Issue 56 | September 2023

Milk Manager NEWS

Farm Advisory Service
National Advice Hub
T: 0300 323 0161
E: advice@fas.scot
W: www.fas.scot

Contents

This month's editor:
Lorna MacPherson

Scottish Government
Riaghaltas na h-Alba
gov.scot

SAC CONSULTING
Part of Scotland's Rural College (SRUC)

Milk Manager NEWS

Milk Market Update

UK Wholesale Dairy Commodity Market

- Fonterra's latest on-line GDT auction (5th of September) resulted in a 2.7% increase in the weighted average price across all products, reaching US $2,888/t. This is the first positive movement in the price index since the beginning of May and the previous auction in mid-August returned a whopping 7.4% fall in the price index. At the most recent auction, butter milk powder fell 6.5% but whole milk powder rose 5.3% (to $2,702/t) and butter was up 1.1% (to $4,588/t) Full results are available at https://www.globaldairytrade.info/en/product-results/

- Domestic wholesale prices for dairy commodities have continued to fall since June. Trade was quite over the reporting period, still being summer holiday season. While the wet weather has improved grass growth and milk output, it will have lessened demand and the 7.4% reduction in the GDT auction in August will have exerted further downward pressure on prices.

Commodity	Aug 2023 £/t	Jul 2023 £/t	% Difference Monthly	Aug 2022 £/t	% Diff 2023-2022
Bulk Cream	£1,623	£1,644	-1	£2,774	-41
Butter	£3,680	£3,790	-3	£5,850	-37
SMP	£1,850	£1,900	-3	£2,990	-38
Mild Cheddar	£3,330	£3,470	-4	£4,700	-29

Source: AHDB Dairy - based on trade agreed from 24th July - 21st Aug 2023. Note prices for butter, SMP and mild cheddar are indicative of values achieved over the reporting period for spot trade (excludes contracted prices and forward sales). Bulk cream price is a weighted average price based on agreed spot trade and volumes traded.

- Mild cheddar showed the biggest percentage decline in average price throughout the month, and although trade was slow, supply and demand are well in balance.

- Butter fell on average by 3% on the previous month, with prices varying by as much as £395/t. For cream, there was little change in average price and little demand over the reporting period.

- SMP price continues to decline on the back of good availability and weak demand. The continuing trend of falling prices in the GDT auction also give bearish sentiment to global SMP prices. Chinese imports of SMP were up 20.3% in June compared to June 2022, but compared to pre-COVID times, they remain by and large absent from the market, still processing local stocks.

- The market indicators AMPE and MCVE fell 1.05ppl and 1.73ppl respectively from July into August on the back of declining wholesale prices for butter, SMP and mild cheddar. The Milk Market Value (MMV) of milk has also declined steady, at 33.04ppl for August (34.63ppl for July and 36.60ppl for June).

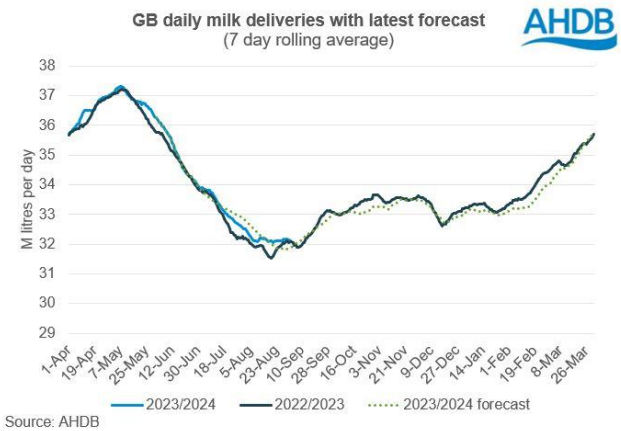
	Aug 2023	Jul 2023	12 months previously	Net amount less 2.4ppl average haulage – Aug 2023
AMPE	28.61ppl	29.66ppl	51.31ppl	*26.21ppl*
MCVE	34.14ppl	35.92ppl	52.06ppl	*31.74ppl*

Source: AHDB Dairy

- Defra put the UK average farm-gate milk price at 36.11ppl for July, which was 23% lower than July 2022. The UK volume for July was 1,247 million litres, which was 2.2% lower than the previous month and 1.0% less than July 2022.

