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Milk Manager NEWS

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Milk Manager NEWS

Market Update

UK Wholesale Dairy Commodity Market

- Fonterra's latest on-line GDT auction (7th January) resulted in a substantial increase of 2.8% in the weighted average price across all products, reaching US $3,371/t. This is a big change in direction from the 5.1% reduction at the previous auction on the 17th December. None of the products on offer dropped in price from the previous auction. Both butter and cheddar rose 3.7% to $4,029/t and $4,015/t respectively. Skim milk powder (SMP) was up 5.4% to $3,026/t. Full results are available at https://www.globaldairytrade.info/en/product-results/

- Cream prices for December showed a significant drop of 15% compared to November, as demand in the run up to Christmas fell away earlier than usual. The November price was £60/t up on the previous month due to the pre-Christmas increase in demand.

- Processors are still feeling the effect of the high butter prices in 2017-2018, which resulted in a 60% drop in the UK wholesale cream price due to food manufacturers either removing or reducing butter from their products. In 2019 (up to October), cream income to processors dropped from 11.6ppl to 8.5ppl. It is possible that dairy farmers supplying the liquid sector may see poorer revenues in this coming year as manufacturers look to recoup margins.

Commodity	Dec 2019 £/T	Nov 2019 £/T	% Difference Monthly	Dec 2018 £/T	% Diff 2019-2018
Bulk Cream	£1.320	£1,550	-15	£1,700	-22
Butter	£3,070	£3,180	-3.5	£3,680	-17
SMP	£2,190	£2,130	+3	£1,500	+46
Mild Cheddar	£2,830	£2,830	0	£2,850	-1

Source: AHDB Dairy - based on trade agreed from 1st to 20th December 2019. Note these prices are indicative of values achieved over the reporting period for spot trade (excludes contracted prices)

- Prices for butter, SMP and cheese remained relatively stable during December, with currency changes being responsible for much of the movement as Sterling rose in the first two weeks of December and then fell away in the second half of the month.

- Imports of Irish cheddar to the UK from January to September 2019 were up a colossal 24% as processors stockpiled product in fear of a no-deal Brexit, equivalent to nearly 90,000t.

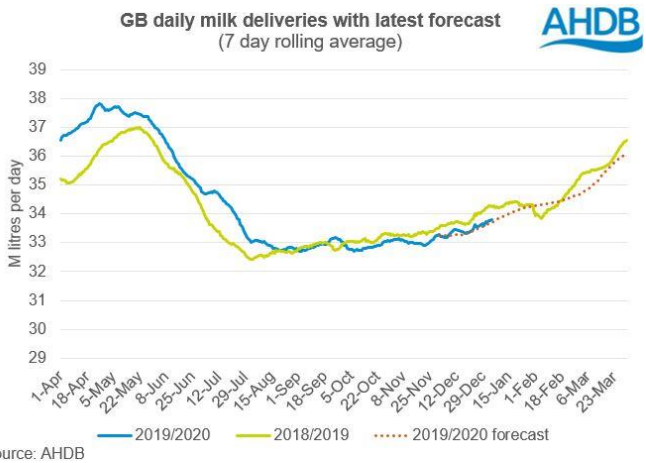
- There has been very little change in the value of milk used in butter and SMP production (AMPE) and the returns from mild cheddar and whey powder/butter (MCVE). AMPE increased by only 0.05ppl in December from the previous month, mainly due to a small rise in SMP. MCVE dropped by 0.04ppl with no change in the mild cheddar component from November 2019.

	Dec 2019	Nov 2019	12 months previously	Net Amount less 2.4ppl Average Haulage – Dec 19
AMPE	31.19ppl	31.14ppl	27.44ppl	*28.79ppl*
MCVE	30.16ppl	30.20ppl	31.04ppl	*27.76ppl*

Source: AHDB Dairy

GB Milk Deliveries and Global Production

- GB milk production continues to run below last year at -1.4% for the week ending 28th December (equivalent to 470,000 litres), and 0.5% above the previous week.



