For more information on any article contact Christine Pedersen on 07831 172940 or christine.pedersen@thedairygroup.co.uk



Milk price and costs

Ian Powell, Managing Director

Our latest dairy market analysis shows the MPE (market price equivalent) to be 31.7ppl, which should deliver a farm gate price of 29 to 30ppl. Dairy markets have been fairly stable over the past 6 months and the cold wet spring should limit EU milk production and provide market stability going into the summer. Some of the recent price cuts down to 26ppl appear to be overzealous and not a reflection of the dairy market, but of marginal intervention products which account for a small part of the UK market. Some futures contracts are being offered; farmers should be wary of committing to these, especially where a volume is committed without knowing the price. Where the futures offer is based on a known volume at a known price then the business can make a judgement in relation to their own cost of production.

The following graph shows the monthly and rolling UK average milk price over the past 3 years:



The average milk price masks the variation between milk contracts of up to 6ppl so keeping your options under review whilst ensuring that you are maximising the milk price your contract offers is always recommended.

The graph also shows three levels of cost of production (including unpaid family labour, rent & finance), with the average cost of 30ppl our best estimate of the cost of production at the present time. Even the low-cost producers at 25ppl would be in deficit for approximately half the period and the average cost producers at 30ppl would be in deficit for most of the period. This clearly demonstrates the need for all dairy producers to assess the robustness of their businesses and identify what action may be needed to deal with milk price volatility. 'Cash is king' in the periods of low milk price

EDITORIAL

Welcome to our newsletter items. Dairy farming remains extremely challenging and the poor spring weather will already be increasing the cost of producing milk. Whilst some of over-zealous there appear remains a need to understand your own costs and where improvements can be made. Bench marking with the Top 25% is a good starting point. Despite the difficult spring there is still the opportunity to improve forage quality and our article demonstrates the 1.5ppl benefit to one dairy business. Another key opportunity is to improve the use of nutrients and our new web based software Nutrient-Wise will help farmers to plan and record, which is becoming increasingly important compliance, especially with the this April. Robotic milking is increasing and our report on some recent Canadian research makes for interesting reading. Our in brief section covers a range of topics including thermodurics, BPS and cow housing.

If you would like to discuss any of the topics featured in this newsletter further, please speak to your consultant or ring the office on 01823 444488.

Christine Pedersen

and businesses survive by delaying investment, reducing debt repayment and drawings.

We are able to carry out benchmarking on management accounts rather than waiting for tax accounts to be available. Our business benchmarking compares 28 items of income and expense to help identify where improvements can be made and with March being the most common accounting year end, it is a good time to benchmark your costs with the Top 25% to assess strengths and weaknesses and to develop a strategy to improve competitiveness.

lan is responsible for MCi (our dairy cost database), our milk price model and works with clients across southern England. He can be contacted on 07831 617952.



Milk from forage

David Donaldson, National Dairy Nutrition Specialist

A major aspect of our nutrition consultancy is to help our clients reduce their feed costs and increase milk from forage which is a strong driver of profitability. The decisions made over the next month or so set the tone for milk production and feed costs for many months ahead, so it is a good time to review herd performance over the last year, celebrate what has gone well and look at areas that could be improved. Take a look at the performance of this herd:

	Year to March 2017	Year to March 2018
Total Milk Yield (per cow)	9,542 litres	9,427 litres
Home Grown Forage Yield (per cow)	3,575 litres	5,105 litres
Concentrate Use (kg/litre)	0.27	0.24
Purchased Feed Cost (ppl)	7.77	6.29

Whilst the herd performance for the year to March 2017 is within the Top 25% of MCi costed herds, the improvement in milk yield from forage is very impressive and firmly puts the herd within Top 10%. A review of cost of production a year ago highlighted scope to reduce purchased feed costs and a target of 6 ppl was set. In spite of a 5% increase in concentrate cost per tonne, the saving in purchased feed of almost 1.5 ppl is equivalent to £18,000 for this herd producing 1.2 million litres of milk per annum.

