

Dynamic tests reveal poor performance of variable speed pumps

Testing – one, two, three

Regular checks and maintenance are key to the success of energy-saving variable-speed vacuum pumps. We spoke to a leading parlour system engineer to find out more.

text **Rachael Porter**

If you've recently installed a variable-speed vacuum pump – within the past five years or so – then, if you haven't done so already, now may be a good time to call in an engineer to carry out an annual dynamic parlour test.

So says Promar's milking systems manager Richard Hoosan, adding

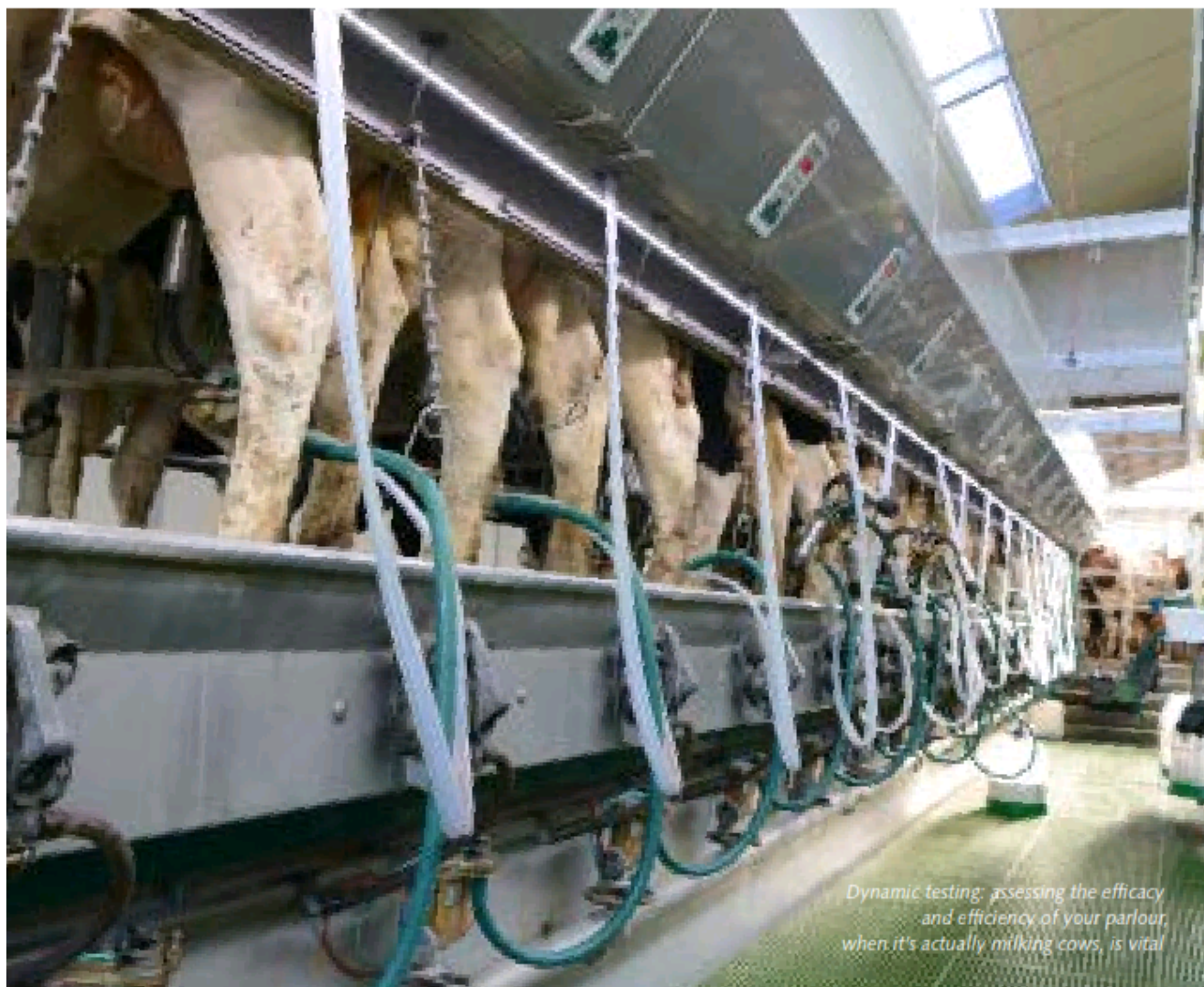
that dynamic tests carried out by the company during the past year have revealed that around 70% of parlours with these energy-saving pumps are either running with vacuums that are too low or too high. "And both can cause problems in terms of teat and udder health, and milking speed."

Grant aid towards upgrading existing

fixed vacuum pumps have seen an increased number of installations on UK units, as well as their use in new parlours. "They save energy and, when working at their optimum, they also improve milking efficiency and safeguard teat and udder health," he explains.

"But installing such a pump is just the beginning. It must also be regularly checked and, in some instances, serviced to ensure that it's working correctly. If it's not then it can cause more issues than it resolves."

So, if you haven't put your parlour through a dynamic test during the past 12 months, it's probably time to book an engineer visit.



Dynamic testing: assessing the efficacy and efficiency of your parlour when it's actually milking cows, is vital



Digital display: an easy-to-read gauge is key to accurately monitoring vacuum levels

“Unlike the static test, which is mandatory in all farm assurance schemes, the dynamic test is optional. But awareness of just how important it is to test a parlour when it’s actually being put through its paces is increasing and uptake of dynamic test has increased four-fold during the past five years,” says Mr Hooson.

