

# ALL THINGS DAIRY

YOUR AHDB DAIRY UPDATE

**We Eat Balanced  
protects dairy's  
reputation**

**Top marks for  
education programme**

SMART CHOICES FOR  
**BETTER BREEDING**

Unlock your herd's hidden potential

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AHDB is a statutory levy board, funded by farmers, growers and others in the supply chain. We equip the industry with easy to use, practical know-how which they can apply straight away to make better decisions and improve their performance. For further information, please visit [ahdb.org.uk](http://ahdb.org.uk)

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# WELCOME

Nic Parsons,  
Head of Engagement – Dairy



Welcome to the autumn edition of **All Things Dairy**. This year we've bid farewell to some of our Strategic Dairy Farms but have been recruiting the next cohort, so keep an eye out for their launch events over the autumn. In this issue, you can read about the excellent work being carried out at two of our current farms, **Newlands and Willow Tree**.

Our successful consumer marketing and education programmes are vital in maintaining the industry's reputation. It's not just about what we say; it's about what we all do day-to-day (365-day compliance) that sets us apart and safeguards our standing.

Health and welfare are just as important, so you'll find articles on relevant topics such as Johne's and pneumonia in this edition.

Our genetic index EnviroCow allows farmers to breed cows with a focus on environmental sustainability. Read how small improvements in EnviroCow scores can significantly reduce emissions and feed costs.

If you milk record, I encourage you to read the enclosed flyer and book your place at one of our upcoming 'Unlocking your herd's hidden breeding potential' meetings.

The services provided by AHDB to support you are becoming more important than ever, so read on the opposite page how we're addressing the impact of rising costs on our spending power.

I hope you enjoy reading this issue. Please get in touch with me on [nic.parsons@ahdb.org.uk](mailto:nic.parsons@ahdb.org.uk) or contact your local knowledge exchange manager if you have any questions.



# Starting conversations about raising the levy



**AHDB having farmers' backs is more crucial than ever. Around 8,000 farmers pay the Dairy levy to ensure AHDB tackles the challenges that cannot be addressed by commercial organisations, individual farmers, or governments.**

**With agriculture facing unprecedented pressures, including inflation and the reduction in the Basic Payment Scheme, services provided by AHDB to support levy payers are becoming more important than ever.**

Conversations are being held with key industry stakeholders and levy payers over the summer. If approved, new rates could be implemented from April 2024.

AHDB is focused on delivering the objectives set out in the Sector Plans published in November 2022, but although significant savings have been made, including exceeding a two-year target of £7.8m by £700,000, rising costs are continuing to add pressure on sector budgets.

With no increase to the Dairy levy rate in over 20 years, the spending power of levy funds over the past decade has been reduced by up to 40%. This is due to inflation as well as changes to AHDB's tax status, meaning it can no longer reclaim VAT. There needs to be a significant step taken to close this gap.

Each year the levy is invested in tackling opportunities and challenges that cannot, and will not, be addressed by commercial organisations, individuals or governments. This includes independent research, our Strategic Dairy Farm network, activity to identify new export markets and domestic marketing.

There is never a right time to be recommending a levy increase, but we believe the current economic climate makes the case more urgent with clear, tangible benefits.

Through Shape the Future, levy payers gave us direction on what is most important to them, and the sector councils used this feedback to develop the Sector Plans.

This was the first time that AHDB had received direct feedback from levy payers on the work we do for them, and these results gave us a good indication of where we would need to invest further levy income.

In order to deliver against these priorities, AHDB is having to adapt the work it's delivering at a time when budgets are being impacted by inflation and a budget reduced by changes to our VAT status.

Without a levy increase, we will lose the expertise and impact that the four sectors need.

**Will Jackson**  
Divisional Director of Engagement





# WE EAT BALANCED

## protects dairy's reputation

Carrie McDermid, Head of Marketing, shares the campaign results and our plans for the next round of activity.



© AHDB

Reaching a staggering 43 million adults, the We Eat Balanced campaign ran in autumn 2022 and January 2023 to drive awareness of the nutritional value that dairy and lean meat can add as part of a healthy, balanced diet.

Now in its third year, it featured on mainstream TV/on Demand, YouTube, newspapers, social media and in eight major supermarkets, where 8m on-pack stickers linked shoppers to healthy meat recipes.

At a time when consumers are facing huge pressures on their budgets, We Eat Balanced has played an important role in shining a spotlight on the nutritional value red meat and dairy can bring and dispelling negative myths. Our social media campaign had more than 41m impressions, with new content targeting the next generation of consumers aged 18–25. More than 90% who saw We Eat Balanced on social platforms said they felt reassured that British meat and dairy were sustainable.

We Eat Balanced also had a positive impact on the perception of specific health benefits dairy and red meat can offer. Six per cent more people saw dairy as a good source of vitamin B12 after the campaign, supported by TV's Dr Ranj Singh.

Year-on-year, the campaign continues to reassure consumers about eating dairy and meat, with consumers more inclined to use the information to defend their choices.