GB Milk Deliveries and Global Production

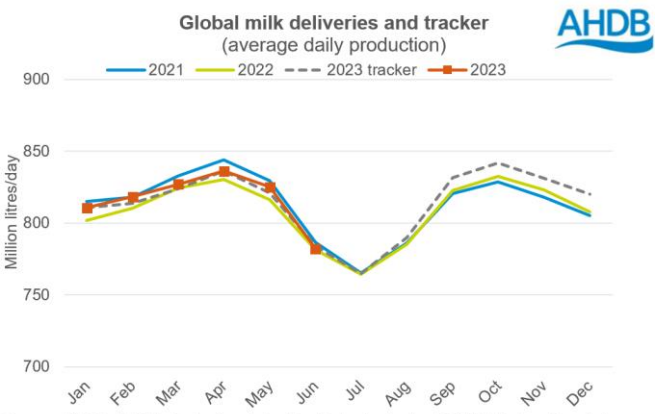
- For the week ending 2nd September deliveries were on par with the previous week with a daily average of 32.12 million litres/day. Deliveries are now 0.1% above the same week in 2022, equating to an extra 50,000 litres/day. For the 2023 calendar year, UK milk production is expected to be up 0.3% on last year, even with the low milk price and squeeze on margins.



Source: AHDB

- In June, global milk deliveries were on average 782.2 million litres/day, up by 800,000 litres on

June 2022. In the EU, German milk production for June was up 2.1% year-on-year, with cumulative milk production at 16.58mT (+2.6% year-on-year). June production in Poland was also up by 1.5% at 1.1mT. However, large drops were seen in France (-2.9%) and Italy (-5.3%). Irish milk collections were down 0.9% on the previous June to 1.08mT.



Source: AHDB, Ministerio de Agroindustria, Dairy Australia, DCANZ, Defra, Eurostat, USDA

- Recent estimates on global milk production from AHDB suggests only 0.1% growth in 2023. Although production in the main milk producing regions is 0.8% ahead of last year, it is thought that the reduction in milk price and any adverse weather conditions will limit milk output in the second half of 2023. In the EU, milk production is expected to decrease in the second half of the year on the back of more cows being culled due to lower milk prices and continuing high input costs. Production is predicted to decline by 3% in both Australia and Argentina, with Argentina having struggled with hot, dry weather limiting forage availability.

Other News

- Dairy farmers in the Sainsbury's Sustainable Dairy Group are to benefit from an additional £6 million annual investment. Farmers are to receive an extra 1ppl on top of their calculated cost of production milk price, amounting to £4.3 million. The remaining £1.7 million will be available as sustainability bonuses based on activities that help towards reducing their carbon emissions to enable the company to meet its "Plan for Better" targets. Activities include things like using sustainable feeds and strategic targeting of fertiliser applications.

- With most milk processors holding their milk price this month, there are further indications of stability in the dairy markets with First Milk and Müller announcing price holds for October.

- China is set to become the world's 3rd largest producer of milk. While it is the biggest importer of dairy products, Rabobank estimates its own production could increase from 41.5mT in 2023 to 47.4mT by 2032. Chinese milk production has tripled over the last 20 years on the back of heavy investment in dairy processing and government support. By the end of 2025, 56% of their milk production is expected to come from herds with over 1000 cows.

Monthly Price Movements for September 2023

Commodity Produced	Company Contract	Price Change from August 2023	Standard Litre Price Sept 2023
Liquid & Cheese	**Arla Farmers UK**	*No change*	33.74ppl liquid 35.21ppl manufacture
Cheese, Liquid & Brokered Milk	**First Milk**	*No change*	36.85ppl manufacture
Cheese	**Fresh Milk Company (Lactalis)**	*No change*	35.5ppl liquid 37.25ppl manufacture
Liquid & Manufacture	**Grahams**	*No change**	36.0ppl
Liquid & Manufacture	**Müller Direct**	*No change*	36.75ppl (includes 1ppl direct premium & -0.25ppl Scottish haulage charge)
Liquid & Manufacture	**Müller (Co-op)**	*+0.011ppl*	39.91ppl
Liquid & Manufacture	**Müller (Tesco)**	*No change*	41.83ppl
Liquid, Powder & Brokered	**Yew Tree Dairies**	*No change**	36ppl Standard A litre price

**Price not confirmed at time of writing*

lorna.macpherson@sac.co.uk; 07760 990901

Straights Update

Global News

- Ukraine's wheat harvest was higher than expected, with a crop of 21.94mT and well above the 17mT estimated earlier this year.