Automatic adjustment

The variable speed vacuum pump has a sensor, which automatically detects and adjusts the vacuum at the teat-end according to work load. “So if, for example, you’re milking the final row of just six cows that come into the parlour, less vacuum is required compared to when two full sides of 10 cows have clusters attached.

“The vacuum adjusts accordingly, which saves energy and also ensures that the vacuum isn’t too high for those remaining cows,” explains Mr Hooson. “Our test results showed that around 60% of these pumps were running too high at more than 42kPa at the teat end when very few cows were being milked. This will result in fidgety cows, slow down milking and will impact on udder health.”

Conversely, if the vacuum is too low then there will be liner slippage, cups

will fall off and milking will be slow. “From the cow’s perspective, milking takes too long and she’ll become fidgety. Cows like consistency and for milking to take the same length of time, every time.”

If the vacuum is too high, fidgety cows will also be the result. “But often because they’re uncomfortable. Anything above 40kPa and you’re also looking at teat-end problems – typically hyperkeratosis, where the keratin lining, which protects the teat canal, is damaged and protrudes from the teat end.

“Again, milking speed will also be reduced, and unexpected sensations and stress will inhibit the milk-let down reflex in the future.”

Poor teat condition also leaves the cow more susceptible to mastitis infection, so vet and labour costs, and milk losses coupled with longer milking times and poorer energy efficiency will add insult to injury.

Mr Hooson says that in a worst-case scenario, some parlours with variable speed vacuum pumps could be fluctuating between these two extremes. “This will, undoubtedly, manifest in cows kicking off units – it will feel very uncomfortable to be milked in a parlour where vacuum is low one moment and then extremely high the next.”

There are three key issues that can result in a fluctuating vacuum. The first is the location of sensors and regulators within in the milking system. “They need to be fitted in a place where they can be most ‘responsive’, which is as close to the teat end as possible,” explains Mr Hooson.

In some parlours, they’re just not in the best place to detect and react quickly to changes in vacuum. A dynamic test will quickly pick this up and it can then be rectified by a parlour engineer. “Often it’s just a case of lengthening a cable to reposition the sensor or regulator – it’s not usually a big job.”

Factory reset

The second reason for sub-optimal performance is a power cut, which then automatically triggers a factory setting reset on some models. “And that’s something that can be easily missed. How do you know if there’s been an interruption to the power supply? Producers will often be unaware of this and that’s why checking the kPa is vital.” The issue here is that many producers – even those who have an annual dynamic parlour test – won’t necessarily know



Richard Hooson: “Know your ideal vacuum level and check for any fluctuations”

what their vacuum kPa reading should be. And, even if they do, the dials fitted as standard to parlours are not easy to read or interpret. “Most dials read from zero to 100kPa, but it’s not easy to know exactly where the needle is pointing and where it should be pointing.

So installing a digital vacuum gauge can help here. It shows a clear figure and, at a glance, producers can see if it’s at the optimum level and also whether it’s fluctuating or stable. Such a gauge costs around £165.”

Regulator maintenance

Poor sensor and/or regulator maintenance can also be a factor when it comes to fluctuating vacuums and unresponsive pumps.

“Some sensors and regulators on the market are better than others, when it comes to how well they wear and function when soiled. Most regulators need a service – ideally at least every six months – even if it’s just a clean. So, again, if you’re having issues then that’s something else you need to check or speak to your parlour engineer about,” adds Mr Hooson.

The solution to all three issues is regular dynamic testing and keeping an eye on your vacuum dial – preferably an easy-to-read digital one.

“And, obviously, it’s essential to know what your vacuum should be and what the dial should read. If in doubt, check your latest dynamic test results. The figures should be in the paperwork.”

He adds that many producers think that once they’ve installed a variable speed vacuum pump that they’ve ‘ticked the box’ in terms of parlour performance and protecting teat-end and udder health.

“But checking that the pump is working as it should be is also essential if you’re going to protect your investment, your cows and your business’ bottom line,” he adds. |

Future financial planning vital

Dairy farmers must take early action to help them develop strategies to successfully navigate a number of challenges which will affect financial returns in the next few years according to Promar International.

Announcing the latest results from their Farm Business Accounts (FBA) service, national consultancy manager Nigel Davies warns that although the year to March 2018 showed improved profits, the prospects for 2019 and 2020 are less positive and there are a number of key actions that all producers need to consider.

"The results to March 2018 show a profit after depreciation of £96,318, significantly up from the £53,130 recorded to March 2017," he explains. "As a barometer of volatility, this profit was over 30% above the average achieved in the last five years, only surpassed by the 2013-14 results.

"Total variable and overhead costs increased by 6.9% and 5.6% respectively, but critically as far as driving profits were concerned, the average producer in the sample increased total milk output by 74,009 litres, keeping four more cows and producing an extra 188 litres per cow, without increasing feed usage.

"This, in conjunction with an average milk price increase of 2.86pppl diluted the impact of cost increases, resulting in profit after depreciation per litre rising from 3.09pppl to 5.38pppl."



Promar's Nigel Davies.