### Consumer reactions to the campaign

“ Dairy gives you a whole range of nutrients at an affordable price ”

“ We have high standards of production in the UK so we should buy British meat and dairy. It is a natural product, full of nutrients ”

“ It showed clearly why milk should be part of a healthy lifestyle ”

**We Eat Balanced**

**HIGHLIGHTS**

- Reached **43 million** adults
- Generated **41 million** social media impressions
- Over 90%** felt it increased credibility and belief that British meat and dairy is produced in a sustainable way in the UK\*
- 8 million** stickers appeared in the **Top Eight** supermarkets
- 9/10** consumers agreed the TV ad communicated meat and dairy can be part of a healthy balanced diet
- Those exposed to social media content and TV, **saw purchase intent grow** (compared to those with no media exposure)

**AHDB**

\*Consumers exposed to farmer social assets

**GET SOCIAL – FOLLOW US AND SHARE OUR CONTENT**

Activity continues all year round on Facebook and Instagram. Stay up to date with the campaign and join the online conversations by following #WeEatBalanced and our social accounts.

[facebook.com/WeEatBalanced](https://facebook.com/WeEatBalanced)  
[instagram.com/weeatbalanced](https://instagram.com/weeatbalanced)

**We Eat Balanced returns in September**

Keep an eye out for the campaign, which starts again on 8 September and runs until 22 October. It can be seen across ITV, Channel 4 and Sky’s catch-up TV, YouTube, social media, the Guardian and i newspapers, as well as promotions in major supermarkets.

We will continue to shine a spotlight on the positive food choices consumers can make and feature nine-year-old Nancy and her grandfather, who continue to be a hit, particularly with young adults.

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# TOP MARKS for education food programme



Roz Reynolds, Head of Education, explains how schoolchildren are more aware of where their food comes from and how it is produced thanks to the hugely successful education programme Food - a fact of life (FFL).

Deemed invaluable by teachers, the programme is delivered by the British Nutrition Foundation in partnership with AHDB and offers free teaching information and resources to educators of children aged 3–16.

Demand for FFL material surged when home learning for schoolchildren swept the nation in 2020, and demand hasn't slowed since the return to the classroom. Last year, downloads of FFL resources hit 1.3m, bringing the total to over 4m in the past three years.

This year saw the return of in-person teacher training events. Venues in England, Scotland and Wales hosted over 250 attendees, with 100% of them

going away more informed about food education and 99% taking ideas back to the classroom to implement.

Feedback at these events was outstanding, with many saying the farmers were their favourite part of the day, describing them as “thought-provoking” and offering a “fascinating insight into farming”.

Social media channels also proved popular with teachers and students. The Twitter handle @foodafactoflife now has over 10,000 followers, while its YouTube channel has had 423,000 views.

Delivering facts about food and farming directly to teachers is incredibly important as our younger generations are the consumers of the future.

FFL forms just one part of AHDB's education work, which also includes partnering on Countryside Classroom and sponsoring LEAF's Open Farm Sunday.



[www.farmsunday.org](http://www.farmsunday.org)



## Education programme – 2022/23 achievements

**1.3 million**   
classroom resources downloaded;  
a **100% increase** on pre-Covid

**792**   
**delegates**  
attended our **teacher training events**

Delivered in partnership by



**20,000** **10,000**  
newsletter  Twitter  
subscriptions followers

**403,000**  
**web users**

**16 teacher training events**

**12** webinars/workshops +  
**4** national conferences where:

**100%** **99%**  
of teachers felt more informed of teachers had ideas to implement at school

## Opening the doors to farming

Organic dairy, beef and arable farmer and chair of AHDB's sector council Lyndon Edwards shares his experience of this year's Open Farm Sunday.

"As a farmer, I believe it is our responsibility to bridge the gap between the public and the world of agriculture. Many people are disconnected from the origins of their food and lack understanding of how it is produced. That's why I wholeheartedly support Open Farm Sunday as an excellent platform for education and connection.

"Since we first opened our doors in 2015, the number of visitors to the farm has steadily increased, and this year we were delighted to welcome an incredible 3,000 visitors.

"We arrange various activities across the farm; and the most popular are always the tractor and trailer rides. Visitors can hop on and off at different points to witness different aspects of farming.

"People have the chance to see cows being milked up close and personal. I stand beside them, sharing insights into our organic farming methods and answering any questions they may have. We also have a vet present, explaining the health and wellbeing of our animals.



All images © AHDB

"Another area of interest is observing the trimming of cows' feet. Visitors can see firsthand how we ensure they remain in optimal condition. It's an opportunity for them to interact with our dedicated staff and gain insight into the meticulous care we provide for our animals.

"We believe in providing transparent explanations for our practices, even when they involve controversial topics. By sharing our perspectives and experiences, we build trust and dispel misconceptions.

"Open Farm Sunday also helps address the labour and recruitment challenges the farming industry faces. One person who's still working for us on an apprenticeship first came to the farm when he was a very small boy and stood in the parlour the entire three hours that we were milking.

"Open Farm Sunday provides a powerful platform for educating the public and bridging the gap between consumers and the agricultural industry. That's why it's vital that many agricultural organisations, including AHDB, provide sponsorship to ensure it continues for years to come."

Find out more about our education programme at: [ahdb.org.uk/education](https://ahdb.org.uk/education)

For further information, contact:

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“ Open Farm Sunday provides a powerful platform for educating the public and bridging the gap between consumers and the agricultural industry ”

# New welfare strategy launched for UK dairy industry

Dairy farmers, vets and industry professionals across the supply chain are being encouraged to back the new UK Dairy Cattle Welfare Strategy for 2023–2028.

The strategy, launched by Ruminant Health & Welfare (RH&W), is designed to help the industry show progress in animal welfare by 2028. It is an update of a previous strategy aimed at improving the welfare of the national dairy herd across our four nations.

