Improvement in Dairy Herd Health

Report by Kingshay

The last milk year was a positive one for UK dairy producers, with continued improvements in cow health and growing momentum in the organic milk sector, according to the latest Kingshay Dairy Costings report.

All reported health indicators saw year-on-year improvements. Mastitis dropped by 2 cases, to 24 cases per 100 cows, with lameness down from 37 to 34 cases per 100 cows. Lameness had experienced quite a jump in 2023/24 due to the extremely wet autumn, winter and spring, so this is a return to previous levels.

Cases per 100 cows	2021	2022	2023	2024	2025
Mastitis	32	30	29	26	24
Lameness	36	35	33	37	34

Table 1: Health Trends

"The only departure from this trend is in mobility scores, with the proportion of cows scoring two to three rising marginally from 5.9% to 6.7%," says Emma Puddy, farm services specialist at Kingshay. "Given the reduction in lameness overall, it's likely that this is due to better reporting, rather than increased mobility problems."

Drawing on data from 1,064 conventional herds and 98 organic herds, the report showed that although overall health parameters improved, the higher milk price meant the cost of each case increased on the year. Given the higher cost of lost milk and replacements, the average overall cost of poor health rose by £320 to £27,655.

"These figures are based on a milk price of 42.4ppl, concentrate costs of £309/t, a herd size of 200 cows and yield of 8,500 litres/cow. It's also important to note that they don't include the knock-on cost of poor health on fertility, which should be taken into account," Mrs Puddy continues.

The difference between the top 25% and total group also widened due to these higher costs, with the top quartile spending £11,764 less on health issues than the average group. "There are clearly some good savings to be made by focusing on marginal gains when it comes to health, with mastitis and lameness likely to have the biggest impact," she adds.

Somatic cell counts (SCC) in conventional herds continue to improve year-on-year, showing an 8.3% decline over the past decade, to a record low of 154,000 in 2024/25. This reflects improved udder health and proactive management over the years.

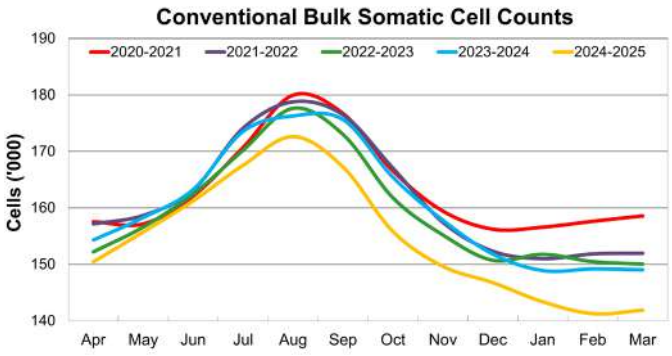


Figure 1: Conventional Cell Count

"As would be expected, the highest SCCs are seen in the late summer (July to September) due to a combination of heat stress, flies and lactation curves," Mrs Puddy explains. "Given that many of the UK's cows calve in the autumn, they are reaching late lactation over the summer, creating the seasonal increase. The lowest counts are from November to February."

However, organic herds tell a slightly different story. Although the decade also shows a decline for average bulk SCC – of 5.3% – the figures themselves are higher for conventional herds, averaging 180,000 in 2024–25. Organic herds saw a much higher bulk SCC than usual during April, May, June and July 2024. These herds did see a lower than usual SCC during September, October and November, as conventional herds did, but this did not continue into the winter months. "Organic herds have fewer tools at their disposal to

Cases per 100 cows	Group	Top 25%	Est. Cost per Case	Group Cost	Top 25% Cost	Difference
Mastitis	24	14	£367	£8,808	£5,138	£3,670
Lameness	34	20	£322	£10,948	£6,440	£4,508
Milk Fever	2.1	0.8	£263	£542	£216	£326
Displaced Abomasums	1.9	0.5	£348	£651	£174	£477
Difficult Calvings	2.9	1.6	£404	£1,180	£641	£539
Retained Cleansings	3.6	2.0	£549	£1,954	£1,109	£845
Abortions	3.1	1.6	£627	£1,944	£1,028	£916
Metritis	5.1	3.6	£318	£1,628	£1,145	£483
TOTAL				£27,655	£15,891	£11,764

Table 2: Health Trends

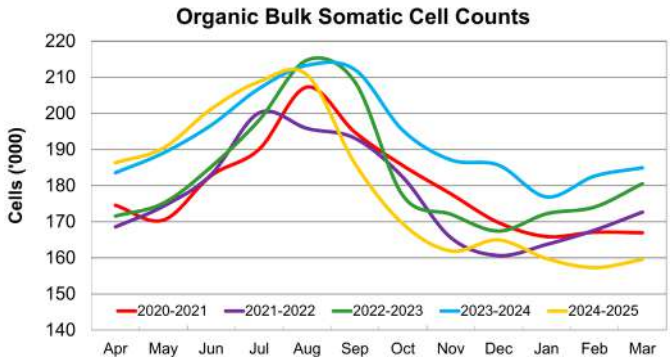


Figure 2: Organic Cell Counts

manage udder health, so close attention to hygiene is even more important," says Mrs Puddy.