Source: AHDB

- AHDB Dairy estimate that GB milk production for the 2019/2020 season is on track for a 29-year high at 12.58 billion litres. This is despite the national herd having contracted by 2.4% to 1.75 million head as of October 2019 compared to a year ago.

- Analysts have predicted that the GB milk production will fall in 2020 due to the reduction in herd size and less growth in yields. This is in comparison to the 2018-2019 season where

higher concentrate levels were fed on the back of tight forage supplies.

- Milk output from the EU-28 for 2020 is expected to grow by 0.4% according to a report by the USDA. Slow growth is expected in the first half of the year as a result of drought related forage shortages in the summer of 2019. However, as forage stocks and grazing conditions return to normal, output is expected to pick up in the second half of the year. Although the EU dairy herd is expected to decline, better management and genetic advances are likely to offset this and increase yield per cow. Much of the excess milk will go into cheese production (as is usually the case in previous years).

Monthly Price Movements for January 2020

Commodity Produced	Company Contract	Price Change from Dec 2019	Standard Litre Price Jan 2020
Liquid & Cheese	**Arla Farmers UK**	*No change**	28.89ppl liquid 30.04ppl manufacture
Cheese, Liquid & Brokered Milk	**First Milk**	*No change*	27.0ppl liquid 27.90ppl manufacture
Cheese	**Fresh Milk Company (Lactalis)**	*No change*	26.50ppl liquid 27.61ppl manufacture
Liquid & Manufacture	**Grahams**	*No change*	25.50ppl
Liquid & Manufacture	**Müller Direct**	*No change*	26.25ppl (includes 1ppl direct premium)
Liquid & Manufacture	**Müller (Co-op)**	*No change*	29.38ppl
Liquid & Manufacture	**Müller (Tesco)**	*No change*	31.44ppl
Liquid, Powder & Brokered	**Yew Tree Dairies**	*No change*	25.5ppl Standard A litre price

*Arla's quarterly currency smoothing mechanism has resulted in a 0.13ppl reduction for a liquid standard litre and 0.15ppl reduction for the manufacturing standard litre from January 2020.

Other News

- Sainsbury's is reducing its milk price by 0.19ppl from January 2020 on the back of its latest quarterly cost tracker review. For the Müller Milk Group supplier, the liquid standard litre price is 30.75ppl and for the Arla SDDG supplier the same reduction takes their price to 30.63ppl (which includes their 0.12ppl haulage charge). Changes to the cost tracker include a 0.16ppl reduction in feed costs, -0.02ppl in fuel and -0.01ppl in fertiliser, which combined make up the 0.19ppl reduction.

- Tesco is also reducing its milk price from February 2020 by 0.26ppl, which brings its liquid standard litre price to 31.18ppl (and 30.93ppl for Arla suppliers). Promar's annual cost tracker for April 19 to March 20 remains unchanged from the last review, with variable costs at 17.12ppl, overhead costs at 11.94ppl and depreciation at 2.10ppl, giving a total cost of production of 31.07ppl. Adjusting for feed, fuel and fertiliser prices adds 0.11ppl, bring the milk price up to 31.18ppl.

- The Co-op follows their 0.01ppl increase in November 2019 with another 0.01ppl increase from February 2020, bring their liquid standard litre price up to 29.39ppl. Despite taking into account the recent decreases from Sainsbury's and Tesco, the Co-op have agreed to include the full 1ppl Müller Direct Premium, bringing about a positive price move.

- Müller have paid their direct producers a one-off retail supplement payment of 0.962ppl. This payment was paid in December 2019, based on the litres produced in the previous month and amounts to about £790 for a 1 million litre producer. The last retail supplement was paid back in May 2018.

- Müller's non-aligned producers who are signed up to their Direct Premium will also benefit from a 0.5ppl increase to 1ppl from January 2020. This will be paid as a 13th payment in January 2021. Producers must meet the same criteria to quality, as well as committing to their being no bull calves euthanised on farm. It is expected that the number of producers signing up to the Direct Premium will increase to 90%.

