

Top production Brown Swiss herd relies on Safesil for silage preservation

High quality, hygienic and consistent silage has helped ensure Clive Davies has the highest production herd of pure Brown Swiss cattle in the UK.

Feeding high quality and consistent silage with no abrupt changes in ration are cornerstones of the strategy for Clive Davies's award-winning herd of Brown Swiss cattle.

"I believe in the three Cs – that Cows Crave Consistency," says Clive, who farms with his wife, Pam at Treffgarne Farm in Lampeter Velfrey near Narberth in Pembrokeshire, and produces an impressive average of 9,600 litres at 4.23% fat and 3.51% protein (milk sold in the 12 months to Jan '15) – more than any other UK producer with a herd of pure Brown Swiss.

But achieving consistency has not always been easy according to Clive, who likes to mix at least two cuts of silage for feeding every day. This means at least two clamps are open at any one time, and – because their faces are wide – progress through the clamp is inevitably very slow.

"The problem was that we were getting heating and spoilage at the face which we started to think was inevitable," he says. "We have tried a variety of inoculants over the years but however good the silage quality seemed, it always became very unstable at the face."

After dumping one fourth cut altogether as 'the cows wouldn't look at it' and on the verge of taking another cut in autumn 2010, Clive decided to call in Andy Strzelecki from Kelvin Cave Ltd to see if he could suggest another approach.

"The trouble with fourth cut is there's a great potential for butyric fermentation," says Andy, the company's technical director,



explaining how low sugars and low dry matters conspire against good fermentation.

For this reason, he recommended scrapping the idea of a bacterial product altogether as results with inoculants can be unpredictable, and opting for a preservative instead.

Choosing the salts-based product, Safesil, containing human food-grade ingredients, he said this would do a more consistent and reliable job and was the only product on the silage additives market which had been guaranteed to offer prolonged storage stability in independent trials [Journal of Dairy Science, 94:824-831].

"There are some situations in which nothing else will do the job, and this preservative was the obvious choice to ensure we'd achieve a hygienic fermentation," says Andy.

Since introducing Safesil, Clive says he's 'over the moon' with the quality of his silage, which now stays cool and clean at the face. However, he closely adheres to other silage-making principles which he says are also essential for maintaining nutritional and hygienic quality.

"We always cut young – in the first few days of May and then every five to six weeks – we wilt fast and seal with a double layer of ClampFilm within 24 hours of cutting," he says.

"The secret of wilting is to ted within two hours of mowing to minimise leaf shatter and it's really important to use the right rate of preservative," he adds.

"If we made poor quality silage I think we would probably be out of business so it was essential that we got it right; it's probably the most important job we do all year," he says.

"The basis of our system is having quality silage and it would be impossible if we weren't using this preservative," he adds. "It means the cows get exactly the same ration every day so we have stuck with Safesil for every cut since we first started."

Another advantage of the silage stability is that heifers can be fed every other day, which is a bonus for a business described as 'run by two pensioners' who only have help on three days a week.

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Consistency in feeding is augmented by consistency of milking and this has been achieved by the installation of two Fullwood Merlin robots. The 125-head herd is milked on average 2.5 times a day and yields have continued to improve since the switch was made.

“We have a target of 45 litres within 12-14 days of calving and we hope for a peak of 50-60 litres at 35 days and to be maintaining 40 litres at day 200,” he says.

This pattern leads to a flat and sustained lactation curve, which is pushing many heifer yields towards 12,000 litres and some cows over 14,000.

He cites the home-bred heifer, Garne Peter Wen, whose output reached 11,440kg at 4.18% fat and 3.6% protein (305 days; value £3,907) and went on to a giddy 14,353kg at 4.21% fat and 3.6% ptn in 396 days, valued at £4,885.

“She’s due to calve in six weeks and is supposed to be dried off today but it’s a hard job to cut the milk down,” smiles Clive.

Current milking ration for the Garne herd of Brown Swiss

Second cut silage	17kg
Third cut silage	17k
Blend	2.5kg
Caustic wheat	3kg
Chopped dried lucerne	2kg
Protected fat	0.5kg
Dairy mineral	0.15kg
Urea	0.05kg

Fed for maintenance plus 23 litres with 0.21kg/litre concentrates in the robots.

This same home-bred heifer also took the reserve heifer championship at the 2014 Royal Welsh Show, standing alongside her herdmate who was reserve champion cow.

Other prizes have flooded in, ranging from the NMR champion herd (all breeds) in Pembrokeshire to the county’s highest lactation value cow, Garne Flash Kerry 40, who produced £4,867-worth of milk in 305 days.

Clive is fulsome in his praise for the Brown Swiss breed and says it’s the production potential above all which most appealed to him when he switched from black and whites back in 1989.

“It wasn’t long after quotas had been introduced, and of course, they’re basically a fat quota,” he says. “The Brown Swiss produces more protein in relation to fat than any other breed, so she’s perfectly suited to a quota situation.”

Paid for protein since the outset on a cheese-making contract with nearby Dansco Dairy, he feels the breed will truly come into its own with increasing exposure to world trade and a growing demand for milk solids.

“I know this is the breed for the future - white-water contracts are finished and we need better quality milk - and I am on a mission to convince the others of the folly of their ways,” he laughs.

As president of the Brown Swiss Cattle Society - a position he is rumoured to have been offered on the strength of the number of breeders he has converted - he is obviously making inroads.

Also praising the breed’s other qualities, he cites its laid-back (albeit quirky) temperament, its strong, black feet and its generally good health.

With virtually no milk fever or ketosis in the herd, and never a displaced abomasum in 25 years, he adds:

“Calving ease is one of the biggest virtues of all.

“Our goal is to get the herd average up to 12,000 litres with solids of almost 8% which will give us nearly



Clive Davies took the NMR herd championship amongst other awards in 2014.

1,000kg combined fat and protein,” he continues. “Of course, I know we should be more ruthless on the bottom 25% as they are dragging the average down.

“We know we have a long way to go but I believe it’s achievable, and when we finally get there - well, perhaps that’s when we’ll retire,” he says. “Like everyone who works with them, we’ve fallen in love with the Brown Swiss breed and for the moment we’re definitely carrying on,” he says. “We’re enjoying what we do and of course we like winning prizes - and beating the black and whites is a particularly lovely feeling!”