Mr Davies stresses that profitability is only half the story when managing a business's finances. Other 'cash' costs including capital expenditure and non-trading items such as drawings and debt repayment need to be accounted for. Despite being a year with a higher than average profit, the average farm made a cash deficit of £85,152 before any new capital introductions. Consequently, total liabilities rose by around £18,000 to £563,310.

Mr Davies says the projected profit for the year ending March 2019 is influenced by the challenging weather in 2018 and a number of deteriorating market factors. Consequently, he forecasts that profits for the current financial year will be lower than the five year average—£40,000 or less—half the average profit to March 2018.

"While we have seen an es-

entially level milk price across the year so far and a continued increase in herd size and yield per cow, rises in feed costs due to increased usage and higher prices coupled with increased overheads will impact materially on profit and the balance sheet.

"We anticipate profits will remain under greater pressure in the year to March 2020 and believe farmers need to start planning now to minimise the impact of several major pinch points including milk and feed prices, forage stocks, Brexit and other global political uncertainties.

"Farmers need to understand the impact of these factors on their borrowings, particularly looking ahead to spring 2019. With all banks now looking more sharply at full farm viability, steps should be taken to put adequate cash facilities in place in good time, being proactive rather than reactive."

To build more sustainable businesses, dairy farmers must continue to drive technically, efficiency and fully embrace the use of financial management information. Managing people and managing animals will be two key areas for attention.

"Implementing changes and improvement can take time, but they happen most successfully when businesses have the best possible financial information to hand and are prepared to regularly step back from their businesses and take an alternative view," he adds.

Complying with compliance

Cross compliance failures continue to be a drain on incomes, with the cost per failure increasing. Promar consultant Mark Wheeler believes farmers should learn from these results, particularly with schemes likely to evolve after we leave the EU.

Cross compliance failures cost farmers basic payment penalties of around £2.2 million in 2016 and will have been a similar magnitude in 2017. Having been given money by the Government the objective should be not to hand it straight back.

The current framework for penalising non-compliance is well known so Mr Wheeler says it should be possible to avoid any penalties.

"In 2017 there were 37% fewer inspections yet we saw 3.7% more inspection failures, up from 1,963 to 2,036," he explains. "31.62% of failures were penalised by 5% or more of Basic Payment Scheme (BPS) compared to 30.56% in 2016. This is a 3.4% increase.

"Of greater concern is that 192 failures attracted penalties of more than 15% of BPS. This is a 25% increase compared to 2016, and a

clear indication that in 2017 either inspection failures were penalised harder or farms had become more complacent."

On average, a 100ha farm received just over £22,800 in basic payment in 2017 and with the exchange rate just set for next year at €1 = £0.89281, this is likely to be worth a similar amount this year, meaning a 5% cut would be around £1,140.

Mr Wheeler warns that penalties are cumulative, so if there are other failures then the cuts would be more severe and recurrent breaches mean the penalty can be tripled the following year.

"Penalties also depend on the seriousness of a breach—whether it is deliberate; whether the result is permanent and whether the impact is limited to the farm or not. Typical negligent penalties range from a warning letter to penalties

of 1% to 5% per breach, whereas those deemed intentional, which can include those where a prior year's non-compliance is repeated are uncapped and upwards of 15%."

Mr Wheeler says livestock failures made up more than 70% of total cross-compliance breaches in 2017 but there is no available data to identify if these are on specialist livestock or mixed farms. Many of the failures are avoidable by good management and attention to detail with records.

Reasons for penalties

"It is worth looking at exactly where failures occur as an opportunity to check how you can reduce the penalty risk, by getting your house in order (see table).

"Many of the major causes can be avoided by simple actions such as replacing lost ear tags immediately; keeping good veterinary records; and submitting movement information and passports within the required timescale.

"Areas like public access and animal welfare are likely to be of increasing relevance as we go forward, and both are already subject to more scrutiny."

Mr Wheeler says the Agriculture Bill states a near status quo for 2019 and 2020 claim years with some simplification likely. This period of short-term stability will be followed by transition through to 2027.

The consultation for 'Health and Harmony' sets a clear path towards 'delivery of public goods', managing and protecting the environment and includes mention of the polluter paying.

"The Bill confirms the direction of travel and legislates for a 'copy and paste' of the current rules into the statute book as we exit the EU with mechanisms to change these rules in future."

He says a proposed new

Environmental Land Management Scheme (ELMS) evolving from the current Countryside Stewardship Schemes but simpler to operate will be one method of tying in new payments to delivery of goods. There is also likely to be some support linked to managing risk and improving productivity. There may also be a new higher animal welfare standard

from 2020.

"The current GAECs and SMRS already cover health welfare and multiple environmental provisions. Just as with more overarching legislation these codes of practice and statutory management regulations are likely to evolve over the timeframe. In my view they will be a set of standards likely to be of more significance and perhaps more tied in with any new payments.

In March 2019, the Government will launch a National Air Quality Management Plan. This will include measures to reduce the impact of ammonia emissions on communities and the environment.

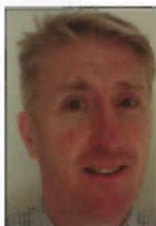
Proposals include N limits, new environmental permit regulations and pushing farmers to more widely adopt low emission application techniques.

"Any failure to comply or deliver public or environmental good will result in either losing potential available payment or being penalised for compliance breaches.

Protecting business

"In the short term I have been working with clients to reduce risks of non-compliance and so ensure that support payments remain in their bank and are not returned to the Treasury.