- Between 50-60 dairy farms have been affected by the bushfires near Australia's east coast. Major dairying areas in the country have been affected, including East Gippsland in Victoria and the NSW south coast. Australian Dairy Farmers Chief Executive David Inall said that it was too early to assess the impact but some reduction in milk production is expected. Road

closures in some areas means that tankers have been unable to access farms and thousands of litres have been dumped. It has also been more difficult to bring in fodder, water and diesel supplies. The number of livestock deaths (dairy, beef and sheep) across NSW has surpassed 6200.

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Straights Update

Straights prices for delivery in artic loads as of mid January are as follows (varies depending on location):

£/T for 29t loads delivery + £8/t haulage to central belt	Jan 20	Feb 20	Mar 20 - Apr 20	May 20 - Sep 20
Proteins				
Hipro Soya	310	310	309	298
Rapeseed Meal	214	215	215	May-Jul 219 Aug-Sep 202
Maize Distillers Meal	210	213	213	213
Starch				
Wheat	156	157	160	May-Jul 163 Aug-Sep 170
Barley	128	129	134	May-Jul 137 Aug-Sep 143
Maize	177	179	179	183
Fibre				
Imported Sugar Beet Pulp	183	183	183	188
Soya Hulls	172	172	172	160

Source: Straights Direct and Cefetra on 16th January. Barley and wheat prices are based on delivery to central belt (for North-East, deduct £5/t for wheat), courtesy of Julian Bell, Senior Rural Business Consultant, SAC Consulting. Prices do not include seller's margin.

Global News

- The first maize harvest in Brazil is set to take place at the beginning of February (which was planted in October/November). However, very dry weather and the lowest soil moisture content in 5 years since September is raising concerns over yield. While this first harvest is the smaller of Brazil's maize harvest, a tightening of supply and an increase in consumption has increased domestic prices. The knock-on-effect is a potential rise in export prices, adding upward pressure to global maize markets.

- Confirmation by Donald Trump's administration that the first phase of a new trade deal with China is due to be signed on the 15th January has bolstered US wheat futures since the start of 2020. Weather and trade have also impacted on wheat prices with US futures being the highest since June 2019.

- Largely due to a reduction in area planted and yields in the United States, global soya production is expected to be down by 20% in 2019/2020, with limited increase in demand due to African Swine Fever (ASF) in China.

UK and Scottish News

- For the rest of 2019/20, the pace of UK wheat and barley exports will be important price drivers. So far the UK has exported 41% of its surplus of barley but just 23% of its wheat surplus. The terrible autumn sowings may be the saviour of UK wheat prices as strong price premiums for new crop encourage farmers to roll-over wheat stocks into 2020.

- Within the UK, the initial AHDB early-bird survey sees lower: wheat (-9%), winter barley (-12%) and rapeseed (-23%) areas but higher spring barley (+28%) and oats (+10%) areas. Note these are early estimates and winter areas and condition may fall further as heavy rain has continued since these were made. Failed winter crops are expected to further boost spring crop and fallow area. UK wheat output could fall 3.2mt to 13mt and given the continuing rain may be lower still as yield potential falls. The picture is similar in Scotland with a likely 10-15k ha swing in winter cereals to spring barley.

- Crop gross margins for 2020 currently appear positive for wheat based on current forward contract prices and trend yields. Spring barley returns are more doubtful given the potentially large UK crop in 2020. Net farm receipts could fall given the lower winter cereal area and potentially moderate yields. Distilling malting barley contracts of £20/t over Nov 2020 LIFFE wheat futures indicate £175/t for harvest 2020 & wheat prices of £155/t; £13/t up on 2019.

- Strangely, Brexit uncertainty maybe less important for the 2020 harvest; the UK is likely to be a net wheat importer though the barley surplus could rise. Also assuming the newly elected Johnson gets his EU withdrawal deal through by 31st January; trading conditions with the EU would remain unchanged at least until 31st December 2020.

