of feed for our livestock and, when managed well, it is easily the most profitable.

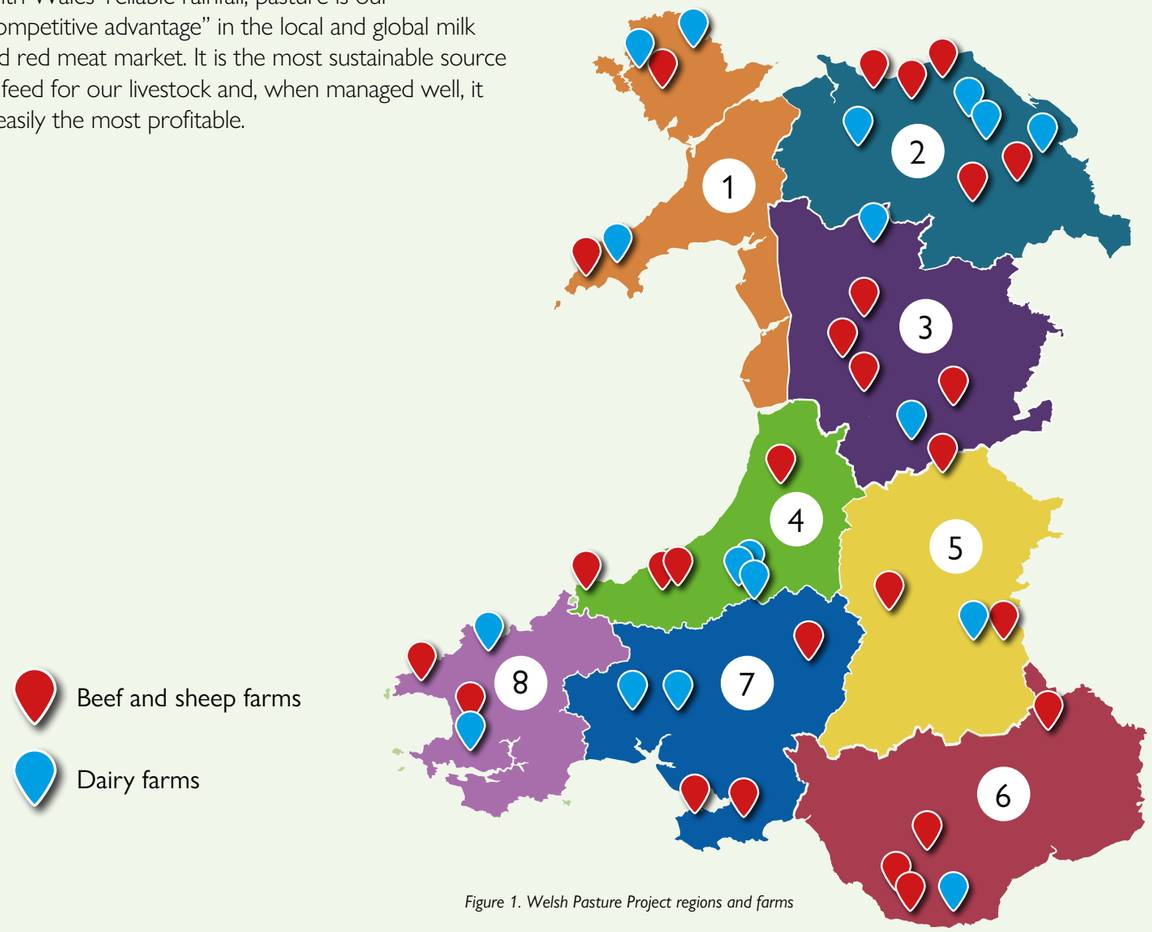

Figure 1. Welsh Pasture Project regions and farms

The aims of this project are to:

- ➜ Encourage farmers to measure pasture regularly
- ➜ Record regional pasture growth rates and share for other Welsh farmers to benchmark against
- ➜ Understand the impact of weather on pasture production
- ➜ Understand the impact of soil type, land class and management on pasture production
- ➜ Assist, share and develop decision making resources for grazing management

PASTURE MEASUREMENTS

All farmers used an electronic rising plate meter, which was calibrated and fitted with a plastic plate for consistency.

The standard UK question for dry matter estimate was used:

Pasture Cover (kgDM/ha) = 125x + 640

(x = compressed pasture height in 0.5cm)

MEASURING TECHNIQUE

- Each field or paddock was measured with a minimum of 30 "plonks" evenly spaced across the field in a "W" shape or a diagonal line.
- The farmer followed the same route for each measurement.

MEASUREMENT FREQUENCY

- Dairy farmers measured their grazing platform weekly or bi-weekly.
- Beef and/or sheep farmers measured a minimum of 20 hectares (ha) every fortnight.

RECORDING MEASUREMENTS

- Farmers entered their pasture cover measurements along with applications of manure or nitrogen fertiliser into Agrinet pasture management software. They then record any grazing or silage events too.

The above content was adapted from the Welsh Pasture Project – End of Year Report 2022 prepared by Precision Grazing.