While this is similar to last year, the country's crop in 2021 yielded 33mT. Domestic use is estimated at just over 8mT.

- The markets for soya and rapemeal are firming due to hot, dry conditions in North America, which is set to continue until mid-September. US soyabeans are still in the crucial pod setting stage where hot temperature can impact on yield. In early September, the soyabean crop was rated 53% good to excellent, down from 58% on the previous week. It is estimated that 38% of the crop has been affected by the drought conditions and continued weather concerns will cause some volatility in the markets, which will likely impact on UK markets.

- Forty-three percent of the US maize crop has been affected by drought although it is still on track for a near record crop, with a big crop also expected in Brazil. Despite the recent weather concerns, AHDB market reports indicate that the longer-term outlook for maize and soyabeans are bearish.

UK and Scottish News

- It has been a frustrating and difficult harvest throughout August, although September has provided some respite with much improved weather allowing good progress in those remaining crops to be harvested. Milling wheat is reported as very variable with 12% protein and sub 10% protein common in Group 1 & 2 varieties respectively, and Hagberg's struggling where crops have been lodged. Distilling wheats need high starch levels relative to protein so good grain specific weight is desirable. However, given the wide fluctuations between dry and wet episodes over the growing season this year there is likely to be a greater range in specific weights across samples (the same applies to feed varieties). The spring barley crop is proving troublesome too, with secondary tiller growth resulting in uneven ripening, and desiccation will be delayed into September for some as a result.

- So far there has been mixed feedback for any spring malting barley harvested, with some reported high nitrogen crops, higher skinning and screening levels and potential germination issues from some of the later harvested crops. Buyers that are offered rejected malting barley for animal feed use should seek advice on the comparative crude protein and energy values compared to those expected of standard feed barley purchases. Maltsters are currently reluctant to change their specifications for quality before the bulk of the spring barley harvest is in the shed and can be assessed and this is therefore likely to be an evolving story over the next month or so. In summary, premiums for malting barley meeting specification are very strong and look overvalued amid low demand. At these levels the market is quickly finding the flexibility to fill in any supply side issues, the EU for example, sourcing 6-row varieties from France into northern Europe.

- Feed barley demand from compounders in the UK is reported as slow and farmer selling scarce as farmers focus on selling more attractively priced commodities.

- Domestic demand for beans remains high and prices are expected to continue to follow wheat in the short-term.

- UK oilseed rape yields are being reported as below the 5-year average (3.3t/ha) at between 2.7-3t/ha which gives the UK around a 35% import reliance this year. Europe appears to have fared better both on yield and oil content and prices have drifted lower as a result. Longer-term values will build in the output achieved from Australia and Canada's harvests. The EU supply side will however remain underpinned by high opening stocks and substantial imports continuing from Ukraine.

- Ex farm prices for cereals and proteins are as follows:

	Feed wheat	Feed barley	Beans	OSR
Sept 23	183	155	210	350
Oct 23	186	158	212	352
Nov 23 - Jan 24	188	165	214	356
Feb - Apr 24	198	170	218	364

Source: AHDB, Farmers Weekly

mark.bowsher-gibbs@sac.co.uk; 0131 603 7533
lorna.macpherson@sac.co.uk; 07760 990901

Planning Winter Feed Requirements

With summer nearing a close and housing just around the corner, it is worth spending some time planning ahead how much forage and purchased feeds you will require. Not only is this useful to ensure adequate forage stocks but it will also help with forward budgeting of feed costs.