"Moving forward it will make sense to do what you can to ensure you are in a position to comply with future changes and so protect your business and income."



Mark Wheeler

Common causes of non-compliances 2017

Category	% of failures	Common causes
SMR7	26.6%	Movement records incorrectly recorded, movement unrecorded, deaths unrecorded or animal not found in records
SMR4	23.3%	Failure of all eligible animals to conform to national herd/flock surveillance and testing intervals for TB
SMR1 NVZ	13.8%	Current year records incomplete not presented or do not exist
SMR 13 Animal Welfare	5.8%	Insufficient or staff not competent to provide livestock care, inadequate or unavailable vet and medicine records that may not agree with the purchase inventory or where animals are not cared for properly
GAEC 1 watercourses	3.8%	The farmer has failed to produce and/or keep an appropriate map of their holding and surface waters or had applied pesticide, fertilizer or cultivated within the one or two metre protection zone
GAEC 7a boundaries	3.8%	The farmer has applied pesticide, fertiliser or cultivated within the 2 metre protection zone
GAEC 2B public right of way	2.2%	Visible obstruction to the public right of way

► Farmers should get ready for 'pinch point'

By Alex Black

PROFITABILITY was up in a 'successful' year for UK dairy farmers, but profits only tell half the story.

According to Promar's latest Farm Business Accounts, average dairy farm profits were £96,318 for the year ending March 2018, up from £53,130 a year earlier.

This was driven by a 2.86ppl average 12-month milk price increase, improved yields per cow, an increased herd size and average feed use staying level.

But according to the Promar figures, after drawings and tax, repayments of loans and net capital spend, businesses were left with a deficit of £85,152 before any new debt was introduced.

Nigel Davies, national consultancy manager at Promar, highlighted some of the differences between top performing farms and the average, with the most efficient having smaller herds, higher yields and better concentrate efficiency.

He said: "Little is to do with milk price. There is 0.1ppl difference."



Dairy farmers' profits only tell half the story

The top farms also had better cow health with lower replacement rates and better fertility performance, as well as lower bedding costs, feed costs and dairy sundries costs. Wages, power and machinery, property and debt per cow were also lower.

"They are able to spend £236 per cow more and to reinvest in the business for future efficiency."

Looking forward, Promar expected profit after depreciation to be under £40,000 for the year ended March 2019. Issues for the years ahead included Brexit, the trade war between the US and China and its potential impact on economic

growth, exchange rates and labour availability and an increasing number of significant weather events.

Mr Davies advised farmers to prepare now for the first half of 2019's 'cash pinch point' and feed and forage needs. He said: "A lot of businesses have increased profitability.

"Most of them will have to pay some tax and that is going to impact the cash position at some point."

He added they needed to be aware of the impact of losing support payments, currently equating to 1.91ppl, as well as looking to remove inefficiencies, including labour and animal management, cow health and fertility.

Drivers of success

- Average 12-month milk price up 10.7 per cent to 29.61ppl
- Average rolling yield per cow up 2.26 per cent to 8,498 litres
- Average herd size up by four cows to 211 cows
- Average feed use stayed level at 0.36kg/litre
- Total variable and overhead costs increased in excess of inflation by 6.9 and 5.6 per cent, respectively, but higher output meant the total costs increase was just 2.1 per cent per litre

Plan early to cope with dairy profit drop

THE NUMBERS

£864

Profit a cow for top 25% of herds in the Promar sample

£457

Profit a cow for the average herd in the Promar sample

By Suzie Horne

Milk producers face a profit drop of more than 50% for the milk year to 31 March 2019 and greater pressure in the following year, advisers have warned.

Consultant Promar International's latest Farm Business Accounts (FBA) results across 500 herds averaging 210 cows show a big improvement in profit after depreciation for the year to 31 March 2018, with a 69% jump to £96,318.

However, wholesale dairy commodity markets are mostly under downwards pressure, and rising production costs have led to the prediction of a severe drop in average profits to £40,000 or lower for the current milk year.

Planning needs to start now to minimise the impact of several pinch points, said the firm's national consultancy manager Nigel Davies, identifying three areas of financial challenge:



TM SCRIVENOR

Input and output price changes

- Feed prices – currently £24/t (11%) higher than a year ago and heading for a £250/t average (non-organic) by February 2019.
- Milk price pressure – Promar is using a farmgate average of 28.85p/litre for its forecast of a profit drop of more than 50% for the year to the end of March 2019. This is 0.5p/litre down on the rolling average of the previous milk year.
- Each 1p/litre movement in milk prices for these herds adds or cuts almost £18,000/year of income, while a £10/t change in feed prices makes a difference of £6,558.
- Overhead cost increases – many of these will be driven by higher oil prices.

PROFIT: PAST AND FORECAST

(Years ending 31 March, herd profit after depreciation)

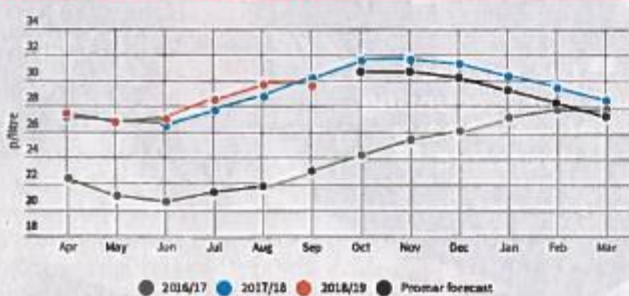
- 2017 – £57,130
- 2018 – £96,318 – more than 30% above the five-year average
- 2019 – £40,000 or lower – well below the five-year average

Source: Promar International

Political uncertainty

Global factors are already affecting dairy commodity prices and the impact of Brexit in terms of tariffs and exchange rates is yet to be determined and understood.