LOOKING BACK ON 2024
A FARMER'S PERSPECTIVE

LLOYD JONES BRIGHT
Groesygarreg, Welshpool

Grass data sharing a good benchmarking tool for welsh dairy farm

Growing high-quality grass and measuring and recording rates of growth accurately during the grazing season allows a Powys dairy farm to produce more than two thirds of the total milk yield from forage.

Lloyd Jones-Bright and his father, Mark, milk 200 crossbreds on a grass-based system at 300-acre Groesygarreg, near Berriew, Welshpool.

Ten years ago they made significant changes to their farming policy.

It had been a high input-high output Holstein herd but they switched to spring-calving Jersey x Friesians, a smaller cow averaging 485kg that enabled grazed grass to be central to that policy shift.

It was a change in mindset instigated by Lloyd when he returned to farm after working as an electrician for four years.

A neighbour had been rearing heifers for a farm with a spring block-calving milking herd and Lloyd was impressed by what he saw when he visited that farm and others with similar operations. "It came down to simplicity and profit," he says, reflecting on why he decided to follow their lead.

Now aged 32, he has been building on that knowledge, including through sharing his grass growth data with the Farming Connect Welsh Pasture Project.

He walks the farm weekly with a rising plate meter and uploads the data to Agrinet.

Plate-metering grass regularly and turning cows onto optimum covers has improved grass use.

As well as helping other farms by sharing his figures, Lloyd says he also gains from others involved in the Welsh Pasture Project.

"It's about benchmarking, making sure that you are at a similar point to everyone else in the grass growth curve, picking up trends, similar to what you might when benchmarking with a discussion group."

Groesygarreg grows an average of 12tDM a year, with a total of 150kg of Nitrogen/acre applied annually across the farm in three dressings.

Cows are turned out to grass as they calve from the second week of February, entering paddocks at target covers of 2,400 – 2,500kgDM/ha and grazing to a residual of 1,700kg.

"We try to get down to 1,600kg but have found that if we push the cows too hard it impacts on yield so is counterproductive," says Lloyd.

Cows produce an annual average milk yield of 5,000 litres at 4.75% butterfat and 3.68% protein, with 3,720 litres produced from forage. Milk is sold to Arla.

In a normal year, the herd would be housed at the end of October, at closing covers of 2,200kgDM/ha, but with mild autumn conditions in 2024 and grass still growing in November, cows remained at grass until the beginning of December.

Between 5 – 10% of the farm is reseeded every year – in the last two years herbal ley mixes were drilled in a bid to provide feed during prolonged dry periods but growth was late kicking in in the spring therefore Aber varieties with plantain are now used as an alternative.

Clay soils make some paddocks wetter than others but paying attention to these, remediating compaction through sub soiling and introducing oxygen into the soil, is paying off with improved grass production.

The business rears all its own replacements and also has a broiler enterprise.

RHYS JAMES
Duckspool, Haverfordwest

Grass the 'backbone' of milk production for Welsh Pasture Project farm

Reseeding up to 15% of the 121ha grazing platform a year with modern grass varieties and clovers is key to producing high quality milk at a Pembrokeshire dairy farm.

For the last two years, Rhys James has been sharing his grass growth data through the Farming Connect Welsh Pasture Project but his interest in grass goes back much further.

When his family bought Duckspool Farm near Wiston, 69ha was promptly reseeded using late heading ryegrass varieties and a white clover mix and a further 24ha was drilled the following year.

Establishing new leys to aid grass growth and quality and milk production is a policy Rhys has carried forward, allowing the farm to produce 13tDM/ha a year.

Grass is measured with a rising plate meter weekly by herd manager, Richard Bevans, from February until the end of November and the data uploaded to Agri-net to provide an accurate picture of covers and growth.

Sharing that data through the Welsh Pasture Project gives other farmers a barometer for their own grass growth figures and is a useful benchmark for Rhys and his team too.

"It's nice to see where your farm sits in terms of the amount of grass grown, it keeps you on your toes," says Rhys, who farms with his parents, Nigel and Linda, and wife, Mererid.

"It is good to have that support network and to benchmark how your farm is performing. We can see which fields are falling behind on grass production and when we need to target those with lime, phosphate and potash."

Soil sampling is used to establish indices - testing last year was 100% funded by Farming Connect because Rhys undertook the work as part of a group – it is 80% funded on an individual basis.

"The testing showed that pH was below where we wanted it to be so we have spread 1.5t/acre of lime across the entire farm," he says.

Soils now average pH 6.2 and at index 2-3 for phosphate and potash.

Duckspool extends to 299ha of owned and rented land where a herd of 460 New Zealand Friesians cross Jersey cows is run on a paddock grazing system.

Cows produce an average annual yield of 6,000 litres of milk at 475kg solids to supply the First Milk creamery at Haverfordwest. The herd calves over an 11-week block from 15 February.

The grazing season starts in mid-February, when the herd is turned out by day only into target opening covers of 2,500kgDM/ha. The herd is fully at grass in early April, grazing to a residual of 1,600kgDM/ha.

Housing is in mid-November with the aim of closing covers at 2,200kgDM/ha.