How has this been achieved? An increase in the quantity of forage available means that forage has displaced more expensive forage substitutes in the ration. At the same time, improvements in the quality of forage, particularly the grass silage (which makes up roughly 50% of the conserved forage with maize silage making up the remainder) means that rations can be formulated with high levels of forage dry matter intake (target 16 kg/head/day) thus displacing more expensive concentrates whilst ensuring that nutrient requirements are still met:

Grass Silage Results	2016/17	2017/18
DM%	29.7	29.4
ME MJ/kg DM	11.1	11.8
Protein %	12.4	13.7

For many, this spring has been the most challenging for a generation and many have already been forced to eat through forage stocks reserved for buffer feeding. Producers are advised to compare their expected forage production with requirements so that the effect of potential shortfalls over the coming months can be mitigated. I started this article by saying that the decisions made over the next month or so set the tone for milk production and feed costs for many months ahead and I don't think I can remember a time when this has been more applicable.

David has 30 years of ruminant nutrition experience and can be contacted on 07471 890888.



Nutrient planning and water rules

Becky Tavernor, Senior Dairy Business Consultant

With this year's extremely cold and wet spring, effective nutrient planning has never been more important. Many farmers have struggled to get on to fields to spread slurry and in some cases, fertiliser. With heading date of grass being predominantly controlled by day length we should still be aiming for the same cutting date as for an 'average' year, which for most will be early May. If slurry has not already been applied, it is now too late to apply slurry for first cut as slurry should not be applied within 4 - 6 weeks of cutting due to potential sward contamination.

This raises the question of how much fertiliser to apply. Potash should not be applied before first cut due to the risk of luxury uptake by grass crops which occurs in the spring and Phosphate is a long-term nutrient which is stable

within the soil and can be applied at any time of year if required, so producers can concentrate on nitrogen applications for first cut. During periods of active growth, grass crops can take up around 2.5kg/ha/day (2 units/ac/day) of nitrogen so with a target cutting date in mind the timescale from application needs to be worked out, an estimation of the contribution of available nitrogen from any manures made and then the nitrogen fertiliser rate calculated. This year in particular it will be important to analyse grass prior to cutting for dry matter, protein, sugars and nitrates to reduce the risk of butyric silage and to make informed harvesting decisions.

Optimising crop inputs to maximise yields for second and successive cuts will be at the forefront of producers minds this year as first cut yields are likely to be disappointing. The Dairy Group has been working with a team of software developers over the last few months to develop our own web-based nutrient planning and NVZ recording tool – Nutrient-Wise. In the light of up to date research the fertiliser recommendation system (RB209) has been overhauled. PLANET, the programme which we and many others have been using until now has not been updated with these new recommendations and is now out of date. Nutrient-Wise is ideal for working out complex fertiliser requirements for fields and for NVZ recording. Crucially, being web-based, information can be accessed by anyone from anywhere (with the appropriate login details), such as in the case of an inspection.

New rules were introduced on 2 April 2018 in England which aim to improve water quality in rivers and streams. These rules set basic guidelines which apply to all farmers and will be enforced by the Environment Agency. The full guidelines are available on line: <u>https://www.gov.uk/guidance/rules-for-farmers-and-land-managers-to-prevent-water-pollution</u> but in summary they will promote good practice in managing fertilisers and manures, encourage land managers to take reasonable precautions to prevent diffuse pollution from runoff or soil erosion and require soil tests at least every 5 years. Discuss with your consultant how these rules will affect your business.

The Dairy Group's FACTS registered and experienced advisors will be using the new software to provide fertiliser recommendations, nutrient plans and records to help clients use fertiliser inputs more efficiently and to meet the requirements of both existing and new rules and regulations.

Based in Shropshire, Becky provides environmental, business and husbandry advice to clients. She can be contacted on 07774 120412.



Food for thought with automatic milking systems

Ian Ohnstad, Milking Technology Specialist

The uptake of automatic milking systems (AMS) continues to gather pace in the UK. The challenges of recruiting and retaining staff combined with the possibility of grant funding has led to increased interest from milk producers in automatic milking technology.

Many studies published in Denmark, The Netherlands and Germany report that on average there is an increase in Somatic Cell Count (SCC), Total Bacterial Count (TBC), Freezing Point Depression (FPD) and Free Fatty Acids (FFA) in the first 5 months after installation of an AMS before results recover to pre AMS levels. However, what is hidden with average figures is that many farms convert from conventional to automatic milking seamlessly with no adverse effect on milk quality.

A recently published paper from Don Anderson, an Udder Health Specialist from New Brunswick in Canada, provides some explanation as to why this may occur. At the end of 2017 there were around 1300 Canadian farms milking with AMS (12% of total farms). These installations ranged from 1 - 25 boxes with an average of 1.8 boxes per farm.