It is important the industry makes progress in these six key areas as research has shown that the public expects the delivery of good welfare as well as good health, and we must continue to set the bar high for standards.

An annual progress report will be published showing the actions taken to achieve the six welfare goals.

These actions will be reported by groups of key industry stakeholders gathering evidence of industry achievements and progress.

Everyone involved in the UK dairy supply chain is encouraged to embrace the strategy, work together and, wherever possible, align their standards to support a centralised data collection to demonstrate industry progress.



## STRATEGIC GOALS

**1 Thriving cows**  
Ensuring all dairy animals are bred and reared to live a long life.

**2 Healthy feet**  
Ensuring a proactive lameness management plan is in place on every UK dairy farm.

**3 Comfortable cows**  
Maximising cow comfort in housing and at pasture.

**4 Appropriately nourished cows**  
Ensuring a healthy body condition throughout the year.

**5 Healthy udders**  
Continued improvements to udder health to reduce cases of mastitis.

**6 Positive welfare**  
Providing an environment that allows animals to exhibit normal behaviours such as curiosity or play.

For more information, visit [ruminanthw.org.uk](http://ruminanthw.org.uk) and sign up for the newsletter.

Follow on Twitter @ruminanthw

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# A responsible approach to ANTIBIOTIC USE

Medicine Hub is an initiative supported by industry representative organisations, milk and meat buyers, food processors, retailers and the veterinary profession.

**The hub was developed by AHDB at the request of the industry to provide evidence of the ruminant sector's responsible approach to the use of antibiotics.**

"Antibiotics have a role in managing the health of animals and must be used appropriately. But without a national database to measure use, it's impossible to understand what is happening at a national or individual farm level," says farmer Lyndon Edwards, who is chair of the Dairy sector board at AHDB.

"The UK really needs to understand what is being used, at what rate and in which categories of animal; Medicine Hub is providing this facility."

Now, with the addition of a recommendation to upload data to Medicine Hub, or an equivalent in the new Red Tractor standards, the speed at which a national picture is developed should gather pace.

"Red Tractor has added this recommendation in response to demand from throughout the industry – from retailers to processors and veterinary

organisations to those representing farmers, and AHDB supports this," Mr Edwards explains.

Eager not to add to already heavy workloads and to avoid the need to dual report, the team behind Medicine Hub has been working with practice management and farm management software providers to streamline the process.

"The majority of data so far have got on to Medicine Hub via vet practice software as the primary source of veterinary sales information. Involving the farm vet is often the best route to put data on the hub," explains AHDB Head of Animal Health and Welfare Dr Mandy Nevel.

"The data will always belong to, and be under the control of, the farmer. All you need to do is grant full access permissions to your (vet) practice, and they can access the account in the same way that you can."

National data providing evidence for the UK ruminant sector's responsible use of antibiotics will be an advantage in trading negotiations with both EU and global customers.

For an individual farmer, tracking use over time, benchmarking against other similar farm types and taking input from their vet can be helpful in managing animal health and responsible antibiotic use, explains Dr Nevel.

"Whether you are a low or average user or periodically have had to use more antibiotics than usual due to an unforeseen event, the information is hugely valuable for individual farms as well as our industry," adds Dr Nevel.

"Accelerating the rate of data upload with the addition of the recommendation that Red Tractor members do so will help the UK get to a position where the ruminant sector can provide proof of its high standards of health management and responsible use of antibiotics," concludes Mr Edwards.

For more information on the Medicine Hub visit: [medicinehub.org.uk](https://medicinehub.org.uk)

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“ The information is hugely valuable for individual farms as well as our industry ”



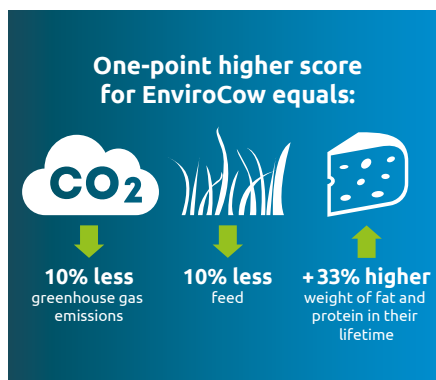
# Time to run a genetic carbon audit?

**Marco Winters, Head of Animal Genetics, explains how our EnviroCow genetic index can help reduce emissions and feed costs and increase constituents.**

Without the right genetics, progress towards any performance goal will be an uphill struggle. So, it's logical for producers to run a genetic carbon audit as part of their drive towards net zero.

Improving genetics is the cheapest and most effective way to make long-term and permanent changes to a dairy herd's performance, and new data show this is as true for carbon footprint as for any other trait that's passed down the generations.

This has been demonstrated by an AHDB study which shows that cows with a one-point higher score for EnviroCow don't just produce 10% less of the greenhouse gas (GHG) methane in their enteric emissions, but they also consume 10% less feed and produce a massive 33% higher weight of fat and protein in their lifetime than the average cow.



This is the first time EnviroCow has been compared with cow phenotype, demonstrating the link between this environmental genetic index and cows' actual recorded performance on the farm. And these findings give the strongest evidence yet that using EnviroCow when making dairy sire selections will help

producers in their drive towards net zero while also making a worthwhile impact on their financial bottom line.