Grass, says Rhys, is vital to the system. *"Ours is a traditional spring block calving system with cows only getting grass and some concentrates through the grazing season so we need plenty of grass and it has to be good quality."*

Concentrate use averages 1.5t/cow/year.

In recent years, maize has also been grown; 24ha was clamped this year as winter feed to be fed alongside grass silage. But grass is the "backbone" of the system, says Rhys, who was the 2017 winner of the British Grassland Society's grassland competition.

"It is still the main part of the herd diet for many reasons, including cost benefits. It is easily the cheapest feed to grow and scores well on the regenerative side of things too."

HUW EVANS
Llanvetherine Court

Data plays key role in new entrant's agroecology farming system

Using grazing management techniques, a first-generation farmer has improved pasture diversity and the health and resilience of soils on a Welsh livestock farm.

New entrant Huw Evans graduated with a master's degree in civil and environmental engineering but chose to follow a different career path when he returned to the land of his heritage to farm in Wales.

At Llanvetherine Court, Abergavenny, Huw established a herd of Belted Galloway suckler cows and a flock of Badger Face Welsh Mountain ewes, and added Large Black pigs, honey bees and a vineyard to the farming mix.

By launching an events and catering business, Three Pools, to provide a venue for parties, weddings and other occasions at the farm and an outlet for marketing meat from his own stock, he generates income to trial different regenerative farming techniques.

Data has played an important role in informing that transition, evidencing what changes are working, and what aren't.

One set of data Huw has been collecting for the last five years is grass growth, measuring grass weekly and sharing his figures with other farmers through the Welsh Pasture Project.

Although he says it is as important to visually assess how pasture is performing as it is to measure, he sees the project as a valuable service that allows the sharing of information with farmers across Wales.

Managing pasture in different ways, through mob grazing, over-wintering on deferred grazing and bale grazing, has lifted grass quality and growth at Llanvetherine Court.

"We are getting better results than when we first came here in 2017, the level of production, and the quality of production, are up," says Huw.

He has never applied synthetic fertiliser or lime, but the farm isn't certified as organic. "Organic doesn't go far enough for me," he says. "We need to rethink how farming goes beyond just not using certain chemicals."

For him, it is based on agroecology, the application of ecological principles to an agricultural system.

Belted Galloways are a good fit for his vision – he has built up numbers to 40 cows, followers and growing cattle, finishing on grass.

"They are really hardy, they can live outside all year round, and give birth by themselves, that's one of the biggest appeals of them, the unassisted calvings, and they are good mothers," says Huw.

Up to 60 ewes are tupped annually, in 2024 using a Ryeland ram.

Two outdoor-managed Large Black sows farrow twice a year and the gilts are grown on to produce bacon.

When it comes to grass performance, farmers must use their eyes in conjunction with measuring when evaluating their fields from week to week, Huw maintains. "It's about standing there in the field and looking at the quality of grass and, if something isn't perhaps not responding in the way you expected it to, to work out why."

Being part of the Welsh Pasture Project has incentivised him to measure every single week and plans to continue providing the project with his data going forward.

2024 PASTURE GROWTH REVIEW

A challenging wet spring proved difficult times for many farmers across the country, with heavy grounds suffering from too wet conditions for turnout, but also slower grass growth with an average of 32.4kg DM/ha up in late April between red meat and dairy growth rates, compared to 46.2kg DM/ha the same time in 2023. It was a difficult time for those on wetter ground, grass available but wet conditions. However, from peak grass growth in May at 81.5kg DM/ha between red meat and dairy, a colder June meant a drop in grass growth before settling, especially on dairy systems. A mild start to the Autumn meant grass growth plateaued with those who kept grazing seeing good growth at an average of 25.2kg DM/ha which may seem low but on average for Autumn/early Spring.