MILK PRICES ARE FORECAST TO FALL OVER THE NEXT SIX MONTHS



Source: Defra GB average farmgate milk price except where otherwise indicated



Top herd profits a cow were almost double those of the average in the Promar sample

Increased efficiencies across the business will be needed to fully offset support payment changes, says Promar.

Forage stocks and quality

Stocks may take until late 2020 to be adequately rebuilt to comfortable levels, says Promar.

The higher profits achieved in the year to 31 March 2018 were driven by:

- A higher milk price – up 2.86p/litre on the previous year
- Higher average rolling yield a cow – up 188 litres (+2.26%)
- Higher average herd size – four more cows than previous year
- Level average feed use at 0.36kg/litre
- Dilution of higher than inflation variable and overhead costs to 2.1% by increased milk output.

These profits needed to cover private drawings, tax and reinvestment.

Farmers Guardian
30th November 2018
Mark Wheeler

Importance of non-compliance breaches must be recognised

THE current framework for penalising non-compliance in the Basic Payment Scheme (BPS) should be better realised to avoid a replica of the £2.2 million penalties incurred in 2016.

Mark Wheeler, senior consultant at Promar, said in 2017 there were 37 per cent fewer inspections but 3.7 per cent more failures, up from 1,963 to 2,036.

“Penalised by 5 per cent or more of BPS were 31.6 per cent of failures

compared to 30.56 per cent in 2016,” said Mr Wheeler.

“Of greater concern is that 192 failures attracted penalties of more than 15 per cent of BPS, a 25 per cent increase on 2016.”

Penalties are cumulative, he said, with recurrent breaches often tripling the penalty the following year.

They are also dependent on the seriousness of breach – whether it was

deliberate, if the result was permanent and whether the impact was limited to the farm or not.

“Typical negligent penalties range from a warning letter to penalties of 1-5 per cent per breach, whereas those deemed intentional, which can include those where a prior year’s non-compliance is repeated, are uncapped and upwards of 15 per cent,” he said.

The proposed new Environmental

Land Management Scheme will be one method of tying in new payments to delivery of goods, including a possible higher animal welfare standard post-2020 and environmental enhancements.

“Any failure to comply or deliver public or environmental good will result in either losing potential available payment or being penalised for compliance breaches,” Mr Wheeler added.

Profit warning for dairy farmers

TRENDS



By Patsy Hunter

DAIRY farmers need to take swift action now if they are to successfully navigate the challenges ahead that are expected to affect financial returns in the next few years.

While milk prices have remained buoyant over the past year, the lack of available forage caused by the late spring and the summer drought, increased concentrate costs and a fast approaching Brexit, all point to less positive year in 2019 and 2020, according to Promar International.

Add to that the expected changes to support payment schemes, which currently equate to 1.91ppl for the average farm, and milk producers have a lot of work to do.

ANNOUNCING the latest results from Promar's Farm Business Accounts (FBA) service, national consultancy manager Nigel Davies warned that although the year to March 2018 showed improved profits, producers need to be aware of new challenges facing the industry.

"The results to March, 2018, show a profit after depreciation of £96,318 - significantly up from the £53,130 recorded to March, 2017, and 30% above the average figure achieved in the last five years - which was only surpassed by the 2013-14 results."

He added that while total variable and overhead costs had increased by 6.9% and 5.6%, respectively, critically - as far as driving profits were concerned - the average producer in the sample increased total milk output by 74,009 litres, by keeping four more cows and producing an extra 188 litres per cow, without increasing the amount of feed used.

"This, in conjunction with an average milk price increase of 2.86p per litre diluted the impact of cost increases, resulting in profit after depreciation per litre rising from 3.09ppl to 5.38ppl."

Of greater significance however, is the fact that while average profits were higher, the average farm made a cash deficit of £85,152 before any new capital introductions. Consequently, total liabilities rose by around £18,000 to £563,310.



INCREASED FEED costs are expected to impact hugely on milk profits in 2019

Furthermore, Mr Davies warned that profit margins for the year ending March 2019, are likely to lower than the five-year average and less than half the average profit to March 2018 as a result of this year's challenging weather and a number of deteriorating market factors.

"While we have seen an essentially level milk price across the year so far and a continued increase in herd size and yield per cow, rises in feed costs due to increased usage and higher prices coupled with increased overheads will impact materially on profit and the balance sheet.

"We anticipate profits will remain under greater pressure in the year to March 2020 and believe farmers need to start planning now to minimise the impact of several major pinch points."

He said the first pinch point is the impact of price changes. Feed prices are currently £24/t (11% higher) and there are clear signals that milk prices will come under pressure too. Rising oil prices will also push many overheads higher.

In addition, the higher profits achieved in 2018 will work

through to a higher tax bill for many which will fall the following year placing a further cash demand on businesses.

"Farmers need to understand the impact of these factors on their borrowings, particularly looking ahead to spring 2019.