We have analysed 475,000 cows to see how the index is linked to real-life performance and associated emissions. Traits of particular interest included yields of fat and protein correct milk (FPCM) over their lifetimes, age at first calving (AFC), number of lactations, mature weight (derived from proxies as liveweight itself is not routinely recorded) and stature (where available).

These are all traits which are known to influence dry matter intake (DMI), whether that intake is partitioned to growth, maintenance or production. DMI, in turn, is proven to affect enteric methane production – in other words, the emissions produced directly through microbial fermentation in the rumen.



© AHDB

The study shows that the top 10% cows, with the best [highest] EnviroCow score, produce the least methane for each kg of FPCM.

The reason they have a low environmental footprint per litre is because these higher EnviroCow index cows have, on average, higher lifetime yields of FPCM, a younger AFC, more lactations and longer lifespans, and so offer an excellent combination of traits required for efficient dairy production.

These cows were also of a smaller stature and lower liveweight since they weren't bearing the high maintenance costs associated with bigger animals.

Cows with the lowest 10% EnviroCow scores were, on average, the tallest, heaviest animals with a late AFC and a shorter lifespan. They lasted just 2.57 lactations on average and are projected to produce 12% more methane than the average per kg FPCM.

Any herd calculating a carbon footprint for their milk buyer will find that these are the cows which knock their score down.

However, although enteric emissions of methane are the largest contributor of greenhouse gases in dairy farming – accounting for around 45% of total farm emissions – they are only part of the picture.

It's not unreasonable to assume that cows which eat less are also indirectly affecting a farm's total carbon footprint to the same degree through a variety of other factors. This includes the smaller amount of feed bought or grown which bears its own carbon footprint, whether through fertiliser, fuel or other factors and the smaller amount of manure and its associated emissions from these higher EnviroCow-rated animals.

Reassuringly EnviroCow is performing exactly as intended and will hopefully encourage producers to make sure they select their service sires with a high score for this index.

## EnviroCow

A genetic index designed to help farmers breed cows with longer lifespans and improved production, fertility and feed efficiency. It was launched by AHDB in 2021 and was the first independent genetic index in the world to focus solely on breeding cows for their environmental credentials.

Check your cows' EnviroCow score on your herd genetic report: [ahdb.org.uk/herd-genetic-reports](https://ahdb.org.uk/herd-genetic-reports)

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# DRY COW TRANSITION

## A holistic approach

Laura Awdry, Knowledge Exchange Manager, explains how David Luxton has been improving his dry cow transition management as part of his Strategic Dairy Farm journey.





**Run by David, alongside his partner Sarah Haworth, and her parents, Newlands Farm is home to an all-year-round calving, fully housed, pedigree Holstein Friesian herd. At any one time, 180 cows are in the milking herd, which are milked through a guided robotic milking system. The average yield is 11,000 L, with 4.2% butterfat and 3.4% protein.**

Working with Hefin Richards of Rumenation Nutrition Consultancy, David has been exploring why taking a holistic approach to dry cow management can help him achieve better results, benefitting not only his efficiency and profitability but the health and wellbeing of the herd.

### Importance of diet

Getting the diet right is critical when considering how you transition your cows. It is important to consider the quality, mineral analysis, energy, and density of the dry cow ration, as well as its presentation.

“As an industry, I think we have spent too long trying to overcomplicate the dry cow ration,” says David. “We’ve gone back to basics at Newlands and have started feeding haylage to all the dry cows. This has helped us to achieve a consistent diet across the dry period. They also receive dry cow nuts twice a day, while the cows in the calving pens get a transition blend. We’ve seen real improvements since making these changes.”

### Management of cows

Management of heifers and dry cows can have a big impact on how well they transition. At Newlands, the heifers are introduced to the dry cow group at least six weeks before calving. “I like to give them a longer period with the dry group so they get used to the bigger, more dominant cows,” says David. “Interestingly, we had one that slipped through the net.

“We’ve seen real improvements since making these changes”

She went straight into the calving pens and then the dairy unit, and she’s not doing as well as the others.”

David works closely with his vet to monitor body condition score (BCS) across the whole herd. It is important to avoid really thin cows or overly fat cows, and David targets a BCS between 2.75 and 3.5 going into the dry period.

“I think it’s important to monitor their condition as much as possible. If you’re not doing this, you can’t address the issues that might arise during the transition period. We assess the BCS at post-natal checks (PNC), pregnancy detection (PD), and a dry-off PD, as well as other times they’re seeing the vet.”

Lameness can also have a big impact on how successfully a cow transitions. The fat pad in the hoof is important for preventing lameness, but if her BCS drops too much during the transition period, she may metabolise fat within her body, increasing the risk of lameness. “We’ve added maize to the milking herd diet to help combat this,” says David. “The maize has helped reduce overall lameness and improve condition by boosting the fat level. We’ve also been doing a 40-day trim on all the cows, as well as a dry-off trim, and are finding that this works well.”

It is important to consider the dry cow environment. Shed spacing and layout can have a big impact on your dry cows. Ensure there is at least 0.6 m of feed space per cow in total for access to forage, concentrate or complete diet portions of the cow’s feed.

Do not overlook water; it is one of the cheapest additives to the dry cow ration.

Ensuring cows have easy access to water can also have a big impact on performance, allow at least 10 cm of trough space per cow. Simple solutions, such as turning the trough by 90 degrees to provide better access, can be cheap and effective ways to improve water uptake.