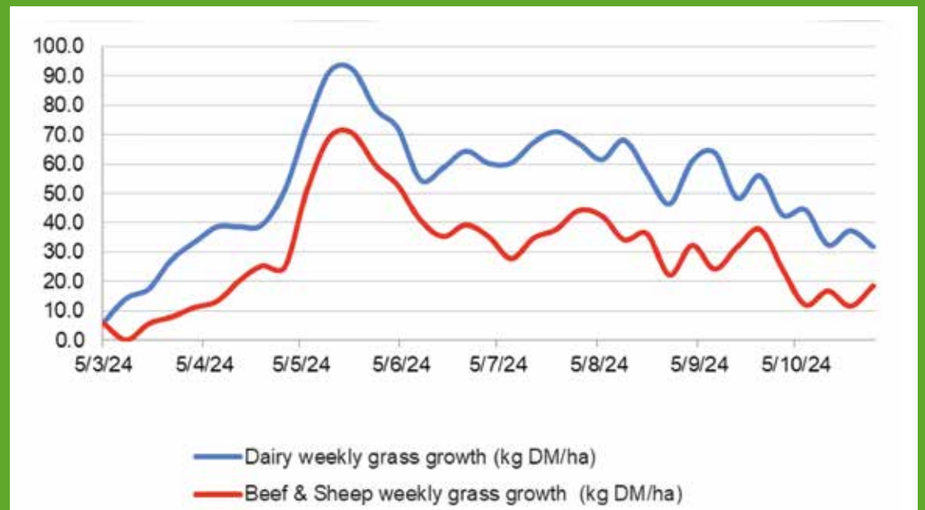

Figure 2. Welsh Pasture Project pasture growth curve 2024

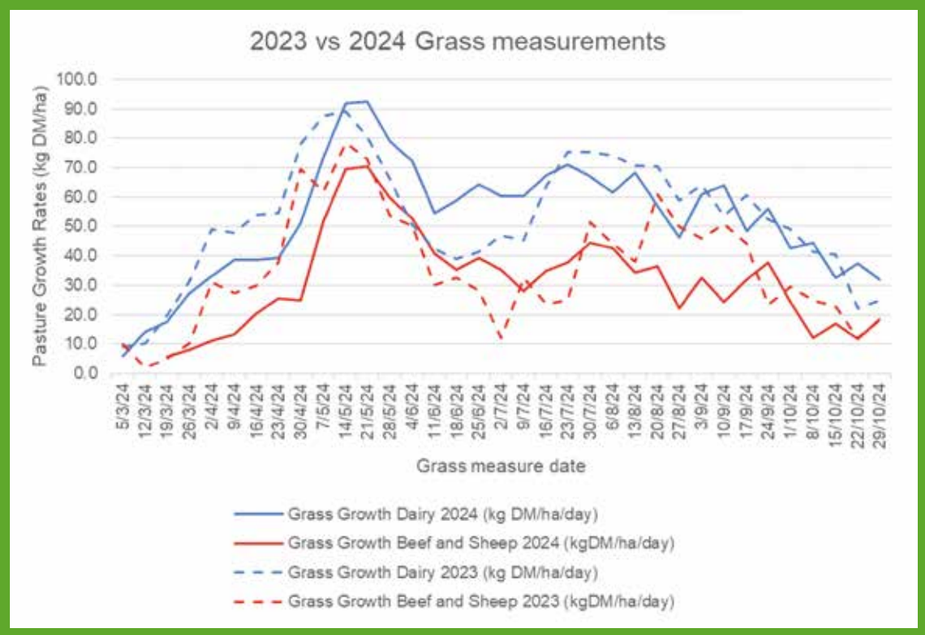

Figure 3. Comparison between 2023 and 2024 grass growth

REGIONAL PASTURE GROWTH CURVES

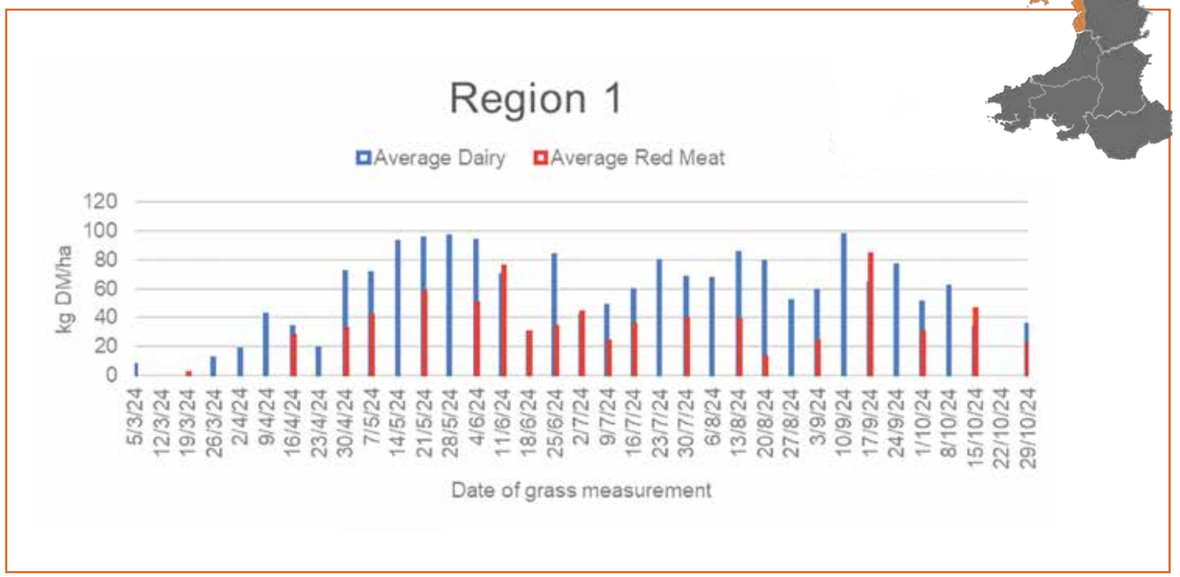

Figure 4: Region 1 grass growth averages

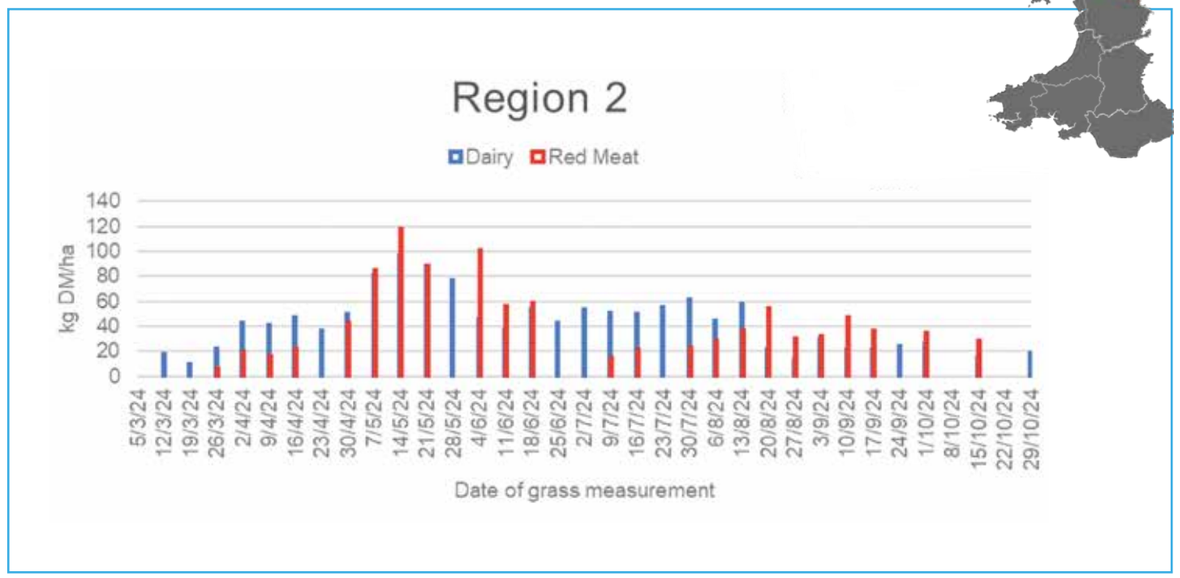

Figure 5: Region 2 grass growth averages

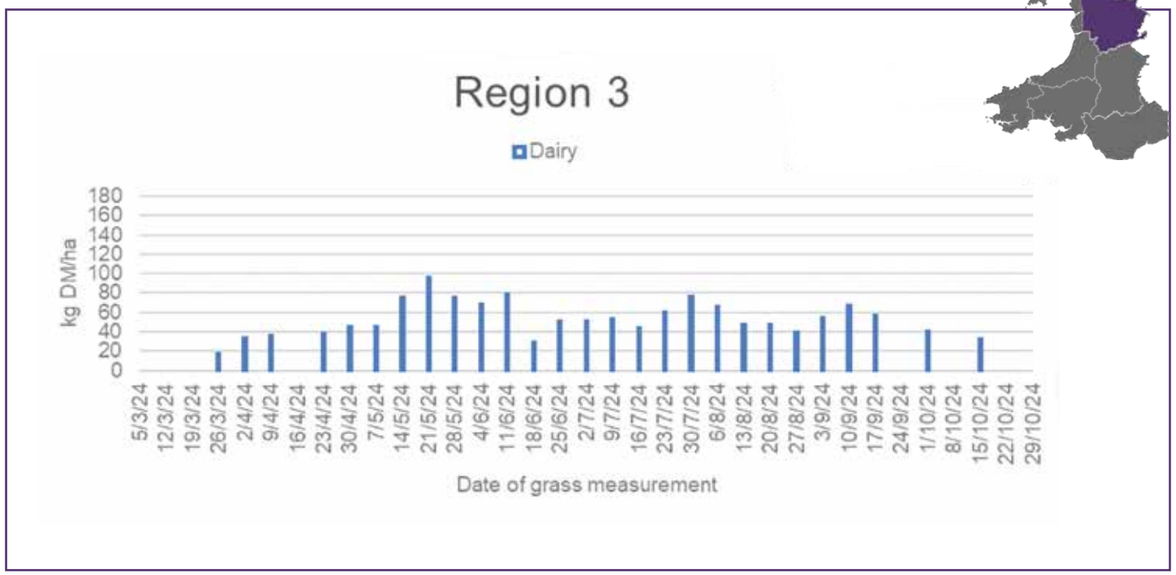