A good starting point is to sample the forages you have on farm. Once you know the dry matter of the forages, you can work out the volume of dry matter contained in the clamps (volume = length x breadth x height in m). Then multiply this by the estimated density of the forage from the following table. Remember to factor in a percentage for waste and any extra in case turnout is delayed:

Guide to silage density depending on DM and height of silage in clamp (density in kg/m^3)

Silage DM %	Height of silage in clamp (m)			
	2.0	***2.5***	***3.0***	***4.0***
20	780	840	890	950
25	690	730	775	830
30	620	660	690	740
35	570	600	625	670
40	520	550	570	610

These silage density figures can also be used to estimate wholecrop and maize silage stocks (Source: ADHB)

With the help of your nutritionist you can then work out the total dry matter requirement of forages for the milking herd, dry cows and youngstock to see you through the winter-feeding period. This will require winter rations for all classes of stock to be drawn up to assess forage requirements and look at what feeds will need to be purchased.

If supplies look tight, it is best to secure additional forage supplies early (make sure you get an analysis on any purchased forage) or see what forage replacers are available. Distillery/moist by-products can extend forage supplies and also save on protein concentrates, depending on their specification. With protein costs still relatively expensive, now is the time to look around to see what deals are out there. Getting winter prices now may save you money on concentrate feeding, as well as help to spin out forage stocks. If so, secure the required tonnage now and remember to factor in any extra loads to cover you over the Christmas/New Year shutdown period.

The decision of the concentrate/forage replacer required on farm may also depend on forage dry matter. For example, if silage is wet (less than 25% DM) with a low pH and high PAL (potential acid loading value over 900Meq/kg DM), then nutritionally improved straw (NIS), soya hulls or sugar beet pulp are ideal to provide highly digestible fibre for rumen health. If silage is of high dry matter, then moist distillery byproducts or potatoes (or other vegetable waste) can help moisten the ration and improve intakes.

A core sample is useful to assess the dry matter and calculation of forage stocks but once clamps are open for feeding, take a representative sample from the silage face (once past the ramp) to check quality and repeat as necessary throughout the winter. As a minimum, resample every couple of months to rebalance rations and see where savings can be made. This is more important for grass silage as opposed to wholecrop forages which tend to be more consistent in quality throughout the clamp.

While it is important to maximise the use of forage in the diet from a cost and rumen health perspective, forage inclusion will be determined by its quality and the expected/desired milk output to ensure that sufficient concentrates are fed to maintain cow condition and protect fertility.

While considering forage stocks and what will be fed to what, a mineral analysis on different forages will also be of benefit for ratioing dry cows. Dry cows require lower quality forage than the milking herd to minimise weight gain during the dry period but take note of whether the forage intended for dry cows contains a high level of potassium (and DCAB value), which could increase the milk fever risk depending on your feeding strategy and mineral supplementation. This is where the advice of a trusted nutritionist is vital to optimise performance of dry cows and minimise health issues at calving.

lorna.macpherson@sac.co.uk; 07760 990901

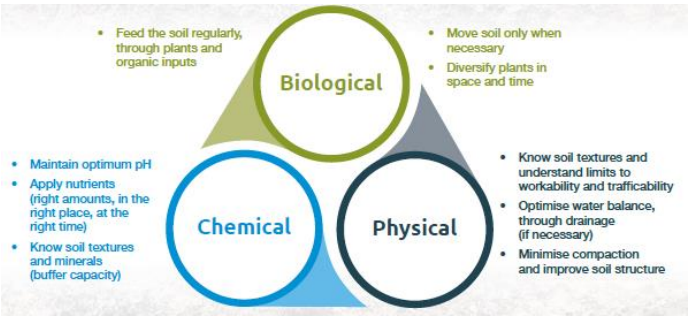
Soil Health - Dairying from the Ground Up

Soil is the platform that underpins everything that you as dairy farmers do. However, soil health has frequently been a neglected key performance

indicator (KPI). There are three pillars to soil health: biological, chemical and physical.