With all banks now looking more sharply at full farm viability, steps should be taken to put adequate cash facilities in place in good time."

The second potential pinch point is forage as he said it would take until late 2020 before adequate stocks are rebuilt to comfortable levels.

There is also the global political uncertainty to consider which Mr Davies pointed out is already impacting on dairy commodity prices and the industry still has to learn the impact of Brexit in terms of tariffs and exchange rates.

To this must be added the likely changes to support payment schemes which currently equate to a total of 1.91ppl for the average farm in this sample. Fully offsetting support payment changes will require increased efficiencies across the business.

Finally 'dairying' related

inflation will not slow in the coming years, with added pressure in particular on wages, feed costs and most overheads.

For a number of producers, there are fewer replacements in the pipeline and the poor spring and challenging summer will have adversely impacted herd reproductive performance and hence future milk output meaning the dilution effect on costs of producing more milk will be reduced.

Instead, Mr Davies urged dairy farmers to continue driving technical efficiency and fully embrace the use of financial management information - managing people and animals are the two key areas for attention.

He said it is in these areas where a wide disparity in the quality of calf management, youngstock management, milk quality and herd reproductive performance remain and it is these areas which impact hugely on profitability.

"People on farms are key. Effective people management is not just about costs, although the top 25% in our sample achieved wage costs 23% lower average."

"Staff management is an overlooked skill and must embrace training and development, delegation, motivation and communication of everyone in the team. With current labour shortages, being a good people manager could be the difference between having someone to milk your cows or not."

He also urged producers to consider the external members of the team, with the better farmers in the survey working more closely with vets, consultants, contractors, accountants etc than the average - an area where many could improve upon.

"Implementing changes and improvement can take time, but they happen most successfully when businesses have the best possible financial information to hand and are prepared to regularly step back from their businesses and take an alternative view," concluded Mr Davies.



NIGEL DAVIES

EARLY PLANNING NEEDED TO FUTURE PROOF DAIRY BUSINESSES

Dairy farmers must take early action to help them develop strategies to successfully navigate a number of challenges which will affect financial returns in the next few years according to Promar International.



Announcing the latest results from their Farm Business Accounts (FBA) service, the most comprehensive analysis of actual dairy farm financial performance available in the UK, National Consultancy Manager Nigel Davies warns that although the year to March 2018 showed improved profits, the prospects for 2019 and 2020 are less positive and there are a number of key

actions that all producers need to consider.

"The results to March 2018 show a profit after depreciation of £96,318, significantly up from the £53,130 recorded to March 2017," he comments. "As a barometer of volatility, this profit was over 30% above the average achieved in the last five years, only surpassed by the 2013-14 results.

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Mr Davies stresses that profitability is only half the story when managing a business's finances. Other 'cash' costs including capital expenditure and non-trading items such as drawings and debt repayment need to be accounted for. Despite being a year with a higher than average profit, the average farm made a cash deficit of £85,152 before any new capital introductions. Consequently, total liabilities rose by around £18,000 to £563,310.

Mr Davies says the projected profit for the year ending March 2019 is influenced by the challenging weather in 2018 and a number of deteriorating market factors. Consequently, he forecasts that profits for the current financial year will be lower than the five year average and also less than half the average profit to March 2018.

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"We anticipate profits will remain under greater pressure in the year to March 2020 and believe farmers need to start planning now to minimise the impact of several major pinch points.

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prices are currently £24/t (11%) higher and there are clear signals that milk prices will come under pressure. Rising oil prices will push many overheads higher. Furthermore the higher profit achieved in 2018 will work through to a higher tax bill for many which will fall due this year placing a further cash demand on the business.

"Farmers need to understand the impact of these factors on their borrowings, particularly looking ahead to Spring 2019. With all banks now looking more sharply at full farm viability, steps should be taken to put adequate cash facilities in place in good time, being proactive rather than reactive."

The second potential pinch point is forage and he says stocks may take until late on 2020 to be adequately rebuilt to comfortable levels.

"Thirdly, global political uncertainty remains a concern. It is already impacting on dairy commodity prices and we have still to learn the impact of Brexit in terms of tariffs and exchange rates. To this must be added the likely changes to support payment schemes which currently equate to a total of 1.91ppl for the average farm in this sample. Fully offsetting support payment changes will require increased efficiencies across the business.

Finally 'dairying' related inflation will not slow in the coming years, with added pressure in particular on wages, feed costs and most overheads. For a number of producers, there are fewer replacements in the pipeline and the poor spring and challenging summer will have adversely impacted herd reproductive performance and hence future milk output meaning the dilution effect on costs of producing more milk will be reduced.

To build more sustainable businesses, dairy farmers must continue to drive technical efficiency and fully embrace the use of financial management information. Managing people and managing animals will be two key areas for attention.

He says here remains a wide disparity in the quality of calf management, youngstock management, milk quality and herd reproductive performance, all of which impact hugely on profitability.

People on farms are key. Effective people management is not just about costs, although the top 25% in our sample achieved wage costs 23% lower average. Staff management is an overlooked skill and must embrace training and development, delegation, motivation and communication of everyone in the team. With current labour shortages, being a good people manager could be the difference between having someone to milk your cows or not.

"And don't forget the external members of the team. The better producers work more closely with their vets, consultants, contractors, accountants etc than the average and there is room for most producers to improve in this area.

