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# Taking on 'Ag Net Zero'



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Excerpt: One of the greatest challenges faced by farmers, is the ability to make the right decision with confidence. We visit Myerscough College Farm who have been making bold moves and serious headway in the pursuit of profitable net zero.

Myerscough College Farm, also known as Lodge Farm, runs a wellknown trailblazing dairy farm business in the heart of Lancashire. From being one of the first to produce TMR's in the 1970's, to being one of the first to adopt a self-propelled diet feeder back in 2021, Myerscough is active in the pursuit of more efficient farming practices for all.

But these moves are not without careful calculation and consideration, from both the farm team and their professional consort.



# Long-Standing And Forward-Thinking

For three decades Andrea Gardner has been an integral member of the Myerscough College Farm team, starting out as Farm Secretary, moving to a Farm Business Development role before progressing to her current role as Farm Director. During this time, Andrea attained an MSc in Agriculture and Professional Practice at SRUC.

Andrea also heads up the Lancashire Farmers Network and offers one-to-one advice on the DEFRA British Countryside Fund in Lancashire. During her career, Andrea has encountered and navigated many 'curve balls', something that is akin to most farmers. Today, Andrea is actively helping the sector to develop and pursue solutions to the food security, carbon net-zero and biodiversity challenges.



# A clear and sustainable pathway

'Ag Net Zero Challenge' - the multi-million pound bid from The Lancashire Colleges to reduce carbon emissions – was the brainchild of Andrea, within her role as Farm Director at Myerscough College.

Along with Harper Adams University and the College of Agriculture, Food and Rural Enterprise (CAFRE), Myerscough are taking on the challenge in 4 steps. Here's a synopsis of their headline actions and plans within those steps:

# Step 1: Increase efficiencies and improve productivity

- Installed a robotic milking system to increase labour efficiency
- Taken on a Dairy Lead for better overall stockmanship
- Working with vets to tackle mastitis and reduce antibiotic usage

# Step 2: Reduce feed and fertiliser inputs

- Invested in a KEENAN self-propelled diet feeder
- Embraced InTouch feed management technology
- Conducted Alltech Navigate feed waste survey
- Improved nutrient management and increase milk from forage

# Step 3: Improve soil and hedgerow management

- Invested into a low impact seed drill bar
- Invested into an umbilical system with dribble
- Practicing minimum tillage cultivations

# Step 4: Renewable energy (investigation stage)

- Installation of solar panels
- Embracement of electric farm vehicles

Capitalising on their experiences and knowledge power, and as part of the challenge, Myerscough have recently invested their capital funding into a training vehicle to tour UK farms, marts, and events to help educate and build on the skillsets of farmers.

"We recently went out to ten very different but all willing farmers to carry out carbon audits - a poultry farm, an intensive dairy farm, a mixed farm, a beef farm, an arable farm, a large sheep farm, and a peatland sheep farm".

"It was evident that we had a long way to go, but also very clear that farmers are keen to progress, even if a little confused by some aspects of it", adds Andrea.

# Making the Move to Self-Propelled Feeding

The Ag Net Zero Challenge has been the driving force behind the KEENAN self-propelled diet feeder investment.

"We needed to manage nutrients going in and nutrients going out and tighten up on our feeding accuracy and wastage. The selfpropelled is radically different to the trailed KEENAN. It takes a bit of time to embed and work, but we pushed on and the results really speak for themselves", says Andrea.

Self-Propelled diet feeding is relatively new to the UK market, but interest and confidence in the system has been gaining serious momentum. The system offers farmers opportunity to optimise loading accuracy, improve animal performance, and make considerable forage savings from better clamp preservation. The KEENAN MechFiber system is the first and only in the world to have been independently Carbon Trust validated to reduce enteric methane production. When Myerscough College Farm made the move from a KEENAN MechFiber Trailed Machine to a KEENAN MechFiber Self Propelled in February 2022, they saw a 1.26 litre increase in milk production and a 0.04 improvement in feed conversion efficiency

# This translates to £22,301.50 of extra profit every year, with a 3.79% reduction in methane output\*1.

#### \*1 Predicted from work by late Dr David Beever from University of Reading

Andrea attributes their progress not only to the self-propelled, but also to the team of experts who work collaboratively to fit the pieces of the puzzle together. Advanced Ruminant Nutrition (ARN) are on hand to walk the cows and offer an independent eye.

"Working collaboratively with our nutritionists and the farm team, InTouch offers the physical ration presentation expertise as well as the technical support alongside the technology. The InTouch system also monitors the loading accuracy of the three trained operators using the self-propelled, as well as the impact of that accuracy on cow performance", adds Andrea.

It's warming to hear that it is in fact Andrea's daughter, Bethany Gardner, who is the InTouch Feeding Specialist for the farm, and has been since before Andrea came to her current position.



# Opportunities in the whole feed management process

Image: Bob Kendal, Alltech Navigate Specialist, with students

As part of the KEENAN and Alltech package, Myerscough embraced the Alltech Navigate process of assessing, analysing and actioning further opportunities to increase feed efficiency and reduce feed waste across the entire feeding process – from field to cow.

The report identified a £73,249/annum\* opportunity from reducing waste.

The key areas identified were:

FCE IMPROVEMENT	£52,339*
SILAGE COMPACTION LOSSES	£4,485*
MASTITIS INCIDENCE RATE	£10,133*
CALVING INDEX	£6,292*

\*Based on March 2022 milk price

Myerscough were quick to adopt the top 3 action points to optimise efficiencies, including:

- 1. Cleaning and adapting water troughs to increase water flow rate,
- 2. Adding Rumenate<sup>™</sup> to mitigate the impact of mycotoxins on fibre digestion and cow health, and
- 3. Increasing lunging space in cubicles.

"Alltech Navigate really drilled into the detail, exposing some pinch points and ways of overcoming them. It's undoubtably brilliant. When it comes to net zero – we've got to start somewhere, and we've got to get going with it. Alltech Navigate is a great starting point that you can see immediate profitability results from too", says Andrea.

Andrea concludes: "Myerscough College Farm is integral to the student learner journey. Students enjoy practical farming experiences as well as access to technical data in action. We're privileged to be coaching and training farm workers and managers of the future, as well as those looking to access roles in the wider farming industry".

## BOX OUT: Current Myerscough College Farm Facts

Cow numbers	200
Milk Yield Average	33.7 litres
Butterfat	4.50
Protein	3.45
System	System 20:20 Swing Over Parlour transitioning to Robotic Milking
Land Type	Land Type – Lowland - Mixed Soil Types Over 730 acres
Sheep	1000 Mule x Texel Lambing Ewes
Beef	Belgian Blue X Finishing System

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## Notes to editor

About KEENAN:

Established in 1978, KEENAN is a respected leader in ethical and profitable farming solutions, focused on maximizing feed efficiency. For over four decades, KEENAN has earned a particularly strong reputation for manufacturing quality diet feeders.

KEENAN, a member of the Alltech family of companies since April 2016, feeds and interprets data from more than 490,000+ cows from over 2,000 farms in 37 countries around the world, representing one of the world's largest field databases on dairy feed efficiency.

KEENAN prides themselves on continuous investment into new technology for the benefit of their customers globally. The company has evolved throughout the years, combining cutting-edge technological developments with breakthrough nutritional expertise.

A keen advocate for environmental sustainability, KEENAN has developed a range of solutions to enable farmers to overcome agricultural production challenges, improve rumen health and feed efficiency. For further information, visit www.keenansystem.com. Keep up to date with KEENAN activities on Facebook, Twitter, Instagram, and LinkedIn.

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