As farmers we often have fields or areas of fields that yield less than other areas of the farm. The answer as to why will be in one or more of the three pillars of soil health, as shown below:

Figure 1 Common Principles to Improve Soil Health



Source: AHDB

Biological

Soil organic matter (OM) is the living or once living part of the soil. It is critical as a food source for the millions of microorganisms and larger more well-known organisms, such as worms, that keep our soil working. These organisms break down applied fertiliser and manures, converting the nutrients into a form which is accessible to the plant. Therefore, measuring the amount of these organisms is an important KPI to assess the health of your soil.

Laboratory tests to look at the variety and quantity of species in the soil are available. However, these are costly and need expert input to interpret. However, measures of organic matter which is standard in most commercially available soil analysis is a good indicator.

In addition, counting worms is also a useful indicator, particularly when counts are repeated each year and can start to show a trend in soil health. Healthy soils should contain over nine worms in a 20cm x 20cm x 20cm cube of soil.

Physical

Research by SRUC has found that compaction can reduce yields by up to 19% from livestock trampling and 37.7% for tractor-related compaction. Compacted soil reduces microbiological processes leading to lower uptake of nitrogen, as well as drainage issues.

Completing a visual examination of soil structure (VESS) will allow you to assess the physical status of your soil. To do this, use a spade to dig soil pits (20cm x 20cm x 20cm), then manually break down a sample of soil by hand, to visually assess the structure of the soil particles, rooting depth and colour/smell. A well-structured soil has round crumbly particles that can be easily broken up between your fingers, allowing plant roots to penetrate down through the soil. It should smell earthy or have little odour; a pungent smell indicates poor drainage or lack of oxygen in the soil. Grant funding could be used to have a specialist advisor complete VESS assessments on your soil.

Chemical

It is important to know the soil's chemical composition to optimise inputs. Soils naturally vary in their chemical composition as does their optimum pH. Soil pH is a measure of acidity and alkalinity and is a starting point for any expenditure, since without the optimum pH any other nutrient applied to the soil is not fully utilised. At a pH of 5.0 to 5.5 it is estimated that 32% (and at pH 5.5-6.0 approximately 21%) of nutrients applied are not available for uptake by the crop.

Once pH's have been corrected the next focus should be on correcting phosphorus (P) and potassium (K) levels. Once pH, P & K levels are within the optimum range you still need to ensure that they stay within the optimum range by replacing the nutrient taken off through grazing or offtake with harvested crop. However, in grazing scenarios, around 95% of P & K is recycled through the animal.

In silage and other crops, P & K are removed from the field at harvest. It is important that fertiliser or manure applications match the offtake. Below is an example of the offtake from multi-cut silage.

Phosphate and potash offtakes from silage

Silage cut	Phosphate removed
1st	39kg/ha (31 units/acre)
2nd	20kg/ha (16 units/acre)

Silage cut	Potash removed
1st	138kg/ha (110 units/acre)
2nd	72kg/ha (57 units/acre)

Source: SAC Technical Note TN:652

To discover the soil's chemical properties, laboratory tests are available. The Preparing for Sustainable Farming (PSF) grant fund is available to pay for soil sampling, so now is a good time to start assessing your soil nutrition status.

Links for further information:
Preparing for Sustainable Farming (PSF) (ruralpayments.org)

Specialist Advice | Helping farmers in Scotland | Farm Advisory Service (fas.scot)

Soils resources for farmers from Farm Advisory Service (fas.scot)

GREATsoils | AHDB

Reduce fertiliser requirements by improving soil health and nutrient availability | Department of Agriculture, Environment and Rural Affairs (daera-ni.gov.uk)

A guide to the Visual Evaluation of Soil Structure (VESS) | Information helping farmers in Scotland | Farm Advisory Service (fas.scot)

james.orr@sac.co.uk; 01252 525010

Water Quality - is it up to Scratch?

We all know the importance of water to a dairy cow. High yielding cows can consume over 200 litres a day and so fresh, palatable water is essential to maintain performance and overall health.

Despite regular emptying and cleaning out of water troughs, they do get dirty very quickly from sediment and bacteria. The main source of contamination is from cattle dropping feed into the trough and faecal contamination. Mould growth can arise in water troughs from spoilt feed from cud balls, grass or other feeds that fall into troughs when cattle drink. This can affect the smell and taste of the water, reducing consumption which in turn can reduce milk output. On the odd occasion, moulds from these sources can cause sporadic abortions.