"Implementing changes and improvement can take time, but they happen most successfully when businesses have the best possible financial information to hand and are prepared to regularly step back from their businesses and take an alternative view."



| Early planning needed to future proof dairy businesses

BY JOHNswire ON NOVEMBER 5, 2018

DAIRY, LIVESTOCK, NEWS

Dairy farmers must take early action to help them develop strategies to successfully navigate a number of challenges which will affect financial returns in the next few years according to Promar International.

Announcing the latest results from their Farm Business Accounts (FBA) service, the most comprehensive analysis of actual dairy farm financial performance available in the UK, National Consultancy Manager Nigel Davies warns that although the year to March 2018 showed improved profits, the prospects for 2019 and 2020 are less positive and there are a number of key actions that all producers need to consider.

"The results to March 2018 show a profit after depreciation of £96,318, significantly up from the £53,130 recorded to March 2017," he comments. "As a barometer of volatility, this profit was over 30% above the average achieved in the last five years, only surpassed by the 2013-14 results.

"Total variable and overhead costs increased by 6.9% and 5.6% respectively, but critically as far as driving profits were concerned, the average producer in the sample increased total milk output by 74,009 litres, keeping four more cows and producing an extra 188 litres per cow, without increasing feed usage.

"This, in conjunction with an average milk price increase of 2.86ppl diluted the impact of cost increases, resulting in profit after depreciation per litre rising from 3.09ppl to 5.38ppl."

Mr Davies stresses that profitability is only half the story when managing a business's finances. Other 'cash' costs including capital expenditure and non-trading items such as drawings and debt repayment need to be accounted for. Despite being a year with a higher than average profit, the average farm made a cash deficit of £85,152 before any new capital introductions. Consequently, total liabilities rose by around £18,000 to £563,310.

Mr Davies says the projected profit for the year ending March 2019 is influenced by the challenging weather in 2018 and a number of deteriorating market factors. Consequently, he forecasts that profits for the current financial year will be lower than the five year average and also less than half the average profit to March 2018.

"While we have seen an essentially level milk price across the year so far and a continued increase in herd size and yield per cow, rises in feed costs due to increased usage and higher prices coupled with increased overheads will impact materially on profit and the balance sheet.

"We anticipate profits will remain under greater pressure in the year to March 2020 and believe farmers need to start planning now to minimise the impact of several major pinch points.

He says the first pinch point is the impact of price changes. Feed prices are currently £24/t (11%) higher and there are clear signals that milk prices will come under pressure. Rising oil prices will push many overheads higher. Furthermore the higher profit achieved in 2018 will work through to a higher tax bill for many which will fall due this year placing a further cash demand on the business..

"Farmers need to understand the impact of these factors on their borrowings, particularly looking ahead to Spring 2019. With all banks now looking more sharply at full farm viability, steps should be taken to put adequate cash facilities in place in good time, being proactive rather than reactive."

The second potential pinch point is forage and he says stocks may take until late on 2020 to be adequately rebuilt to comfortable levels. .

"Thirdly, global political uncertainty remains a concern. It is already impacting on dairy commodity prices and we have still to learn the impact of Brexit in terms of tariffs and exchange rates. To this must be added the likely changes to support payment schemes which currently equate to a total of 1.91 ppl for the average farm in this sample. Fully offsetting support payment changes will require increased efficiencies across the business.

Finally 'dairying' related inflation will not slow in the coming years, with added pressure in particular on wages, feed costs and most overheads. For a number of producers, there are fewer replacements in the pipeline and the poor spring and challenging summer will have adversely impacted herd reproductive performance and hence future milk output meaning the dilution effect on costs of producing more milk will be reduced.

To build more sustainable businesses, dairy farmers must continue to drive technical efficiency and fully embrace the use of financial management information. Managing people and managing animals will be two key areas for attention.

He says here remains a wide disparity in the quality of calf management, youngstock management, milk quality and herd reproductive performance, all of which impact hugely on profitability.

People on farms are key. Effective people management is not just about costs, although the top 25% in our sample achieved wage costs 23% lower average. Staff management is an overlooked skill and must embrace training and development, delegation, motivation and communication of everyone in the team. With current labour shortages, being a good people manager could be the difference between having someone to milk your cows or not.

"And don't forget the external members of the team. The better producers work more closely with their vets, consultants, contractors, accountants etc than the average and there is room for most producers to improve in this area.

"Implementing changes and improvement can take time, but they happen most successfully when businesses have the best possible financial information to hand and are prepared to regularly step back from their businesses and take an alternative view."

The Farmers Mart
November 2018
Nigel Davies

Plan ahead to understand cost implications

THE National Milkfinder matched sample for June 2018 highlights that production levels of milk litres and solids, for the average herd of 210 cows, have



survived the challenge of the late winter, and remain largely unaltered from June 2017.

However, Nigel Davies, Promar's National Consultancy Manager, notes that the average total purchased feed bill for the month is now almost a five-figure sum at £9,777 per herd, which is effectively 9.1% higher per cow compared to twelve months ago.

"Aside from practical challenges, these numbers serve as a prompt to start planning ahead to help understand the financial implications of ensuring that there will be adequate supplies of both home-grown and purchased feed for the months ahead," he explains.

"Producers should aim to gauge an understanding of the potential cost implications of feeding livestock right through to

this time next year and beyond," adds Nigel.