### Impact of changes

Since making these small changes, David has seen a noticeable reduction in metabolic disorders and transition diseases. “There have been fewer incidences of milk fevers, with just one case in the last four months, which we can put down to a bad calving,” says David. “We’ve also had very few retained placentas. They’re settling into the herd well, with milk yield peaking sooner. Fertility has remained good, and our submission rate is 80%. They’ve got a good rumen fill and are doing really well overall.”

By making sure he is considering all aspects of dry cow management, David is prioritising the health and welfare of his cows during this vital period. This means that he is able to optimise the fertility, yield, and efficiency of the Newlands herd.

To find out more visit:  
[ahdb.org.uk/strategic-dairy-farms](http://ahdb.org.uk/strategic-dairy-farms)

For further information, contact:

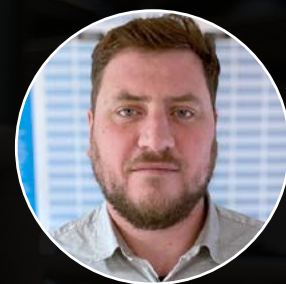
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# MASTITIS CONTROL

## Small changes, big results



**Knowledge Exchange Manager, Alan McFadzean, explains why reducing clinical cases of mastitis at Willow Tree Farm has been a mission for Howard and Tom Pattison since becoming a Strategic Dairy Farm.**

**Working with James Breen, a veterinary surgeon at Map of Ag and the University of Nottingham, Howard and Tom have explored how small changes to cow management and the environment can have a big impact on udder health.**

By taking advantage of Willow Tree Farm's milk recording data and using AHDB's Mastitis Control Plan, James was able to identify trends in the herd. "The cows I am most interested in aren't the ones with an exceptionally high cell count or which have been reported with several clinical cases already, but the ones where there is a new infection.

"For example, we might see a cow that has had a low cell count for the last three milk recordings suddenly record a high cell count. This is a new infection in lactation and can help us to identify patterns, such as whether there is a seasonal bias."

The clinical mastitis data from Willow Tree Farm showed a clear trend. "The rate of new cases in cows more than 30 days in milk was exceeding the target of two new cases in every 12 cows. Since the number of new cases appearing in the first month of lactation was so low, it meant cows were picking up the infection after joining the milking herd. So, the cause must be found in the milking cow environment," says James.

James spent time with Howard and Tom reviewing the farm set-up. They wanted to identify potential changes that could be made to reduce infection rates, given what they already knew.



"We used to run the cows in three pods plus a high-cell-count group," says Tom. "One of James' first recommendations was to get rid of the high-cell-count group and open up the four barns to allow the herd to run together."

James also emphasised the importance of maximising the available living space to help manage infection. "Studies have demonstrated that increasing the living space available to each cow can be beneficial to both cow welfare and yield.

"The high-cell-count group enjoyed the most living space, while the rest of the herd was run at almost full stocking density. There was no evidence of contagious mastitis patterns, so it was a simple solution to open the space allowing better use to be made of passageways and loafing areas."

The type of sand used for bedding has also been changed. "We test the sand for bacterial contamination," says Tom, "but it is much softer and more free draining. We haven't needed to dig the beds out at all in the past year, whereas previously, we were digging them out every five to eight weeks."

Howard and Tom have also made improvements to the collecting yard, increasing the available space. "We're aiming for at least two square meters per cow in the collecting area. If cows are tightly spaced before milking, it can be challenging to control environmental mastitis infection," says James.

Finally, they considered the post-milking yard and how cow flow could be improved. "We've allowed more space post-milking," says Tom. "While the cows are now run as a single group in the shed, we still milk them in two groups to help control pressure in these areas."

In 2021, the rate of new cases of mastitis in cows that were more than 30 days in milk averaged 4.5 cases per 12 cows. "Initially, the rate of new cases fell during the first few months of 2022," says James. "It spiked a bit in June and later during the hot summer, but since then, the rate of new infections has consistently fallen." In 2022, the average rate dropped to 3.5 new cases per 12 cows, and between November 2022 and January 2023, there were only 2.5 new cases per 12 cows on average.

"It's rarely one thing that needs to change," says James. "You usually need to make a combination of changes, and you might not know which is working the best, but as long as the rate of new disease is coming down, you're making progress."

To find out more visit:  
[ahdb.org.uk/strategic-dairy-farms](https://ahdb.org.uk/strategic-dairy-farms)

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“Studies have demonstrated that increasing the living space available to each cow can be beneficial to both cow welfare and yield”

# SMART CHOICES

## for better breeding

The success of Willie Fleming's breeding programme speaks for itself. His milking herd sits in the top 1% for Profitable Lifetime Index (£PLI), predicted transmitting ability (PTA) of kilograms of milk, fat and protein, and our new genetic index EnviroCow.



© Dreamstime

**Willie's farm, Hillhead, near Lockerbie, is home to 370 pedigree Holstein cows. He keeps 330 cows in milk at any one time, producing an average of 12,800 L with 4.00% butterfat and 3.35% protein. The milking herd is fully housed in a purpose-built, 320-cubicle shed and cows are milked with six Lely robots.**

Sexed semen is used on 80% of the herd. The remaining 20% is put to beef. With a replacement rate of 27%, Willie consciously breeds more replacements than he needs, genomically testing youngstock to inform his decisions about which heifers will be entering the milking herd.

Willie uses AHDB's Herd Genetic Report and bull proofs, alongside Lely's data, to make informed breeding decisions.