But what are the other risks from unclean water? In the warm summer months, under the right conditions, blue-green algae can form in outdoor troughs and significantly impact health, with their toxic compounds affecting the liver and nervous system. However, there are also disease risks from indoor troughs during the housing period.

The bacteria Bacillus licheniformis is often found in water troughs and is one of the main causes of abortion in housed spring-calving suckler herds fed on clamp silage in the last two months of pregnancy. Abortions caused by this bacterium tend to be less prevalent in dairy herds but is still a risk. Testing by SRUC Veterinary Services has found levels of up to 5 million cfu of *B. licheniformis* per gram in debris from the bottom of water troughs. Contaminated water can also allow the spread of other diseases such as Johne's, E. coli, leptospirosis and bovine TB.

High levels of bacteria will also be found in biofilms. A biofilm is like a slime, produced by the bacteria that coat the insides of troughs and pipes. These biofilms build up with time and consist of nutrients such as sugars and proteins, creating an ideal habitat for potentially disease-causing bacteria to thrive.

Microbiology testing of water for E. coli and total coliform bacteria can be carried out. Ideally, these bacteria should not be present in livestock drinking

water and bacterial counts should not be greater than 200/100ml for E. coli and 5000/100ml for coliforms (Source: Cawood laboratories).

Water contamination and disease risk is much greater where farmers are trying to reduce mains water usage with either borehole, stream or rainwater sources. If not using mains water, test borehole water annually, as well as having the pump serviced. Ultraviolet filters do not work effectively on murky water and a particulate filter will be required to remove any sediment before ultraviolet treatment.

Remember that water contamination might not necessarily be visible if from unsuitable pH, minerals or heavy metals. Palatability is affected by high levels of manganese and iron and these minerals can also increase the amount of oxidative stress on the cows, making them more susceptible to mastitis, higher cell counts or retained placenta on the back of a weakened immune system.

Tests for water cleanliness should include analysis for pH, nitrates, sulphates and TDS - total dissolved solids (inorganic contaminants). Other minerals can also be tested for.

Guidance on water quality

What to test for	Target range
pH	6.0 – 9.0
Nitrates	< 20ppm
Sulphates	<1000ppm for adult cattle <400 for calves
Total dissolved solids	Ideally <1000ppm but up to 3000ppm is regarded as safe

lorna.macpherson@sac.co.uk; 07760 990901

Rumen Audits: Maximising Livestock Health and Performance

Introduction

Feeding the dairy cow equates to around 51% of the total cost of milk production (Teagasc, 2023). Therefore, maintaining good rumen health is vital to ensuring optimum feed utilisation and greater profit margins. A better functioning rumen will be able to extract more nutrients from feeds which will contribute towards greater milk output, better milk quality, fertility, and overall health. Rumen audits are used to assess the functionality and condition of the rumen, allowing for management and dietary changes to be implemented where necessary to maintain high levels of performance. This can be particularly useful when transitioning from summer grazing to winter diets or vice versa.

Purpose of Rumen Audits

Rumen audits serve several important purposes which include:

- Health monitoring: Rumen function has a direct impact on cow health. Poor rumen function can increase the risk poor reproductive performance, acidosis, metabolic disorders and even lameness. By regularly conducting rumen audits, farmers can identify potential problems early and intervene promptly, minimising the risk of more severe health complications.

- Assessing feed efficiency: A properly functioning rumen is essential for optimum feed utilisation. Maintaining a stable environment within the rumen will enable microbes to break down feeds more efficiently, allowing for greater absorption of nutrients. Identifying any imbalances or deficiencies can allow for informed decisions about diet formulations.

- Optimising herd productivity: By regularly assessing rumen function, and implementing changes accordingly, farmers can help maximise milk production and improve milk quality from fewer inputs, leading to greater profitability.

Conducting Rumen Audits

Rumen audits use a combination of physical assessments to determine overall rumen functionality. These include:

1. General condition of the cows: Assessing body condition, rumen fill, and cow cleanliness can give a good indication of rumen health. Measuring rumen fill can give an indication of dry matter intakes. Fresh or high-yielding cows with a poor rumen fill score are more prone to metabolic problems caused by negative energy balance.