"This is a real challenge for many and for this reason, using a costings service like Milkfinder can be beneficial in helping to give an accurate indication of likely purchased feed costs, against which farmers can compare the likely costs of other feed sources.

"For example, additional feed this year could come from catch crops sown in the autumn or spring, or other external sources of forage."

Nigel encourages farmers to map out the relative costs of any additional feed sources now, thereby making informed decisions, rather than waiting until next year and then realising that a better decision could have been made.

www.promar-international.com

Parameter	Month of June 2017	Month of June 2018
Yield per cow in milk per day (litres)	25.9	26.1
Concentrate use per litre(kg/l)	0.28	0.28
Concentrate price per tonne (£/T)	215	233
Total other purchased feed cost (£)	254	295

ROSEMARY *Collingborn*



Rosemary Collingborn and her husband Joe farm a closed herd of 100 pedigree Friesian type cows, 60 youngstock and breed bulls for sale. She has served on the MDC Council, Veterinary Products Committee, the RSPCA Council and was WFU dairy chairwoman.

“It is now a spring project, which means we have to patch up the old, leaky wooden cubicles

I recently had a very good day out at the Women in Dairying conference. This organisation was founded by RABDF, AHDB and Promar, and its vision is 'connect, share, inspire' – basically empowerment.

Although the movement has only been going a few years, the conference was packed with able dairying women, certainly a powerful force to be reckoned with. In fact, it would be hard to get a more powerful roomful.

I picked up some useful tips, not least from Minette Batters, the second speaker. As a Wiltshire Wildlife Trustee (WWT), I was very interested to learn that conservation NGOs are now putting fairness for farmers right at the top of their agendas.

The director of the WWT's first question to Michael Gove recently was what was he going to do about a better deal for farmers in the food chain?

Minette described how a no-deal Brexit would mean Armageddon for farmers, as our standards would be undermined by imports trading at lower world standards, and these imports could continue coming in until an objection was sustained, which could be years further on. We both agreed that exports urgently needed promotion.

I also had a good talk with Sarah Bolt from Kingshay. Sarah has a masters in animal behaviour, always a fascinating subject, and I quizzed her about what colour plastic cubicles would appeal to our cows. Apparently, cows are afraid of yellow. Why then, I wonder, do they have to have yellow ear tags?

Challenging

It has been an extremely challenging year for every farmer. We will not be having new cubicles of any colour just yet, as there has been a delay on our new cubicle building, so it is now a spring project, which means we have to patch up the old, leaky wooden cubicles. Joe had been hoping never to use them again, except on a bonfire, so it is not a popular delay.

On top of that, the 500 tonnes of maize we had booked has gone elsewhere and we are well into our silage clamp. We seem to have had less rain than anyone, and our plate meter has been registering nothing.

With feed prices going up much faster than milk prices, it is set for a challenging winter. Still, as Joe says, we will survive. Hopefully.

After months of discussion, we have just had CCTV





On-farm this month: (Above) Brinkworth Hildebrand eyeing up a plastic cow in the yard; (Below left) cows out at autumn grazing.

Farm facts

- ▶▶ Farm: Family run 185 acres dairy farm in North Wiltshire
- ▶▶ Herd: Closed herd of 100 Friesian type pedigree cows
- ▶▶ Yield: 7874 litres
- ▶▶ Soil type: Heavy on Oxford clay
- ▶▶ Rainfall: 749mm
- ▶▶ Milk buyer: First Milk

set up on the buildings and farm entrances. A cow had been put in the calving pen and we watched avidly all the first day while she showed no signs of calving.

The next day, she was calving and, when I heard my 97-year-old mum muttering that she was bored, I suggested she could come and watch a cow calve.

She was surprised not to have to go outside, and from the kitchen table she was lucky enough to be the first one to see a calf born on the new monitor. Coffee time and she was able to see the calf attempt to find the udder and suck.

When Joe came in for coffee, I told him we would be watching the screen to see him give colostrum and dip the calf's navel, and he was heard to mutter 'maybe this CCTV isn't such a good thing'.

We will soon be selecting semen for autumn calving and, as usual now, most is genomic. Is genomics out of control? How do we measure longevity in this current rush for the future?

All dairy farmers want their cows to last, particularly as cows are at their most productive as mature animals. When genomic breeding can be breeding a heifer out of a heifer by a six month-old bull to increase the rate of genetic improvement, how can longevity be measured?

We breed dairy bulls for our own use and for selling,

but I have always used the opposite approach. I select Excellent cows that have proven themselves in the herd over many lactations, with good type, milk yield, milk quality and longevity.

We have two sets of Excellent full sisters in the herd in their ninth and 10th lactations, all by our own bull Brinkworth Turlock VG86. His own history is interesting as he was originally destined to be a veal calf, but was just too good-looking to go that way.

Breeding

We have more recently bred Brinkworth Rhys EX90 and have 30 of his progeny in the herd, 80% of which have classified VG or Excellent so far. He was deliberately bred for high milk quality and longevity, and these are lovely black cattle all looking the same with near to 5% butterfat. They are just how I would like modern Friesians to be.

To try and update ourselves, we genomically tested our young bull Brinkworth Hildebrand, and he came out with a very satisfying spring calving index (the new grazing measure) of 336. He gave us the greatest surprise, however, when he escaped one day and decided to serve a life-size plastic cow that lives in our yard!