- The big concern could be for barley and oats; with larger sowings expected any surplus remaining after December 2020 could face export barriers to the EU if a deal is not ratified by then.

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Characteristics of Successful Agricultural Businesses

Many clients I speak to feel as if they are working extremely hard, putting in long hours on the farm day in, day out and not seeing any reward. A benefit of being an Agricultural Consultant is getting to see a variety of farms and their accounts, enabling me to pick out the key attributes of those performing well. So what do successful agricultural businesses do differently from others? How can two farms in the same area, with a similar soil type, climate and management system generate vastly different incomes?

Research has found that only 5% of factors affecting farm performance are outwith the farmer's control. This suggests that the factors dictating whether or not a business is profitable is down to the individuals involved in the business; the decisions made and how they are implemented. Data from the English Farm Business Survey found that the top 25% of dairy farms surveyed made on average £100,000 per year more than the bottom 50%. So what are the top 25% of farms doing differently?

A study by the Andersons Centre on behalf of AHDB looked at the characteristics of high performing farms. This study found a series of activities which the top performers all adhere to. While some of the bottom 50% may engage in some of these activities, they do not engage in them all. These key attributes are as follows:

- **Minimising costs** – research has shown that successful farms have lower costs yet greater outputs. Identifying areas where costs can be cut and don't affect turnover is crucial: sharing equipment with neighbours, co-operative buying, training and incentivising staff to maximise productivity. Keep necessary staff and machinery and no more.
- **Target setting and budgeting** – sit down with business partners and family members to set targets at the start of the year. Create an action plan on how to meet the targets and create a financial budget/projection. Meet regularly throughout the year to discuss progress – what has worked and what can be done better? Know your cost of production!
- **Benchmarking** – compare the performance of your business to others. Join benchmarking groups and compare your performance to benchmarking data, whether it be on AgRE Calc© or the QMS enterprise profitability figures or any other benchmarking data. Benchmarking allows you to see where the business isn't performing, allowing you to target and improve that area. This is all well and good but benchmarking only works if you act!
- **Understanding the market** – identify what the market requires, be it carcass specifications or butterfat %. Keep in regular contact with who you supply to ensure you are producing what they want. Ask them what you could do to add value to your produce and again act on what they say.
- **Focus on detail** – the sum of small gains. Identify little things that you could do better and focus on improving them. A lot of small changes can have a massive effect. Create standard operating procedures with "how to" guides available near to where the job is being done. This can be very useful to focus the mind, reduce corner-cutting and ensure inexperienced staff maintain high standards.
- **Have a mind-set for change and innovation** – work smart, don't make excuses about why a job is labour-intensive and difficult. Take time to consider better ways of completing the same task. If spending a whole day thinking of and creating a quicker way to do something saves you time and stress in the future, then it is worth it.
- **Continually improve people management** – staff and family labour are on your side by helping you achieve your dream. Creating efficient, motivated and self-sufficient staff

requires investment in money but particularly in time. Take time to get to know staff; learn what motivates them, train and empower them and provide clear, achievable objectives.

- **Specialise** – research shows that farms that focus on one farming system rather than many tend to be more profitable. Diversification has been pushed as the answer to farm profitability in recent years but diversification should not be carried out at the expense of existing enterprises. A good example of specialising is a dairy farmer who was fantastic at managing milking cows but rearing heifers was always treated as an afterthought. Accommodation for youngstock was also poor. As a result, the performance of heifers coming into the herd was poor, so he contracted the rearing of heifers out, benefiting both businesses.

Ultimately, no-one can improve your business apart from you. To move your business into the top 25% of farms takes more than a rise of market prices and luck, it takes change. Change in the way we think about our businesses and change in the way we operate. However, change takes courage and self-belief. At almost every farm tour of a successful business, the host's story starts with the realisation that they needed to change for their business to survive. The successful businesses all, at one point, had to change. After all, as Einstein said "The definition of insanity is doing the same thing over and over again and expecting different results".