Bactoscans have not shown the same downward trend, generally remaining within a range of around 25 to 30 for conventional herds and 20 to 35 for organic herds. This is because bactoscan is linked to milking line cleanliness and as these values are well within most contracts' requirements, there is little incentive to improve further.

Fertility Status (Year ending...)	**Last Year** (March 2024)	**This Year** (March 2025)
Calving interval	393	394
Days to first service	70	72
Services per conception	2.2	2.2
Conception rate	41%	42%
100 day in calf rate	48%	44%
200 day not in calf rate	12%	16%
Infertility culling rate	6.7%	6.8%
Cost of infertility (p/litre)	1.91	2.15
Cost of infertility (£/cow)	£162	£182
Cost of extended calving interval per day	£4.88	£6.86

Table 3: Fertility

Fertility

Fertility has long been improving in the UK, but last year saw a bit of a slide, most likely due to the poorer quality forage, as a consequence of the weather. Last year featured a highly unusual combination of factors. Poor summer weather resulted in difficulty grazing, suboptimal silage production, and therefore huge dents in milk from forage across the board.

Most indicators showed a drop in fertility, with the calving interval extending by a day to 394 days, and days to first service creeping up by 2 days to 72. The 100-day in-calf rate fell by four percentage points, with the 200-day not in-calf rate up by the same amount.

Trouw Nutrition, which analyses forage for Kingshay, showed that most first cut silages had a higher neutral detergent fibre level and lower metabolisable energy content than normal, while second cuts suffered from increased lignin and lower rapidly fermentable carbohydrates.

"Outside of nutrition, it's also possible that the increasing use of sexed semen, which has slightly lower conception rates, could be another factor contributing to the drop in fertility figures," Mrs Puddy says. "However, there remain long-term improvements in fertility. Since 2017, the calving interval has shortened by an incredible 14 days, with days to first service down by four and services per conception dropping by 0.6. The conception rate is five percentage points higher, with the 100-day in-calf rate up by 11 percentage points. This is all good progress upon which producers can further build in the years ahead."

The proportion of cows leaving the herd reached a record high of 29.2% in the year to March 2025. Although rates do fluctuate slightly each year, the long-term trend is one that's creeping up – from 25.9% in 2015/16. The age at exit has steadily declined, from 3.76 lactations 10 years ago to 3.43 now, meaning cows are having a shorter productive life."

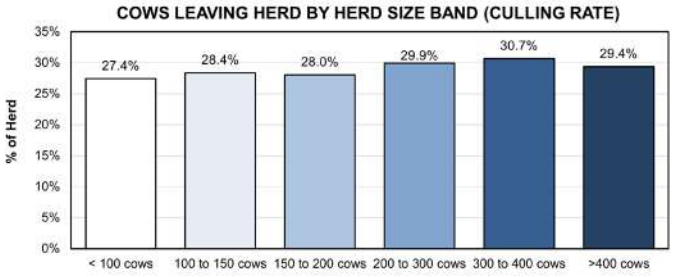


Figure 3: Cows leaving the herd by herd size and / or yield level

However, the number of forced culls has dropped to its lowest level, at 63%, with selected culls comprising 37%. Producers are choosing the best cows to keep and culling those with potential problems," explains Mrs Puddy.

Figure 4: Forced vs selected leaving reasons

Health reasons dropped from 41.7% last year to 40.1% of cows leaving, with management reasons easing from 14.7% to 14.4%. However, cows leaving for fertility and performance reasons were up, year-on-year, from 28% and 15.5% to 28.2% and 17.3% of total leavers, respectively.