2. Rumination: Cows spend on average one-third of their time processing partially digested,

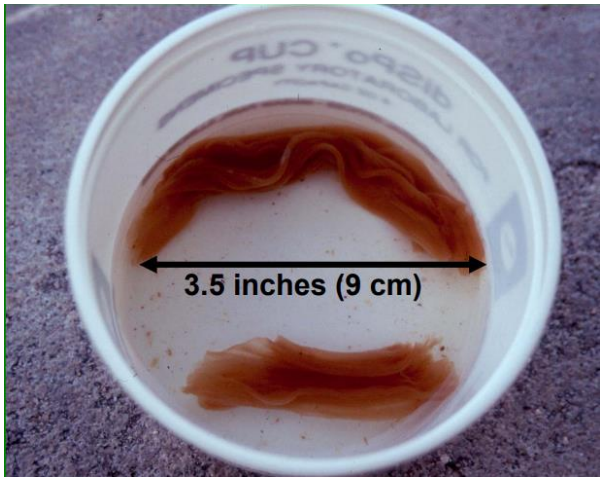
regurgitated food. Counting cud chews gives an indication of rumen health - ideally over 55 chews per cud should be observed in healthy cows. Also, at least 6 out of 10 cows that are lying down should be ruminating and fewer than this could suggest dietary problems such as insufficient fibre.

3. Feed sorting: Cows have a tendency to sift through the ration in search of more palatable, energy-dense components. However, consuming large amounts of rapidly fermenting carbohydrates can lower rumen pH and lead to sub-acute ruminal acidosis (SARA). Assessing the composition of the ration left behind in the feed trough could indicate how well the diet has been mixed/presented. If the refusals look very different to the freshly mixed ration, then a degree of sorting has taken place. The addition of water to the mix can help reduce sorting behaviour and also improve intakes.

4. Manure consistency: The ideal consistency of manure will resemble a thick porridge and form piles that stand 2-3cm in depth. Thin, watery manure or stiff, hard manure can indicate nutritional imbalances or disease. Manure that appears bubbly/foamy is typical of cows with acidosis.

5. Mucin casts: When damage occurs in the lining of the intestine (usually due to acidosis), a substance called mucin is produced to protect the damaged area (see photo below).

A mucin cast rinsed under water



Source: https://www.ars.usda.gov/ARSUserFiles/50901500/px-based_v3.2/educ-matrls/pdfs/PP_manure-evaluation_hall.pdf

Mucin is later shed from the gut and will appear in the faeces. The appearance of mucin casts is an indication of abnormal damage to the gut.

6. Manure composition: Manure is sieved under running water to reveal the level of undigested fibrous material and grains. Larger amounts of undigested forage and grains would suggest accelerated feed passage through the rumen, meaning less feed is broken down and more nutrients are wasted.

In conclusion, rumen audits use a combination of physical assessments to determine the digestive health of the dairy herd. Regularly monitoring rumen function and responding to changes in rumen health will help sustain high levels of herd health, feed utilisation and milk output resulting in better profitability.

marcus.fox@sac.co.uk; 01539, 889990

Nature Auditing and Restoration

From 2025, Scottish Government intends that 50% of a farm's Basic Payment Scheme (BPS) support will be conditional on set nature outcomes. Currently it is unclear what these outcomes will look like, and what minimum requirements will be set. However, the common occurrence in all discussions is the notion of having to complete a biodiversity audit. For a while now there has been much speculation that carbon auditing, something many are now familiar with, would be built into policy and future payments, but biodiversity is a different, less clear animal.

In the past few months, consultants have been speaking to farmer groups across Scotland on the topic of biodiversity auditing and how we value nature. During that process, it has become clear that, while farmers may know what habitats they have on their farm, they do not seem to have a firm grasp on the condition of those habitats and more importantly, the actions needed to improve the quality of those habitats. Scottish Government thinking appears to be, action to improve biodiversity can only be conducted once a proper inventory is taken.