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The Importance of Good Cow Flow

Good cow flow in the milking parlour is important for more than just keeping down the time spent in the pit. When cows are moving through the parlour efficiently, stress on cows and humans is reduced, and the efficiency of milk let down is greater. There is also likely to be less lameness caused by extra turning forces on the hoof and damaging the white line at the parlour exit.

Less stress = better cow flow

If a cow is stressed during the milking process, she is less likely to want to return to the parlour. This will slow down cow flow. Stress on cows can be reduced in a number of ways:

Space - when a group of cows is in the collecting yard it is important that they have enough space to find their preferred order. Some cows will want to be milked first while others will prefer to be at the end. Often the milking order is different from the walking order from the field or housing. Much of the work done on cow flow originates from New Zealand, where it is recommended that a Friesian type cow needs 1.5m^2 of collecting yard space. For larger Holsteins this may rise to 1.7m^2.

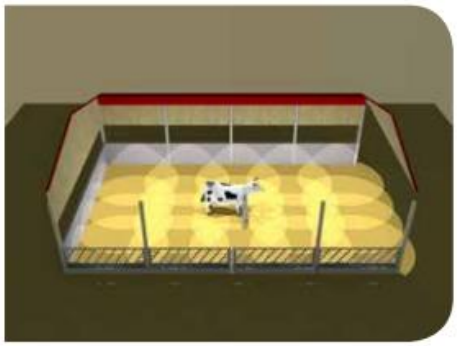
Surface - collecting yards should have enough grip for cows to be able to move with confidence. This could be provided by surface treatments when the floor is poured or by grooving on existing floors. For hygiene reasons, standing water should be avoided as this will give the sensation of a different surface that the cow may shy away from. It may also cause reflection that may be interpreted as movement by the cow. As a prey animal, this is likely to cause stress.

Although sharp corners should be kept to a minimum, rubber matting can be used in these areas to improve grip and reduce abrasion on the hoof when turning.

If the cows are grazing, consider the transition area between concrete and track. This should be well maintained both on the way into and out of the parlour. Further information on cow track construction is available on the FAS website https://www.fas.scot/downloads/technical-note-tn730-construction-of-a-cow-track-for-access-to-grazing/

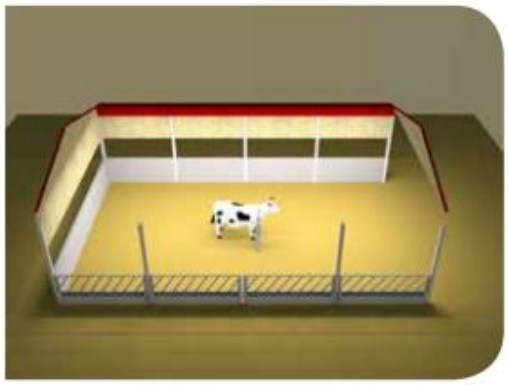
Lighting - collecting areas and the parlour should be lit uniformly to avoid shadows (see figures below). Sharp, dark shadows across the concrete can be interpreted by cows as a barrier, causing them to pause before crossing.

Figure 1. Example of poor light uniformity



Source: AHDB Dairy

Figure 2. Example of good light uniformity



Source: AHDB Dairy

The level of illumination should be greater in the pit and recommend light lux levels are given below:

Recommended light levels for different areas

Area of Milking Facility	Illumination Level in Lux
Collecting yard	50
Milking pit	500
Cubicle/straw yard housing	150-200

Exits from the parlour should also be well lit as cows naturally prefer to move from darker areas to lighter ones. Lighting should be designed so that it is not shining directly at the cows, creating glare.

Human interaction - good stockmanship is as important in the parlour as anywhere else. Aggressive shouting at cows in the pit will be heard by cows waiting in the collecting area. This will increase stress levels in these animals which can hinder milk let down and may well increase the amount of muck in the parlour. Both of these things can slow down milking time.