"Looking at all individual reasons, not in-calf remained the primary problem, at 14.8%. New in at number two was surplus

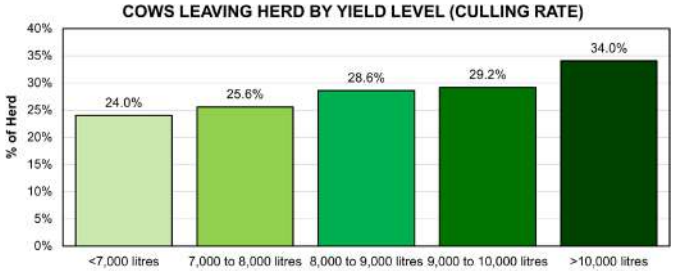


Figure 5: Cows leaving the herd by herd size and / or yield level

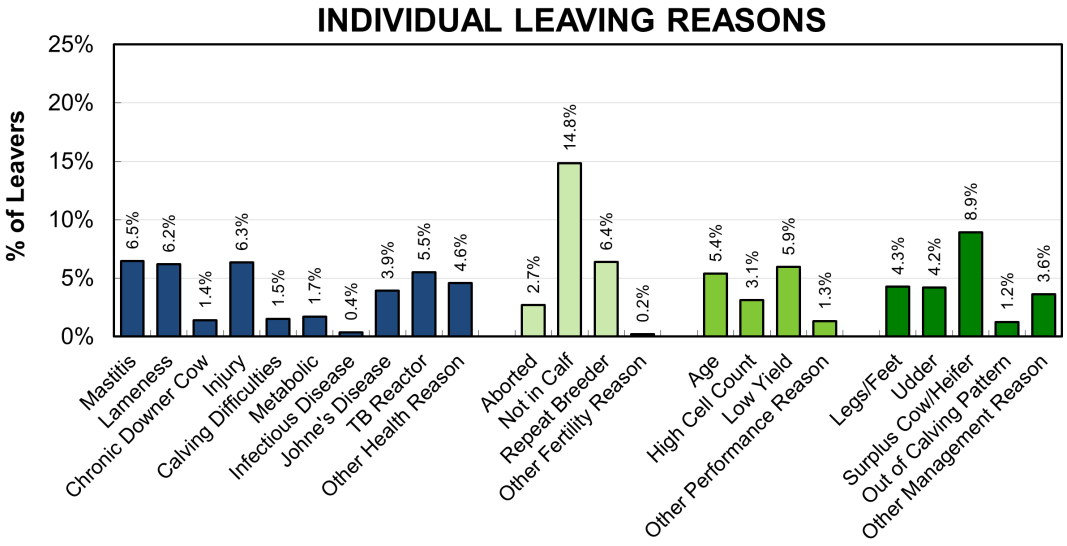


Figure 6: Leaving reasons

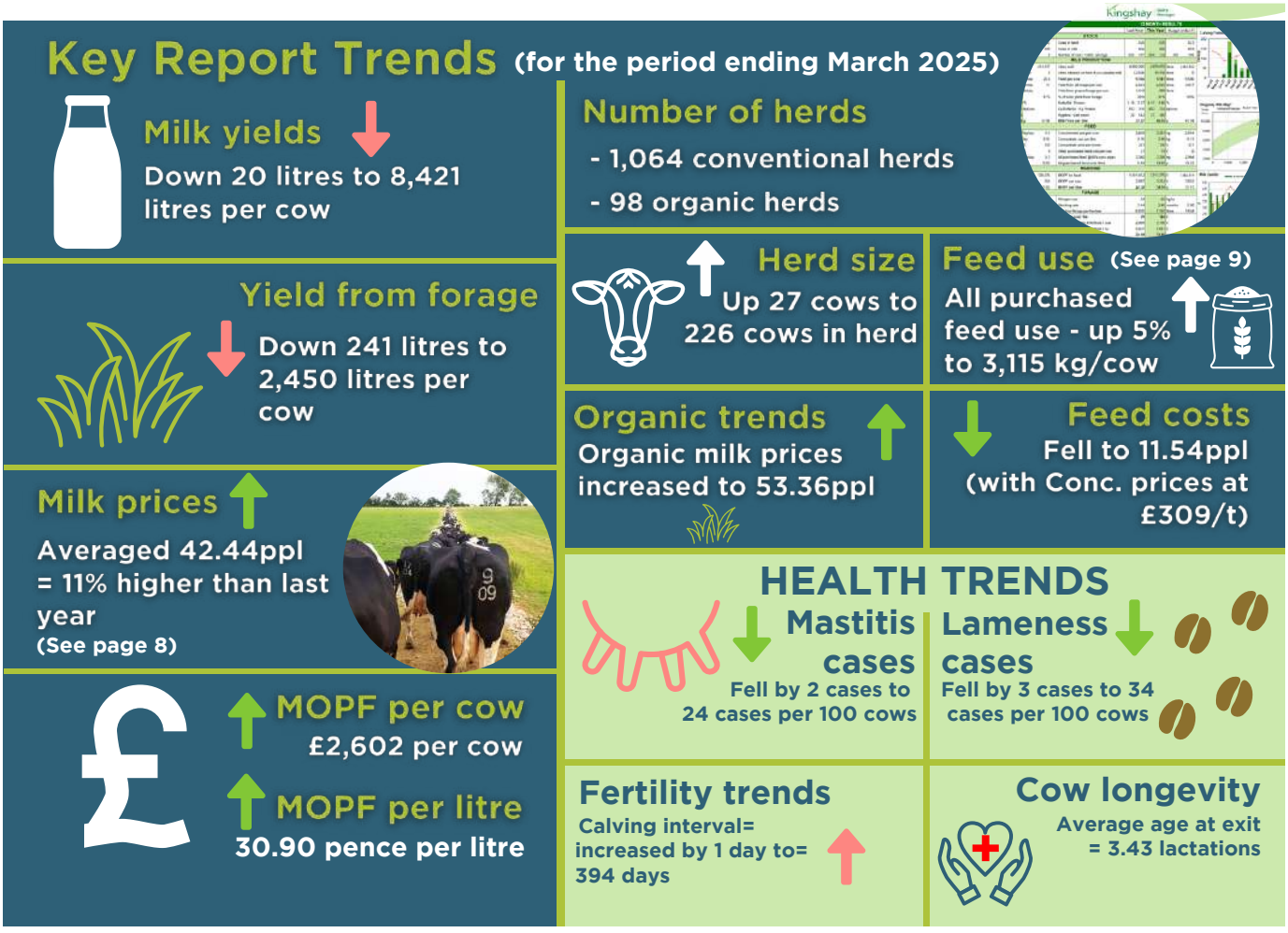
stock, at 8.9%, up from 5% last year. In third place was mastitis at 6.5%, down from 8.1% last year," says Mrs Puddy.