A survey across all Canadian Provinces in June 2017 confirmed there was no significant difference in SCC or TBC between herds milked conventionally and on AMS. However, again the use of average quality figures can mask some problem farms.

In the Province of New Brunswick which saw the first AMS installation in 2010, there are now 31 farms milking with AMS out of a total of 193 farms (16%). In 2017, there were a total of 30 reported milk quality infringements and 13 of these infringements (43%) came from AMS farms. When 43% of milk quality infringements come from only 16% of the farms, this suggests further investigation is needed.

The Canadian paper highlighted a number of potential problems. In particular, the inability of the AMS to differentiate between a clean and a dirty teat. In conventional milking systems, a heavily soiled teat will / should receive additional cleaning and disinfection prior to cluster attachment. With an AMS, the teat cleaning mechanism, whether a cleaning cup or a brush, will clean every cow for the same duration, irrespective of teat cleanliness. This highlights the

importance of the design and management of the housing environment to ensure that teats are clean. The Canadian paper then went on to consider milk quality issues with different facilities. Around 70% of the AMS units were installed on farms where there had also been a significant improvement in the cow housing. The TBC on these farms was significantly lower than on farms where the AMS was installed with an existing accommodation system.

While there are many explanations for poor milk quality, including poor equipment cleaning, problems with milk cooling or tank cleaning, sub-clinical mastitis infections or missed clinical cases, the cleanliness of the cows is a significant factor. If you are seriously considering installing an AMS, take the time to consider how clean your cows are currently and whether you need to consider housing design and management at the same time as examining AMS.

Ian is an internationally recognised specialist in milking technology working throughout the UK and worldwide. He can be contacted on 07774 267900.

News in Brief.....

Thermoduric counts in milk – from April 2018, some milk producers are introducing a payment schedule with deductions of up to 0.5 ppl for high Thermoduric counts. Thermoduric bacteria are organisms that survive pasteurisation and can cause defects in the final product, such as reduced shelf life for milk or spoilage of cheese.

Silage, faeces, animal bedding and soil all contain large numbers of thermoduric bacteria and are the most common sources of these bacteria in raw milk. Whilst it will never be possible to completely exclude thermoduric bacteria from raw milk, certain steps can be taken to significantly reduce their numbers. The main areas to focus on are teat cleanliness, poor parlour hygiene and inadequate plant cleaning. Taking more care to clean teats prior to milking, wearing gloves and keeping them clean during milking as well as ensuring there is sufficient hot water, at a high enough temperature, to adequately sanitise all parts of the milking equipment can all help control thermoduric counts.

Livestock housing - this is often the time of year that farmers start thinking about alterations to housing or even new housing facilities. In truth, if plans are not already drawn up and a builder booked, it is probably too late to do much more than some basic alterations before cows are housed again in the autumn. Modifications to existing cubicles, installation of new cubicles or improvements to ventilation are some of the most common jobs undertaken.

If you are planning new housing, now is the time to discuss it and get plans together in time for construction in spring/summer 2019. Top of the list of things to consider is location; how a new building fits in with both existing and future facilities such as milking facilities, slurry storage and additional housing.

2018 Basic Payment Scheme (BPS) Update - the window for 2018 BPS applications closes on **15 May 2018**. Some of the main changes to this year's application process are detailed here:

- 1. Continued satellite remapping is affecting nearly all farms. Ensure that any changes made are reflective of the parcels on the ground. If you are happy with the changes continue as normal but if you disagree you should submit an RLE1 form detailing the necessary changes.
- 2. There is a new hedgerow mapping layer which can be viewed in the land section. Hedgerow data is important because it will be used to calculate EFA eligible hedgerows and 2018 Countryside Stewardship revenue claims. To remap hedgerows you also need to submit an RLE1 form to the RPA.
- 3. This year it is important to make sure land use codes are compatible with the land cover for each parcel which can be viewed in the land section.

We advise you to ensure all of the details in this year's application are correct as any discrepancies can increase the risk of delayed payment and/or incurring penalties. Please also remember that all Countryside Stewardship (CS) revenue claims should be submitted by **15 May 2018**. Discuss any BPS or CS issues with your consultant.

The Dairy Group consultants work across the UK providing a wide range of dairy business advice. Please contact our Head Office at Taunton or visit our website for further information or to contact our consultants:-

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