All staff should be aware of the level of stockmanship required and training should be provided where necessary. This ensures that the cows are treated in a uniform manner.

Perfect cow flow may be difficult to achieve due to restrictions, such as existing buildings in the yard. However, there are many things that can be done to make improvements which will make life easier for cow and farmer alike.

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Carbon Footprint – What is it and why should we use it?

The agricultural industry is facing more scrutiny now than ever before, particularly where the environment is concerned. Our industry is now at a point where farmers must be more business driven, while maintaining high welfare standards that UK farms subscribe to and minimising impact on the environment. One of the biggest changes which has been pushed through several different schemes is undertaking a carbon footprint audit. While it can be seen as yet another hoop to jump through, some farmers have embraced it and used it as a tool to measure herd and business progression.

So why should you undertake a carbon footprint audit? Many farmers are doing so because it is a requirement from their milk purchaser, but it could be as useful as a set of accounts if an audit is done correctly. There is a strong correlation between a low carbon footprint and good profitability. This is because a farm with a low carbon footprint has been careful in matching inputs to their business needs and improved the farm's outputs off these inputs, thus keeping a low carbon footprint.

There are several factors which can influence a farm's carbon footprint. They range from reducing calving intervals to lowering replacements rates, and improving yields to list a few, all of which can help improve the farm's profitability.

Using replacement rate as an example, reducing a herd's replacement rate could have a significant impact. If a 200-cow herd has a replacement rate of 30% and reduced it to 25%, it would cut the number of replacements needed by 10 cows per year. If these were home-grown replacements, it would save £18,180 on average a year (the AHDB average cost for growing a replacement heifer is £1818). Better still, it would help to lower the herd's carbon footprint as there would be less non-producing animals. This applies whether the herd is closed, buys in replacement heifers or operates a flying herd, which would be importing carbon onto the farm when buying in replacements. The main reason the carbon footprint is lowered is due to reducing inputs while maintaining outputs.

When a carbon footprint is carried out, it shows how many grams of CO_2 equivalent emissions are produced from each area of the farm enterprises

e.g. how much comes from manure or how much comes from feed and so on. These figures can be benchmarked against each other year-on-year, highlighting which areas of the farm's activities can be improved, and where cash in the business can be saved. It can also help in the decision making of capital investments, to see how much of a saving on carbon could be made from investments such as new housing or slurry systems. The saving on physical inputs or the increase in actual outputs can be measured in a more detailed manner, ultimately helping lead to better payback of the investments.

Farm businesses must become more and more efficient with their resources, especially with the NFU's drive for the agricultural industry to be carbon neutral by 2040. While looking at a farm's accounts is a good place to start, getting information from a carbon audit which supports these accounts from physical inputs and outputs is going to be vital. Fully funded carbon audits are available through the Farm Advisory Service, where an experienced consultant can advise on mitigation measures to help reduce carbon footprint and increase profitability, something which every farm will need to work on moving forward. More information on carbon audits can be found at https://www.fas.scot/carbon-audits/

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Selective Dry Cow Therapy and Udder Health

Selective Dry Cow Therapy (SDCT) is becoming commonplace on many dairy farms in response to increasing pressure to use antibiotics responsibly, as well as the demands from milk buyers and supermarkets. Cows with no evidence of existing infection within the udder can be successfully dried off with only a teat sealant, and the use of antibiotic dry cow therapy can then be targeted to only those cows with evidence of infection at dry off, usually indicated by a high somatic cell count (SCC) in late lactation.