When comparing herd size bands, traditionally exit rates increase with herd size, but that wasn't the case last year. Herds with under 100 cows had the lowest rate of cows leaving the herd at 27.4%, with 300 to 400 cow herds the highest at 30.7%. Those with the highest proportion of forced leaving reasons were in the 150 to 200 cow band, at 67.3%, while the smallest herds had the highest selected proportion of selected leaving reasons, at 43% of leavers.

Higher yields were directly related to higher leaving rates, rising from 24% in the lowest yield band to 34% in the highest. "Health was a bigger issue for 9,000 to 10,000 litre herds, and fertility for 7,000 to 8,000 litre herds, whereas the smallest herds culled more for performance reasons, and the largest herds culled more for management reasons, such as conformation or not fitting into the calving pattern," Mrs Puddy explains.

Comparing Systems

Organic herds have most certainly turned the corner following a few tricky years. Low to moderate yielding systems saw the



highest jump in milk price, year-on-year, up 20% to a chart-topping 54.09ppl. They had the highest culling (32%) and replacement (34%) rates of all systems as well as the highest feed costs per litre (14.53ppl).

All year-round calving herds are the most common conventional systems. The grazing-focused group had the smallest herds (177 cows), this year producing 6,837 litres/cow (34% from forage). Housing focused, year-round calving systems are the most prevalent overall, boasting the largest herds (266 cows) and highest yields (9,775 litres/cow). These intensive systems exhibited the highest conventional culling (30%) and replacement rates (33%).

Channel Island herds bucked the trend when it came to milk production in 2024/25, by increasing yields despite the challenging season. Having reduced herd size by seven in 2023/24, producers cut numbers again this year, to 206 head. They also reduced the stocking rate, to 2.62 cows/ha – although that is still well above the conventional and organic stocking rates of 2.39 and 2.05, respectively.

When it comes to margins, the reasonably high milk price and lower feed costs meant margins remained firm, despite the dreadful weather over the summer of 2024, which saw yields from forage drop sharply. In fact, given the most favourable milk price: feed price ratio since 2001, the average margin over purchased feed (MOPF) was the strongest for a very long time, bar the milk spikes of 2022.

"This year housing-focused, all-year-round calving herds had the highest MOPF per cow at £2,937/cow, and the highest margin per litre was achieved by the low to moderate-yielding organic herds, at 41.15ppl," says Mrs Puddy. "But we are still seeing a wide variation between the top and bottom quartile within each production system, where groups of herds have similar goals."

