

## Small changes have a BIG impact on dairy margins

**North Yorkshire dairy farmer, Andrew Ayrton has wiped £11,750 off his annual feed bill and now has one of the highest margins over purchased feeds in the county – despite his marginal location.**

Achieving a margin over purchased feed of 18.35p per litre demands a concerted effort to produce quality home-grown feeds. But for North Yorkshire dairy farmer, Andrew Ayrton, it's involved no more than minor changes to the way he grows his ration and feeds his cows.

Farming at Bower House in Eastby on a 139 hectare (345 acre) tenancy on the fringes of the Yorkshire Dales, growing feeds on the farm will always present challenges. Grass silage can be wet and needs to be carefully balanced; while growing wheat involves dodging the catchy weather and negotiating tricky terrain on his marginal cereal land.

So, when Mr Ayrton discovered a better way of producing his forage he grasped the opportunity, and found he not only made an immediate net annual saving of over £7,000 for his 220-cow herd, but he also introduced significant knock-on efficiencies.

The process involved bringing his cereal harvest forward by several weeks and changing the way the crop was processed and stored. In particular, it involved doing away with a urea-based product which he was mixing with mature wholecrop silage to help improve its feed value and stability.

"We've always wanted to make high dry matter wholecrop silage as it produces a good buffer feed when mixed with grass silage and helps keep the cows tight," says Mr Ayrton. "But the ammonia-releasing product we were using required us to achieve such a high dry matter in the wholecrop that we often couldn't harvest until into September.

"This left us very little time for our autumn cultivations which were often carried out as the weather was closing in," he says. "It also presented difficulties at the clamp where an extra man was needed to mix the urea with the forage as it came in from the field.



*Farmer Andrew Ayrton (centre) with his son Tom, who is studying at Askham Bryan College, in discussion with Michael Carpenter of Kelvin Cave Ltd.*

"This was particularly time-consuming as the bags sometimes set solid and we had to find ways of breaking them up before they could be mixed."

However, the main driver behind the change was Promar's principal consultant, Jonathan Hill, the main advisor to the farm. He said: "When things are very tight you have to look at your costs, and at £11,750/year, this one was very high. Added to this was the fact that the forage mixed with the urea never seemed to analyse as well as it should.

"So, I recommended to Andrew that if he removed the urea from the wholecrop, the amount of soya he would have to buy to make up the protein shortfall would be a fraction of its cost," he says.

Keen to maintain a high dry matter crop, Mr Ayrton turned to feed and forage preservation specialists Kelvin Cave Ltd, whose northern manager, Michael Carpenter, offered advice.

He said: "Wholecrop can present particular challenges as it is more fibrous than grass silage and can be difficult to consolidate, especially when very dry."

For this reason, he recommended using the preservative, Safesil, rather than a bacterial inoculant, some of which can give variable results.

"Safesil's ingredients are used in human food preservation and have been independently proven to eliminate the activity of yeasts and guarantee prolonged storage stability (Journal of Dairy Science, 94:824-831)," he continued.

"This is particularly important for wholecrop forage, which will inevitably come in from the field with a covering of spoilage organisms which have the potential to grow rapidly," he says. "This can not only result in significant dry matter losses but is likely to reduce palatability and dry matter intakes."

Mr Ayrton used Safesil for the first time in 2016, applying it from an IBC on the forager.

"This immediately freed up a man and machine at the clamp where we no longer had to mix the urea with the crop coming in," he says.

There was also a bigger window for