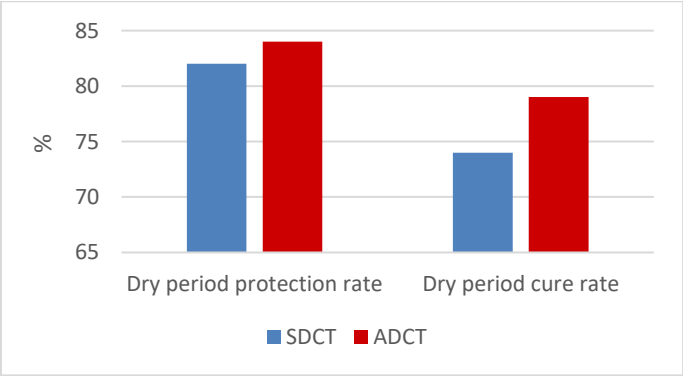
Over the last three years, 17 dairy farmers in Scotland have been taking part in a project looking at SDCT and the effect on udder health. The project was funded by the Scottish Government's Knowledge Transfer and Innovation Fund (KTIF) and managed by SAC Consulting with additional support from Zoetis, the University of Edinburgh and Müller, with only farms suppling their milk to Müller taking part. Each herd's dry period performance was monitored through individual cow SCC, and mastitis records were analysed to assess the impact of SDCT.

Dry Period Performance

Dry period performance was measured by dry period protection rates (i.e. what percentage of cows did not get a new infection in the dry period) and dry period cure rates (i.e. what percentage of cows with an infection at drying off were then cured during the dry period). Pre-calving status was based on the last 3 SCC before drying off. A SCC of 200 was used as the cut-off point, and if all 3 SCC recordings before drying off were 200 or less the cow was classed as uninfected. If 1 or more of the last 3 SCC recordings before drying off were 201 or greater, the cow was classed as infected. Post-calving, the first SCC recording was used, with 200 or less being classed as uninfected and 201 and more being infected.

There was dry period performance data on 3342 cows, of which 57% were given teat sealant only at drying off (SDCT), and 43% were given both antibiotic dry cow therapy and teat sealant (ADCT). The effect on dry period protection rates and cure rates are shown below.

Dry Period Performance in Cows on SDCT and ADCT



The dry period protection rate was almost identical between the treatment groups, with the SDCT group being only two percentage points below the ADCT group (82% versus 84%). The industry target is 90% and only 1 out of the 17 farms achieved this target in both SDCT and ADCT cows.

As expected, most of the cows with a SCC over 200 in late lactation received ADCT. However, 373 cows in the SDCT group had at least one high cell

count in the last 3 recordings prior to drying off. Most of these cows were wrongly classified as they should have received antibiotics, although individual selection criteria varied between farms. As anticipated, more cows with a high SCC at drying off getting ADCT were cured (79%) compared to only 74% in the SDCT group. This result shows the benefit of the responsible use of ADCT when used to target those cows that had evidence of udder infections at drying off.

There was a huge variation between farms in dry period performance (see Table 1). The best performing farm was using SDCT in 75% of the cows. Conversely some farms had poor dry period performance even in cows on ADCT, indicating that there were areas for improvement e.g. better housing environment and management of dry/transition cows.

Table 1. Dry Period Performance in the Best and Worst Farm

	Dry Period Protection Rate		Dry Period Cure Rate	
	SDCT	*ADCT*	*SDCT*	*ADCT*
Best farm	91%	93%	84%	87%
Worst farm	66%	71%	61%*	64%

*49 cows with a high cell count prior to drying off were accidently dried off with teat sealant only

Clinical Mastitis Rates

Across the 17 farms, a total of 2059 clinical mastitis cases were recorded, of which 353 were of dry period (DP) origin (occurring within the first month of lactation). There were fewer mastitis cases of DP origin in cows on SDCT compared to those on ADCT (see Table 2), and the total number of mastitis cases was significantly higher for cows on ADCT. However, these are the problem (or high SCC) cows more likely to have chronic recurring udder infections, which would sporadically result in clinical mastitis. When expressed as a percentage, mastitis cases of DP origin out of the total number of mastitis cases was slightly higher for cows on SDCT, but the biggest risk was for first calving heifers.