Figure 6: Region 3 grass growth averages

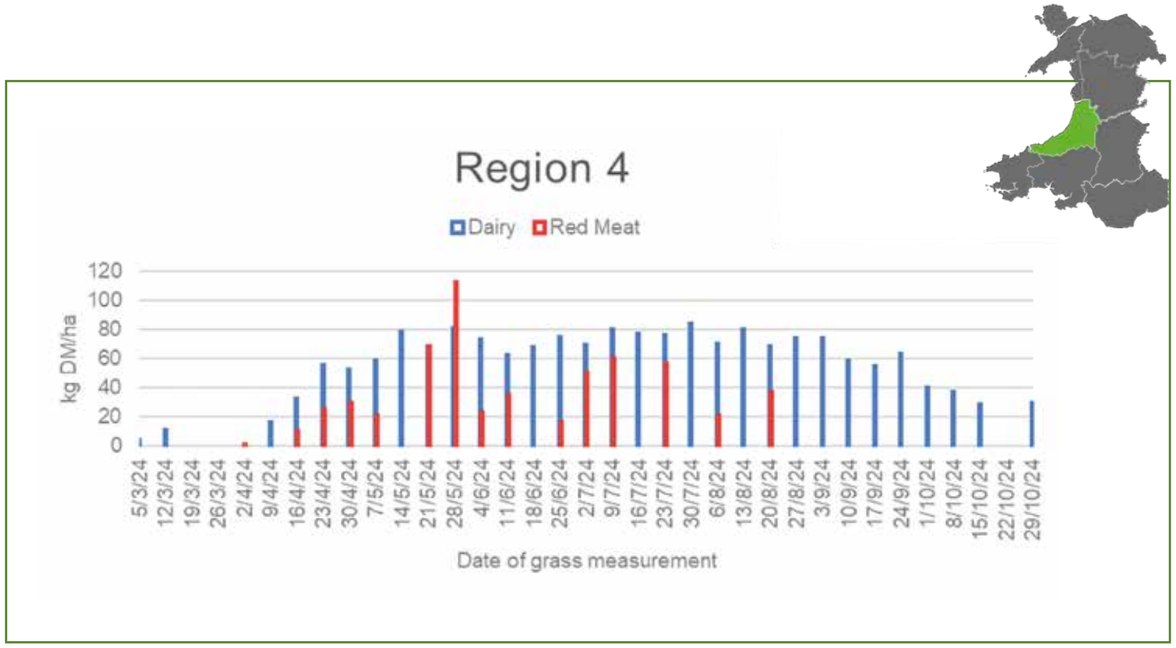

Figure 7: Region 4 grass growth averages

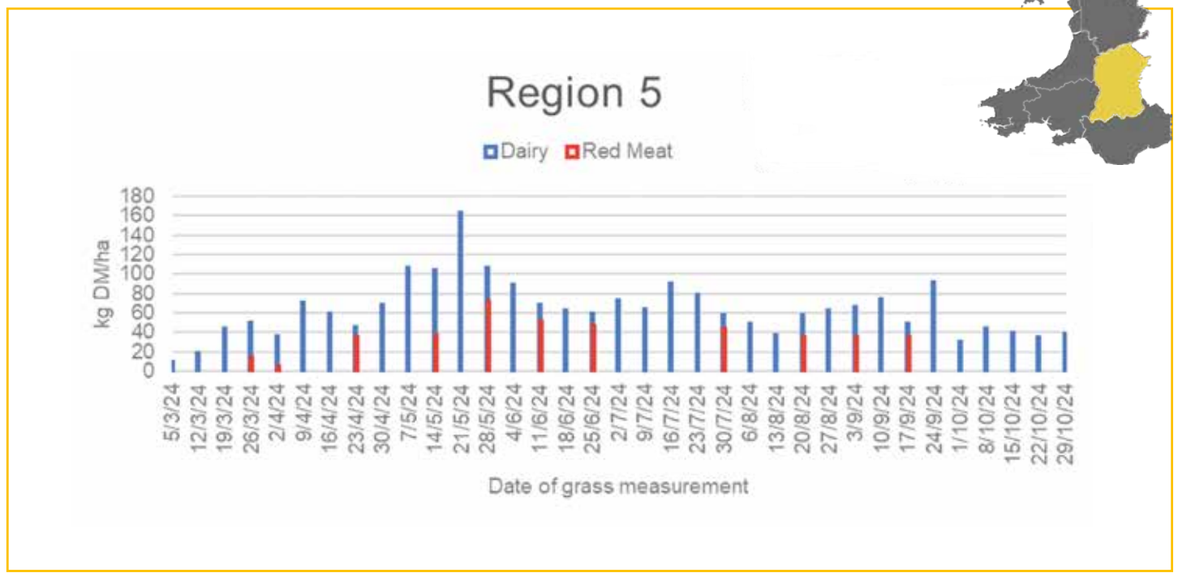

Figure 8: Region 5 grass growth averages

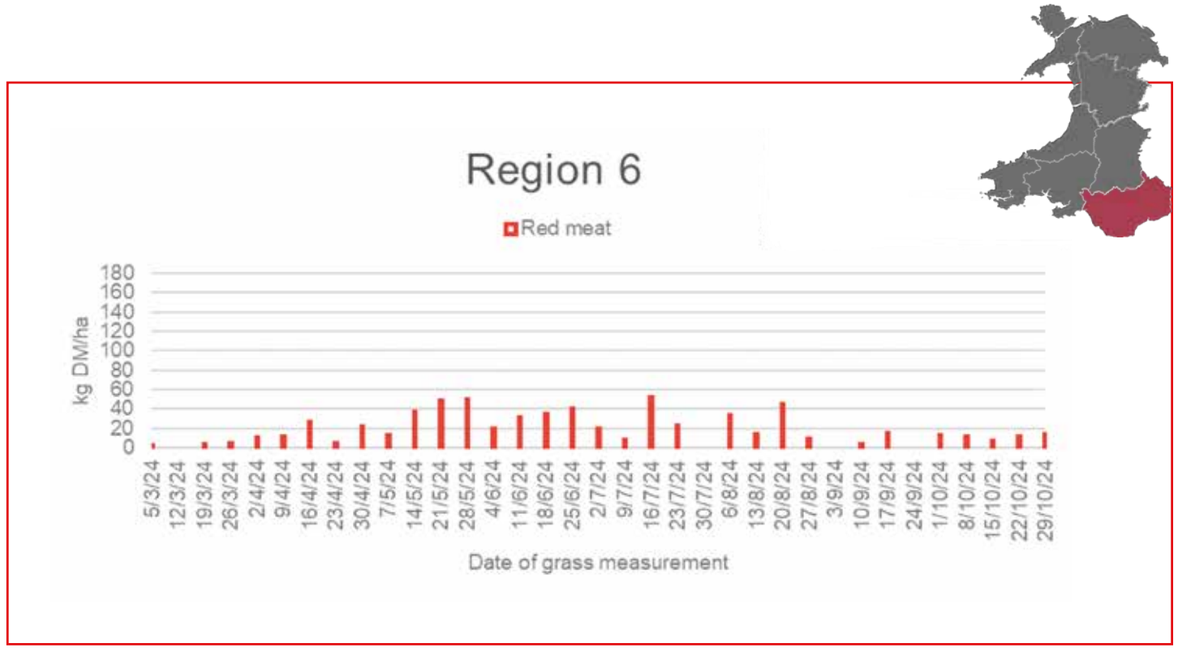

Figure 9: Region 6 grass growth averages

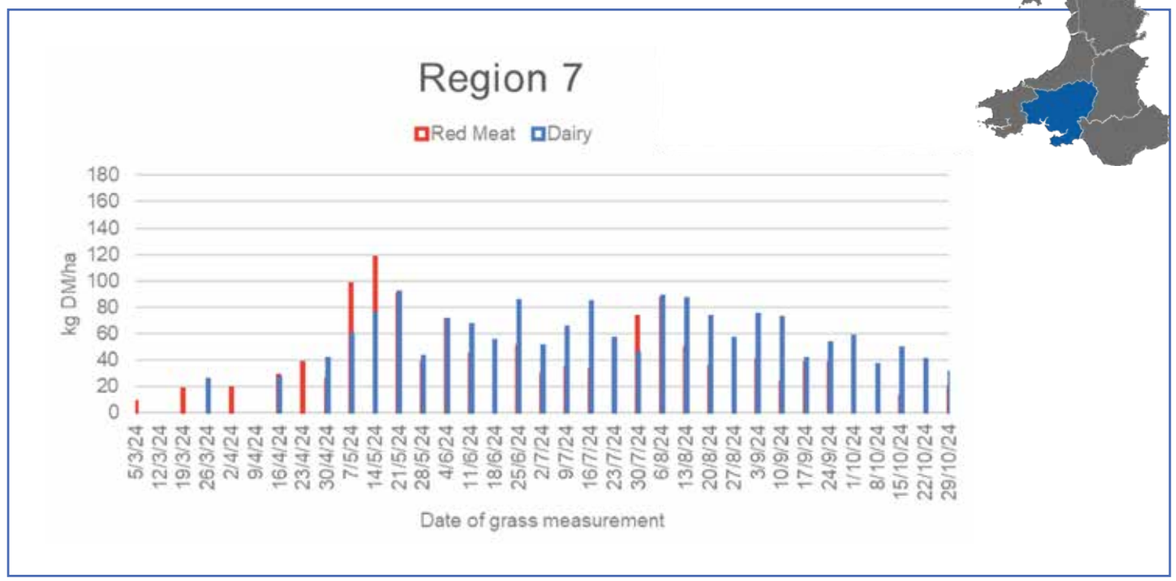

Figure 10: Region 7 grass growth averages

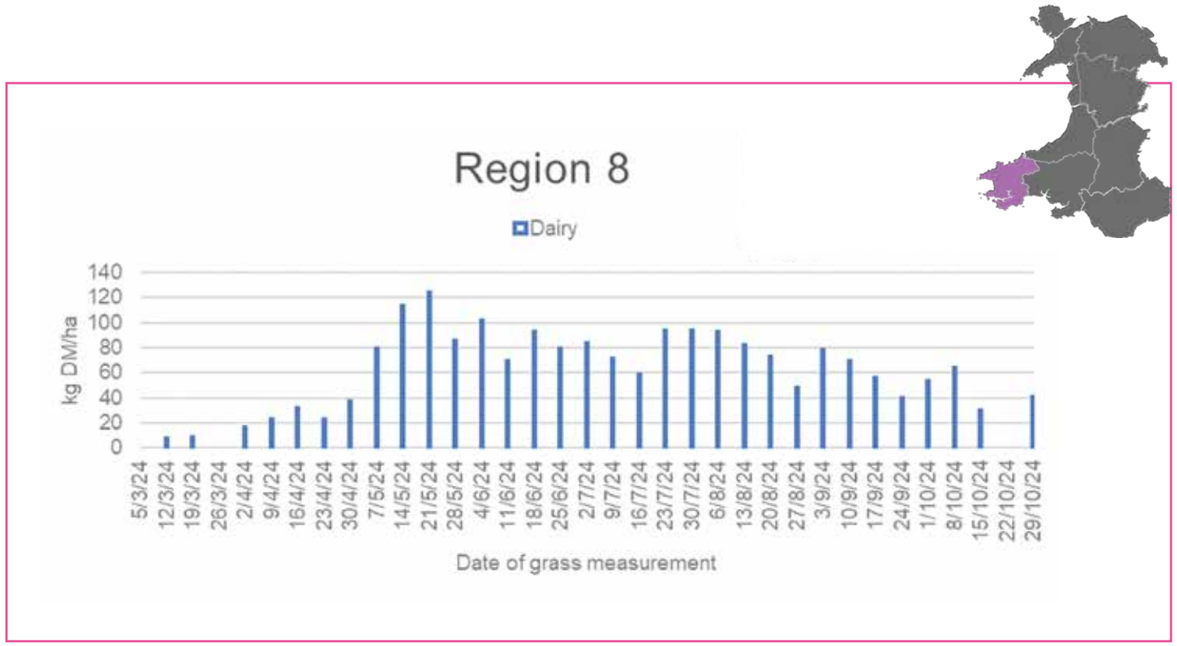

Figure 11: Region 8 grass growth averages