"We started testing some of our cows in 2010 and began using genomic-tested bulls around the same time," says Willie. "I enjoy understanding the numbers and the rankings and like to use the up-and-coming bulls before too many other people have discovered them!"

Willie has clear goals for the herd and knows which traits he is looking for as part of his breeding programme. "During the past 10 years, we've really focused on breeding for a longer lifespan," says Willie. "This allows us to be more selective in the cows that we keep."

A good number of healthy, older cows in the milking herd is one of Willie's measures of success. "More than 10% of the herd are in their fifth lactation or more, and I'm looking to maintain that. Some of our fourth- and fifth-lactation cows are our highest yielding. Our heifers average between 11,000 L and 12,000 L, a second calver perhaps 14,000 L, but the older ones produce 16,000–17,000 L."

Bulls need to have a £PLI score over 800 to be selected for the Hillhead herd. "They also need to have good scores for yield and constituents, which ties in with our contract," says Willie.



Despite his success, Willie is conscious of the challenges ahead. “In the past four years or so, we’ve really focused on using bulls with traits that will breed daughters that are suited to the robots, as well as slowly reducing the stature of the herd while maintaining milk yield. This should help us increase our maintenance scores and further improve our environmental credentials.”

Understanding the data has been a vital part of Willie’s success. His advice to those wanting to better understand the genetics of their herd is to start to look at their reports.

“Knowing where your herd is to begin with is vital. Only then can you look at the characteristics you want to improve and decide what you are aiming for. This will help you work through the available options and select the bulls that are best suited to breed cows that work with your system and business goals.”

## UNLOCK YOUR HERD’S HIDDEN BREEDING POTENTIAL

Discover the untapped potential in your herd at one of our upcoming workshops. We will reveal hidden gems in your herd’s data, and you will walk away with a tailored report to help you take your breeding decisions to the next level.

The choices you make will have a lasting effect on farm profitability as they accumulate over generations. While good selections positively influence your herd for years to come, poor decisions can hinder improvements from good management.

Your milk recording data is already shaping UK genetics through our independent evaluations that are used by breeding companies. But are you making the most of this data?

### At the workshop, one of our genetic experts will enable you to:

- Create clear breeding goals tailored to your farm’s requirements
- Access and analyse your herd’s genetic potential with a personalised report
- Identify your herd’s baseline and identify areas for improvement
- Evaluate your data and choose the right bulls for your herd

The workshops are designed for anyone with a milk-recorded herd who wants to be more actively involved in their breeding strategy.

Whether you make your own breeding decisions or work with your team or breeding advisor, the workshops will give you what you need to unlock the hidden breeding potential in your herd.

“Knowing where your herd is to begin with is vital. Only then can you look at the characteristics you want to improve and decide what you are aiming for”

Read the enclosed leaflet or visit: [ahdb.org.uk/dairy](http://ahdb.org.uk/dairy) to find your nearest meeting.

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# Achieving a successful **SECOND CALVING**



**Successfully transitioning heifers into the milking herd is crucial to avoid significant financial losses, explains Senior Animal Health & Welfare Scientist Jenny Gibbons.**

**One of our previous studies found that only 24% of farms reached a profit during the first lactation. On most farms, the heifers weren't repaying their cost of rearing until the second lactation, and in most cases, they were well past halfway through that lactation.**

Giving heifers the opportunity to calve down for a second time is, therefore, not only important for your bottom line but also for herd longevity, your carbon footprint and consumer perceptions.

To maximise profitability, heifers should calve at around 24 months of age, by which time they should reach 80–85% of their mature body weight. Before calving, feed heifers a close-up dry cow ration. Ideally, they should be housed separately from older dry cows, but if that is not possible, move them to the dry cow pen at least 60 days before calving. This allows them to adjust to competing with older cows and reduces the risk of metabolic issues after calving.

Research suggests that inflammation plays a key role in the development of transition disorders, which can significantly affect heifers. Inflammation can suppress the immune system and hinder nutrient absorption. Therefore, after calving, provide heifers with high-quality feed to meet their energy demands.

Monitor freshly calved heifers for metabolic diseases, such as ketosis and milk fever. It is important to also look out for reproductive issues such as retained placentas or metritis, as well as mastitis, which can have a negative impact on freshly calved heifers. Regular monitoring of milk for signs of infection is essential.

Housing first-calvers separately from older cows reduces competition for feed space during the transition to the milking herd. It also makes it easier for you to spot any new disease. However, if you need to house them with mature cows, make sure the stocking density is 90% or less, based on feed space, to minimise competition.

Additional care and patience are required when moving heifers through the milking parlour. First calvers experience stress from their initial calving and are exposed to new environments and social dynamics. They often find themselves at the bottom of the pecking order and must learn a new routine, which can disrupt cow flow.

Heifers require special attention for their hoof health during the transition period. Studies show that lameness often originates in heifers, as the soft tissues of the sole inside the hoof are thinnest around calving, increasing the risk of bruising and ulcers. Administering anti-inflammatories to heifers at calving and whenever they become lame has been shown to reduce their future risk of lameness.

Considering heifers' unique behaviours and needs is crucial to minimise stress on their feet after calving. They have different social, feeding, and lying behaviours compared with older cows. They feed more slowly, ruminate less, and are often lower in the pecking order. Providing appropriate space, considering their movement, group changes, and grazing access, can contribute to their wellbeing.

