

Award-winning approach to producing forage

An eye on future challenges and a desire to increase business sustainability means that a focus on forage has become even more important to one dairying couple.

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Maize silage: a vital source of home-grown starch in the milking herd's ration

Reducing bought-in feed costs by increasing utilisation of home-grown forage has always been a key objective for one Devon-based producer. Since taking on Waterford Farm, on a Devon County Council tenancy in 2015, Chris Creeper and his wife Connie have worked hard to develop their Axminster-based herd and producing large volumes of high-quality forage has been a fundamental business objective. “For us it is all about getting better, not necessarily getting bigger,” explains Chris. “We want to be as self-sufficient as possible. Producing high quality home-grown forage, as well as having cows that can best utilise it, is key to us achieving this objective. “Our drive to make the most of what we can produce ourselves has influenced everything from the breed of cows in our herd and what we feed, through to the farm’s reseeding schedule, our approach to silaging, and future crop rotations. We want to keep ahead of future developments and plan our forage policy to help mitigate against the challenges we shall face in the future.”

Forage ‘cornerstone’

The pair currently manage a herd of 140 milkers, comprising Holstein Friesians, Jerseys and Ayrshires. The Holsteins produce an average of 31.2 litres per day and the remaining breeds an average of 22.3 litres. Butterfat currently stands at 5.36%, with protein at 3.66%, and all milk is supplied to Saputo on a Dairy Crest contract.

Chris is keen to keep things as simple as possible when it comes to feeding and it is no surprise that forage forms the cornerstone of the herd’s diet. “We aim to house cows for six months of the year and have them out at grass for six months,” explains Chris. “When they are housed, they are fed maize silage, grass silage, and some urea through the mixer wagon, at a total rate of 4.4kg per cow per day, topped up to yield via the parlour on an 18% protein concentrate.

“During the grazing period we will buffer feed with a 16% protein concentrate and also feed some chopped round bale silage through the mixer wagon to provide fibre.”

When the couple first took on the farm tenancy, Chris



Chris Creeper: "We plan our forage policy to help mitigate against the challenges we shall face in the future"

quickly established that many of the grass leys needed reseeding.

"Most of the grass on the 74 hectare farm had been permanent pasture and the quality of the grass needed to be improved dramatically," he says.

Reseeding policy

Chris consulted with ForFarmers' Louise Woolcott and embarked on a wide-scale reseeding policy to rejuvenate the grass leys, aiming to reseed 12 hectares a year. Five years later, 95% of the farm has been reseeded and only a small section of flood-affected land remains. "The plan is to ensure that we have no leys above four years old, because it is at this stage that weed grasses start to appear and grass quality diminishes. We talk to Louise regularly and currently use ForFarmers TOPGRASS varieties to provide the type of quick growing, high sugar, highly digestible grass we need."

Chris has also embraced a multi-cut approach to silaging and is pleased with the results that he has achieved. "When operating a more conventional approach to silaging, cuts were often taken too late, when the grass was in the three-leaf stage of development," he explains. "This resulted in some

high fibre silage that would require significant concentrate supplementation to make up for nutritional shortfalls.

"The multi-cut system means that we take a good quality cut early in the season – around mid-April – and then keep taking cuts as and when required; ideally when grass is in the two-and-a-half-leaf stage. We mow and ted and, by having our own kit, we can get the grass off when it's at its best."

Grass silage results have been good with the latest silage analysis recording 35.7% dry matter, 18% protein, 12.2 MJ/kg ME, and a D value of 76.

Targeted approach

To maximise the quality of grass grown at Waterford Farm, and to minimise the use of bought-in fertiliser, soil and slurry samples are regularly analysed to help formulate targeted fertiliser plans.

"We need to know the N, P and K values in the soil to help identify areas of nutrient deficiency. Our slurry is also analysed so we can then come up with a detailed fertiliser plan, identifying which areas of fields need which inputs and whether our slurry is able to provide these, and at the right levels.

"Our milk contract demands more fat and protein, so we needed to increase the starch in the cows' ration," explains Chris. "We decided to plant 12 hectares of maize in 2019 to add to the ration.

"I hadn't grown maize before, so decided to grow Pioneer 7034 and 7036 – both varieties that we thought were 'bomb proof' given our lack of experience.

He harvested the maize early and yields were good, at around 44 tonnes per hectare, with the silage analysing at 12 MJ/kg ME, a D value of 76.2, and starch at 32.9%. "We treated the maize with a 11 CFT additive and the resulting silage has been stable – there is minimal waste at the top of the clamp."

"Our aim is to be as self-sufficient as possible and lucerne seems like a sensible thing for us to grow in the future," he says. "Soya is just going to get more expensive and there are the environmental issues associated with its use. So it makes sense for us to grow as much of our protein requirements on the farm as we can." |

Jerseys help to increase the level of milk constituents produced by the herd



Cow comfort: rumination is key to making the most of home-grown forage