TOTAL PASTURE GROWTH FOR 2024

On average, dairy farms across Wales grew 17.6tDM/ha, 4tonnes more than previous year. However, beef and/or sheep farms grew 7.7tDM/ha, similar to the 2023 season. The graph below shows the estimated tonnes of dry matter (tDM/ha) grown on dairy and beef/sheep farms throughout the eight regions that are part of the Welsh Pasture Project over the previous two years.

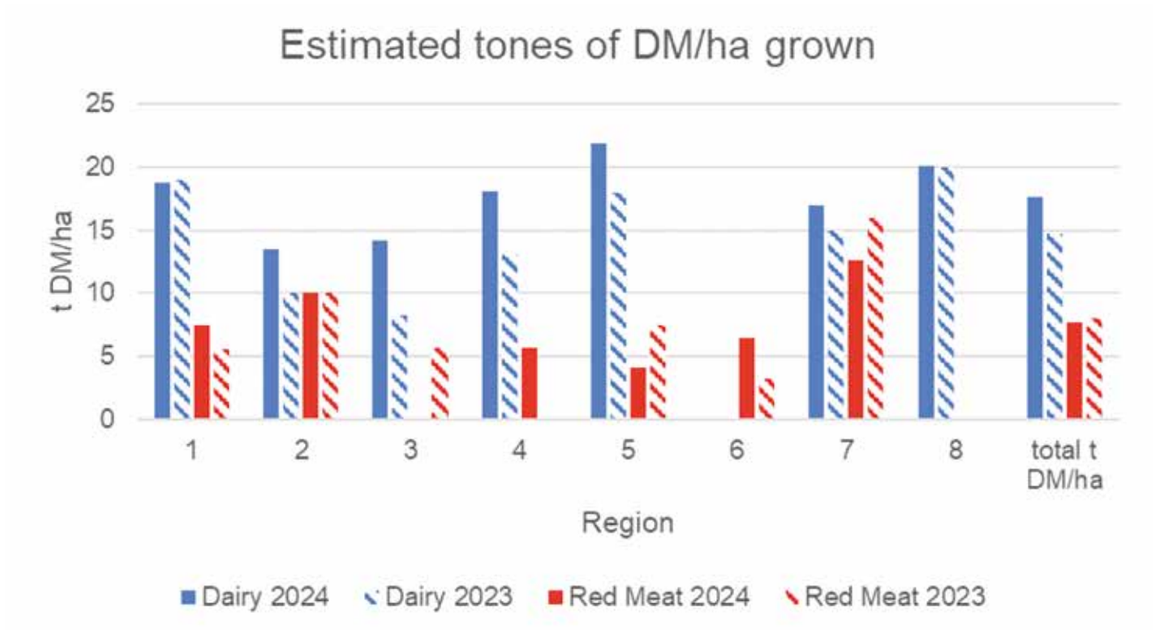

Figure 12: Estimated tonnes of DM/ha grown in 2023 and 2024

Looking forward:
Your current efforts are laying the groundwork for the 2025 grazing season by completing your final round well. Although we cannot predict the weather, we can position ourselves to benefit from it as much as possible.

Reaching average cover goals for the 2025 grazing and, consequently, closing average cover in 2024 are the primary KPIs. Paddocks should have been cleared out as much as possible during the drier months of August and early September.

Remember that you can help by adjusting your grazing wedge in the spring.

We would like to take this opportunity to thank all the contributing farmers who have submitted their grass measurements throughout the 2024 grazing season. Their commitment and willingness to be a part of the project allows us to provide the latest regional grass growth figures for Wales regularly throughout the season.