

Focus on forage quality drives business growth

Maximising silage – and milk from forage – potential

Seeing, first hand, what a 'little and often' approach to silage making can achieve has led one Welsh dairying business to review its forage policy and adopt an autumn-calving system.

text **Emily Ball**

Two trips to the Netherlands changed the Evans family's thinking about the role of high quality forage production at their South Wales-based dairy unit. The levels of performance they saw and the ideas they came back with have helped to

change the direction of their business as they plan for the future.

Pembrokeshire-based producers Nigel, Susan and Stephen Evans currently milk 335 spring block-calving Jersey x Friesian cows at Spittal Cross Farm, near

Haverfordwest. Since 2000 the system has focussed on grazing, supplemented with around one tonne of concentrate fed through the parlour. With grazed grass playing such a large role, conserved forages tended to slip down on the list of priorities.

"We made silage primarily for young stock and dry cows, and to feed in the shoulders of the season, and it wasn't a top priority," says Stephen. "So when I was invited by ForFarmers to visit the Netherlands to look at conserved forage production in late September 2015, I wasn't absolutely sure what relevance it would have to my

Feeding forage: visiting Dutch units changed Stephen's approach to silage making.





Stephen Evans: "What I saw really opened my eyes"

business. But I'm always open to new suggestions and, in fact, what I saw really opened my eyes to the possibilities of high quality forages in a dairy business." Stephen visited units where producers focused on providing the cow with the best possible forage and system to utilise it in. High yields followed as a result. "We had been taking two or three cuts of grass silage, but in Holland they take five, six or even seven cuts of high quality silage, every five weeks or so, from smaller areas."



	UK	Netherlands	difference
dry matter (%)	32.1	45.4	+13.3
crude protein (%)	13.4	17.2	+3.8
D value	68.3	79.3	+11
pH	4.2	5.0	+0.8
AD lignin	25	18	-7
lactic	79	32	-47

Table 1: First-cut silage results, 2016

He says that the way the Dutch producers approach grass harvesting is similar to the way he uses grazed grass in an extensive system. "We use a rotation to ensure that the grass is available to the cows at the best possible quality, high energy, good protein and the right dry matter.

"We saw producers cutting when the grass is ready, not when the contractor is booked. This ensures that only the highest quality grass is ensiled. It really made me think about what could be possible here in South Wales."

In October 2016 Stephen went back to the Netherlands with his father Nigel, accompanied by ForFarmers' James Wilyman. Again the pair were impressed with the focus on high quality silage and cost control.

"The producers we spoke to and spent time with knew every single cost on farm, down to the eurocent. The attention to detail across the board, but specifically to silage making, was second to none," says Stephen. "They cut at the right time and the wilting, clamp management and feeding out were exceptionally well managed. They didn't use tyres on the silage clamps, only sheets and sand bags. And many put a layer of sand across the top of the clamp.

Future opportunities

"None of the cows we saw were fed more than two tonnes of concentrate per lactation and they had excellent milk solids and fertility. The right genetics were important, but the high quality forage was crucial to achieving these results."

After Stephen's first trip to the Netherlands the Evans family spent time reviewing the business and future opportunities, and they developed a plan to move to an autumn block-calving system.

"As the business continues to grow we have found ourselves restricted by the area that we have available to graze," explains Stephen. "Stocking rates have risen in recent years and our land is quite fragmented, making meeting the cows' needs with grazing increasingly difficult.

Instead we will look to utilise the good quality grass that we can grow here in Pembrokeshire through quality silage and use it to drive the business forward, and enable us to increase herd size.

"This summer we're buying in about 200 autumn-calving cows and delaying mating for our spring block, with the plan to be totally autumn calving by 2018.

"We did make some of our own silage already and have invested in some more machinery. From this April we'll be looking to take multiple smaller cuts of silage, when the grass is at the right quality, and will follow the Dutch lead on clamp management and feeding out. The Dutch are absolutely streets ahead of us when it comes to ensiled forages and I think we've got a lot to learn from them."

Silage quality

An analysis of first-cut silage taken from the UK and the Netherlands in 2016 highlighted the disparity in silage quality, which is holding back some UK herds from producing more milk from forage, says ForFarmers' Nick Berni.

"Our analysis results found that first-cut silage in the Netherlands was much higher quality," says Mr Berni. "Dry matter values were 13.3% points higher, crude protein was 3.8% points higher, and most importantly D value stood at 79, as opposed to UK levels of 68."

"High forage quality results in higher milk from forage," adds Mr Berni. Figures from the Kingshay costing service in October 2016 show average yield per cow in the UK stands at 8,078 litres, with milk from forage at 2,633 litres (32%). The equivalent average milk yield per cow in the Netherlands stood at 8,697 litres. Of this, 4,088 litres were produced from forage (47%), with the top 25% of producers achieving 54%.

"Dutch herds are producing between 1,400 and 2,400 litres more milk from forage compared to their UK counterparts," continues Mr Berni. "And, on average, they are feeding 750kg less concentrates per cow. There is also potential to improve rumen health and milk quality."