It seems milk from forage is still very strongly linked to MOPF, with conventional herds in the top 10% for milk from forage achieving a margin that was 20% higher per cow and 14% higher per litre. The top 10% of producers' reliance on forage, the most cost-effective on-farm feed, allowed them to use considerably less concentrate – 2,426kg/cow, costing £816 – while the bottom 25% used 3,563kg and spent £1,227/cow.

This focus on forage directly translated to higher profits: The top herds earned a margin over purchased feed of £3,131/cow, compared to £2,514/cow in the bottom quartile, even though the latter group produced more total milk (2.3m litres) from larger herds feeding more concentrates. Even for housed herds, prioritising grass and silage management while balancing rations will pay dividends in herd efficiency.

"The best way for a farm business to see where they are successful and where they could improve is by putting their figures side-by-side with other producers in similar systems," says Mrs Puddy. "We hope that by publishing this report we can help farmers to do exactly that, and to find ways to continue the positive trends we've seen."

The full report can be downloaded at www.kingshay.co.uk.

Trends Over The Past 10 Years
Taking a look at the bigger picture can help identify trends to consider, both positive and negative. So, what do the past 10 to 20 years show us?

Over the past decade, average herd size has grown by 17.7% – reaching a record high of 226. Stocking rates have also increased, by 5.3% in 10 years, to a record high of 2.39 livestock units per hectare. When it comes to milk production, the average herd produced 1.9m litres in the year ending March 2025, up by nearly a quarter in the past 10 years. Yield per cow also increased, by 4.6%, to 8,421 litres, reflecting better genetics, nutrition and health.

However, the data shows that most of the production gain is from herd expansion, rather than individual increases. Yield from forage is up by 12.8% over the past 10 years, to 2,450 litres. Clearly each season affects forage growth and quality, which is also reflected in milk from grazing figures. Butterfats have seen an 8.7% increase over the past decade, to 4.35%. Protein levels saw a more modest increase of 2.7%, to 3.38%.

Milk prices also enjoyed a good year, up 41.6% from 10 years ago to 42.44ppl, with milk value per cow up nearly 50% to £3,574. Over the past decade, concentrate use has increased steadily both per cow and per litre, up 12.9% and 6.3% respectively. However, feed prices have increased by £79/t, and feed cost per cow has more than tripled since 2005, rising 48.6% in the past 10 years.

Margins have improved significantly, increases essential to cover higher overheads and other variable costs. The margin over purchased feed (MOPF) per cow has increased by 47.9%, to £2,602 – nearly two and a half times higher than 2005, while the MOPF per litre has increased by 41.4% to 30.90p. This will have been driven by a strong milk price and efficiency improvements.

Milk Price Analysis
Following the sharp dip in milk prices seen through spring 2023, this past milk year has brought a period of relative stability, albeit with notable fluctuations across contracts.

From the low point of 36.64ppl in July 2023, average prices gently climbed, lifted by tighter supply. By December 2024, average prices had climbed to 45.82ppl, although record production then saw them ease back to 45.47ppl by March 2025.

While the difference between the top and bottom 10% narrowed markedly up to July 2024, to 9.88ppl, the higher prices meant it then rebounded sharply, reaching 14.04ppl by February 2025. This widening gap demonstrates the increasing divergence between milk contracts and the importance of aligning production systems to market signals. Processors are increasingly rewarding attributes beyond volume alone, with premiums available for quality, seasonality, and sustainability measures.

So, what lies ahead? With continued climatic uncertainty and high input costs, confidence remains fragile. However, there's growing recognition that milk pricing structures are evolving. As consumer pressure intensifies and supply chains strive for greater resilience, price differentiation within and between contracts is likely to continue.

Now more than ever, understanding your milk buyer's pricing mechanism and how your business can match it is critical. Whether through improved constituents, aligned seasonality, or regenerative practices, the tools to improve milk price are increasingly within the producer's control.

About Kingshay
Kingshay Dairy Consulting works with a wide range of UK and international milk processors, consultants, nutritionists, feed companies and other experts to collect regular farm data. This helps farmers to make relevant comparisons to support proactive animal health care across a wide range of production systems, from extensively grazed to fully housed.

It also works closely with the European Dairy Farmers group, bringing together top producers from across the Continent. The UK will be hosting the EDF Congress in Chester from 23–25 June 2026, featuring a range of animal health topics, data benchmarking and knowledge sharing.

Olivia Cooper

Olivia Cooper is director of Agri-hub, an agricultural journalism and PR agency. She is former chair of the British Guild of Agricultural Journalists, current GB representative on the International Federation of Agricultural Journalists' executive board and managing editor of British Dairying magazine.