Space is vital for cows, and a study funded by AHDB found that heifers given more space yielded higher milk volumes compared with older cows.

“ Only 24% of farms reached a profit during the first lactation ”





Increasing the space allowance from 9 sq m to 14 sq m resulted in an average of 600 L more milk per heifer over a 305-day lactation. Heifers also spent more time lying down and feeding when provided with greater space, and they experienced less interaction with older cows.

Separating heifers from cows in a dedicated group for the first four months until they reach peak yield can reduce bullying and stress. This allows heifers to regain pregnancy before having to compete with older cows.

Improving fertility and health to ensure heifers reach their second calving has numerous benefits, including a positive impact on the farm's bottom line, carbon footprint, and the industry's goal of achieving net-zero carbon emissions by 2040.

For further information, contact:

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Senior Animal Health and Welfare Scientist

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## TEN TIPS TO SMOOTH HEIFER TRANSITION

- Train heifers to the parlour
- Make sure your calving pen is in a quiet place
- Give pain relief after calving
- Monitor for clinical and sub-clinical milk fever, ketosis and displaced abomasum 21–30 days post-calving
- Maintain dry matter intake during transition
- Monitor body condition score and rumen fill
- Allow sufficient feed space and push up feed at least 4–6 times per day
- Provide adequate lying space of at least one cubicle per heifer or 10 m<sup>2</sup> in a loose yard
- Minimise group changes to reduce social stress
- Make sure your heifers are not lame



# TAKING ACTION against Johne's

Dr Miranda Bowden-Doyle, AHDB Animal Health and Welfare Scientist, brings you the latest evidence on Johne's disease from a long-term study that followed a batch of calves for eight years.



**Johne's disease is a chronic and debilitating disease that affects the intestines of cattle, preventing them from absorbing nutrients. Affected cattle produce less milk, take longer to become pregnant, are worth less when culled, and, most importantly, will spread the disease to other cattle in the herd.**

As part of our research partnership, the Royal Veterinary College followed 440 dairy calves from birth through to their sixth lactation. Calves were carefully monitored and regularly tested for Johne's. By the end of the study, more than a third had tested positive for Johne's.

The study aimed to identify and explain the importance of the risks posed to calves by the environment and the dam.

### The environment

We have known for a long time that the calving area – how clean it is and which cows have access – is crucial to Johne's risk management. Until recently, though, no one had measured the scale of the risk.

By observing the conditions in which the calves were born and measuring the time spent in the calving yard, the researchers discovered that calves that spend more than seven hours in a dirty calving yard are nearly five times more likely to be infected with Johne's compared with calves that don't.

Since calves are most vulnerable in the first few days after birth, it is logical that contamination of the calving area plays such a large role in transmitting the disease and explains why a lot of focus is given to the cleanliness of the calving area in control strategies.

“Implementing the Johne's management plan has reduced levels by half. We have started to use more detailed information from the vets to look at daughters of Johne's cows in the herd and analyse patterns so it can be managed even more closely to further reduce levels”

**Andrew Gilman, Statfold Farm (AHDB strategic farmer)**

Two of the biggest things that can be done to break the infection cycle are to ensure calves are born into a clean environment and to not calve Johne's-positive cows in the same location as Johne's-negative cows.

### The dam

It is known that daughters of infected cows are more likely to become infected with Johne's. Daughters of cows with detectable antibodies at calving are more than two and a half times more likely to test positive later in life compared with daughters born to uninfected cows.

It appears, however, that a cow can still pose an increased risk to her daughter even if she does not have detectable antibodies – in other words, an infected cow that tests negative can still infect her daughter.

In this study, daughters born to cows who tested negative at the time of calving, but tested positive later, were at increased risk of infection. If the cow tested positive within a year after calving, her daughter was more than three and a half times more likely to become positive. Even if the cow's first positive test is more than a year after calving, the risk is still nearly three times higher than it would be for daughters born to cows that never test positive.

These findings will have serious practical implications for managing the daughters of cows that later go on to test positive. Having a scrupulously clean calving environment that Johne's-positive cows cannot access is not enough to prevent new infections. You also need to consider how you manage the daughters of infected cows, even if they were born before the first positive test.

## NATIONAL JOHNE'S MANAGEMENT PLAN

First launched in 2015, the National Johne's Management Plan sees farmers work with specially accredited vets to put in place one of six management strategies on their farm. The plan is reviewed annually.

Further advice and support: [actionjohnesuk.org](http://actionjohnesuk.org)



### Action Johne's initiative role transferred to AHDB

Dairy UK asked AHDB to expand its role within the Action Group, and, starting from April 2023, we took on the responsibility of the delivery team for the initiative and now oversee the administration of the Action Johne's website. On-farm delivery of the scheme remains unchanged.

Lyndon Edwards, Chair of the Action Group and AHDB's Dairy Sector Council, said: "Dairy farmers and their vets understand the negative impact Johne's disease has on herd health, but it doesn't end there. The damage can be seen in so many other ways, including reduced performance and an undermining of the reputation of the industry.

"To benefit levy payers, AHDB has committed to driving greater engagement with the industry to help reduce the cost to the sector and the animals we value through increased awareness and proactive management. In time, I am confident the investment of energy and expertise in this area of herd health will be seen delivering great value to farmers."