This article is not going to tell you what that inventory will look like, or what actions should be

taken to build the nature value of the habitats you have on the farm. What this article will do however, is discuss the return of a new funding scheme that could facilitate investment in new habitats and the restoration of existing ones.

The Nature Restoration Fund (NRF) has returned for another round of applications. The fund aims to provide support for natural capital projects, particularly as it relates to habitat creation, restoration and connectivity across the farmed landscape and elsewhere. The fund offers up to 90% funding to complete bespoke nature projects that do not neatly fit into comparative environmental schemes. Unlike other schemes, the fund does not set management criteria; in contrast it is concerned about positive nature outcomes.

The NRF was developed to address the drivers of biodiversity decline and our nature crisis, including land-use change, direct exploitation of organisms, mitigation and adaptation to climate change, pollution and invasive and non-native species impacting nature. The fund has five core priorities:

- Habitat and species restoration
- Freshwater restoration
- Coastal and marine initiatives which promote restoration
- Control of invasive non-native species
- Projects to enhance and connect nature across and between urban environments

In addition to these funding priorities, preferential treatment will be given to applications that; bring together strong partnerships, bring together additional funders, can demonstrate clear additionality over and above the project itself and projects that have a clear, sustainable vision for how the project can be maintained following the end of the fund's contract. Also, the more funds requested the higher the expectation of landscape scale benefit. Funding for projects starts at £25k but can rise to £250k and beyond depending on funding tier accessed.

Dairy farming has long been, generally, highly productive but a consequence of this has been little scope for the integration of nature. However, where the NRF differs from other schemes is that there are no restrictions placed upon a business that it does not place upon itself. Some past successful projects have included the creation of a 0.4-hectare pond on a farm to the tune of around £35k, or the establishment of 8,900 metres of hedgerows with grant aid of around £200k, with both projects including the necessary capital infrastructure.

Those businesses interested in investigating the potential of the NRF to build nature into their farm should seek advice and input from their agricultural advisor and NatureScot. Those businesses interested in having a baseline biodiversity audit completed can receive up to £1,000 towards the cost of a biodiversity specialist advice plan through FAS. See the link below for more information: https://www.fas.scot/specialist-advice/

alexander.pirie@sac.co.uk; 01292 525036

Dates for Your Diary

- 13th September - **UK Dairy Day**. The International Centre Telford, Shropshire, TF3 4JH.

- 27th September - **Choosing Financial Software for your Farm Business**. On-line event. Time: 19.30-20.30. For more information and to book your place please visit: https://www.fas.scot/events/event/choosing-financial-software-for-your-farm-business/

- 28th September - **Challenging the Norm: Future Dairy Systems**. Western House Hotel, 66 Craigie Road, Ayr, KA8 0HA. Time: 10.00 (registration from 9.30) until 16.15. For more information and to book your place please visit: https://www.eventbrite.co.uk/e/challenging-the-norm-future-dairy-systems-tickets-680736399897?aff=oddtdtcreator

- 29th September - Young Farmers Upskilling Workshop: CowSignals®. Time: 10.00 -15.00. Venue TBC (Stranraer area). For more information and to book your place please visit: https://www.fas.scot/events/event/young-farmers-upskilling-workshop-cowsignals-2/

- 6th - 8th October - **ABAB Calf Show 2023**. NAEC, Stoneleigh Park, Kenilworth, CV8 2LZ https://www.holstein-uk.org/events/abab-calf-show-2023

- 10th - 11th October - **Future Farming Expo**. P&J Live, East Burn Road, Stoneywood, Aberdeen, AB21 9FX. For more information please see: https://www.futurefarmingexpo.com/

- 26th October - **Safe Use of Veterinary Medicines**. On-line course. For more information contact event organiser Embryonics on 01606 854411 or email: courses@embryonicsltd.co.uk

For any further enquiries regarding the information in this newsletter please contact:

Lorna MacPherson (Dairy Consultant)
SAC Consulting
Ferguson Building
Craibstone Estate
Aberdeen
AB21 9YA
Email: lorna.macpherson@sac.co.uk
Tel: 01467 530445
Mobile: 07760 990901

Funded by the Scottish Government as part of the SRDP Farm Advisory Service.