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# THE VITAL ROLE of calf housing

**Calf housing is often overlooked, yet its role in improving health and preventing pneumonia, along with other health conditions, cannot be overstated, explains David Ball, Lead Environment Specialist.**



**Neglecting a calf's environment can have far-reaching consequences during the critical early stages of their life. Failing to prioritise housing can negatively impact both the welfare of your herd and its long-term profitability. Improving calf housing doesn't have to be expensive. While custom-built calf housing can offer the ideal environment, making small changes and paying attention to detail can significantly enhance conditions and maximise the potential of your calves.**

Maintaining effective hygiene is a fundamental requirement for calf housing. All materials used in calf areas should be easy to clean and maintain since broken and porous surfaces can harbour pathogens and compromise health. Ensure the calf pens are designed for easy and thorough cleaning, even when other calves are present. Avoid scraping through passages between pens, as this can spread pathogens.

Grouping calves in tight age groups reduces the risk of disease spread. If all-in, all-out management is not feasible, ensure the pen floors and drainage allow effective cleaning of individual pens. Hygienic preparation of food is vital. Have adequate facilities to clean, rinse, and dry feeding components and ensure that wash water drains away from calf pens to prevent contamination.

Calves prefer dry bedding, and their lying times decrease as the dry matter percentage of the bedding falls. Using high-quality bedding materials can significantly impact calf health and performance, especially in terms of thermal comfort and hygiene. Well-bedded calf pens experience lower rates of diarrhoea, for example. Therefore, maintain a frequent schedule of adding fresh bedding.

Proper airflow is essential in all livestock housing. Calves do not generate enough body heat to create the 'stack effect' where warm air rises, drawing fresh air into the building. Therefore, natural air currents must provide the airflow. Ensure openings on all sides of the building allow airflow from any direction while protecting the calves from drafts. The airflow should not exceed 0.2 m/s at calf level.

## CALF PNEUMONIA

**Pneumonia is one of the most significant diseases affecting calves, costing the UK cattle industry an estimated £50m a year. It is the most common reason for death and poor performance in young cattle from weaning to 10 months of age.**

**As we head into the autumn period, it is the perfect time to review your calf housing to minimise the risk of pneumonia in your youngstock.**

**It is also worth exploring the infrastructure grants available through Defra's Animal Health and Welfare Pathway, which can provide funding to improve your calf housing facilities.**

**By being proactive and making the necessary improvements, you can ensure a healthier and more prosperous future for your herd.**

**Keep an eye out for our upcoming pneumonia campaign with helpful advice on how to lower the disease risk in your calves.**

Installing a Positive Pressure Ventilation System (PPVS) can be an excellent way to maintain a constant airflow. However, it is crucial to provide an escape route for stale air through the roof. After weaning, house calves separately from pre-weaned calves.

Calves up to eight weeks old have a limited ability to regulate their body temperature. Providing deep straw bedding, creating sheltered spots within group pens, using lamps, providing a diet with sufficient energy, and using calf jackets can all help to keep calves warm in colder temperatures. Control temperature and relative humidity (RH%) to ensure an optimal environment for calf health. High RH% in warmer temperatures increases the risk of heat stress and pathogen proliferation.

Proper flooring is crucial. Concrete floors should have a minimum slope of 1.6% across the entire pen and 5% in areas with high moisture levels. This lets water and urine drain from under the straw bedding; installing a drainage channel can also help with this. Good drainage becomes even more critical when using automatic feeding systems for calves.

Investing in and optimising your calf housing, paying attention to detail and even making small changes will benefit your business and can help to ensure that the highest quality heifers enter your milking herd.

For further information, contact:

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# NEWS & UPDATES

## FUNDING TO HELP TACKLE BOVINE VIRAL DIARRHOEA

The industry-led scheme BVDFree England is making good progress, with 45% of English dairy holdings now registered, covering 53% of breeding dairy cows in England.



The aim of the voluntary scheme is to eliminate Bovine Viral Diarrhoea (BVD) from all cattle in England by identifying and removing animals persistently infected with the BVD virus.

Vets and farmers are encouraged to continue their testing and upload their results to the BVDFree England database. This will help farmers reach 'BVD Virus Test Negative' status. This is achieved after two years' worth of negative tag and test results or two consecutive negative annual checks, which entail blood antibody testing of 5–10 unvaccinated animals between 9 and 18 months old.

Defra's Animal Health and Welfare Pathway Review can fund an annual visit from your chosen vet or team of vets to the value of £372. This payment is for bespoke advice and complete diagnostic testing for the elected endemic disease for your species. In the case of cattle, it is BVD.

Testing for the pathway can be completed via a bulk milk test or a blood serum antibody test, which must be carried out on six animals in up to two epidemiological groups. Once completed, you can submit this testing as part of your accreditation for both the BVDFree England and CHECS (formerly known as Cattle Health Certification Standards) schemes.

Find out more at [bvdfree.org.uk](http://bvdfree.org.uk)

## MEET THE TEAM

Our field-based Knowledge Exchange team are your first point of contact for support and enquiries, helping put technical expertise and guidance directly into your hands.

If you want to understand how we can help, or if you need pointing in the right direction or want to know what's

happening in your area, get in touch with your local knowledge exchange manager, as shown on the map.

Contact details for our specialist teams, such as market information, research and genetics, can be found at [ahdb.org.uk/meet-the-team-dairy](http://ahdb.org.uk/meet-the-team-dairy)

## AHDB Dairy Knowledge Exchange Managers by region