Table 2. Incidence of Mastitis of Dry Period Origin Depending on Drying off Treatment

Dry Off Treatment	Total Mastitis Cases	DP Cases in 1st month of lactation	% DP cases
SDCT	651	127	19.5
ADCT	1107	140	12.6
First calving heifers	301	82	27.2

First lactation heifers are a good indicator of dry period infection when they calve for the first time, as they have no previous mastitis history, and have not received any prior dry cow therapy that could influence mastitis or SCC rate after calving. A high incidence of heifers calving in with mastitis or a high SCC at first milk recording after calving may point towards cleanliness of the dry cow environment, as well as how heifers are managed and transitioned into the milking herd. Heifers have different challenges compared to cows over the calving period and they likely experience more stress moving from the in-calf heifer group to the dry cow group and their introduction to the milking parlour. Stress will suppress the immune system and increase the risk of infection.

In conclusion, SDCT can work very well and it is possible to achieve industry targets for dry period performance with high rates of SDCT. Heifers contributed the most to mastitis cases in the first month after calving on many farms, and so their management and introduction to the herd must be carefully managed to minimise stress and reduce the risk.

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The Benefits of Vetch

Vetch (also known as tares) is an annual leguminous plant and has many benefits in wholecrop or grass mixtures for livestock producers. It is a very versatile crop which can be grazed or conserved as hay or grown as a green manure or for grain. Winter vetch is frost tolerant, making it particularly suited to a winter cover crop or green manure.

Source: DLF Seeds

There are several varieties of vetch but hairy vetch is most widely used in farming. When used as a cover crop, hairy vetch can help prevent soil erosion by holding the soil in place and preventing it from being blown away.

The plant acts as a soil conditioner through its deep rooting system, which helps soil aeration and health. Being a legume, the plant fixes nitrogen in the region of 100-250kg N/ha, benefiting subsequent crop growth. It can also fix nitrogen at lower soil temperatures than clover. Vetch is tolerant of a wide variety of soil conditions although does not like water-logged conditions and is also more tolerant of acid soils than most grain legumes (except lupins).

Vetch is high yielding and very competitive against weeds due to its clambering, smothering growth habit. However, it is not very competitive against weeds in the early growth stages until it reaches 10-15 cm in height. It can help increase disease resistance of the main crop and has little problem with pests or diseases, providing a good break in the life cycle of cereal diseases crown rot and take-all.

This legume can be included in a wholecrop mix at around 10-30% inclusion, often with cereals and peas, with the cereal acting as a scaffold for the vetch. It is a palatable, high protein forage, which adds protein to the cereal crop and increases yield of the mixture rather than just sowing a single species. At the higher inclusion rate there are reported issues of the crop being very thick to mow and can pull the crop down and so a 10% inclusion is commonly recommended. Typical seed rate for a wholecrop mixture is 75kg/acre or 10% less if undersown.

Vetch can also be included in a grass mixture as part of a silage crop to help increase the protein content (sow at 17kg/acre). It works well sown in the autumn for over winter cover or grass silage mixtures due to its frost tolerance. It has a late sowing window compared to other legumes and can be sown into late September.

When looking to purchase seed this year, ask your supplier about the benefits of vetch and its inclusion in wholecrop or grass mixtures and what it can add to your forage production and quality.

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Dates for your Diary

- 20th - 22nd January - **British Cattle Breeders Conference.** Telford Hotel & Golf Resort, Great Hay Drive, Sutton Heights, Telford, Shropshire, TF7 4DT. Time: 09.00-17.00.

- 21st January - **Mastitis: Predict, React and Optimise #QuarterPRO**. The Black Bull Inn & Restaurant, 2B Montgomerie Street, Tarbolton, Mauchline, Ayrshire, KA5 5PR. Time: 10.30-14.30. To book your place, call the KE Events hub on 01904 771216 or email ke.events@ahdb.org.uk

- 22nd January - **Mastitis: Predict, React and Optimise #QuarterPRO**. Crichton Royal Farm, Glencaple Road, Dumfries, DG1 4AS. Time: 10.30-14.30. To book your place, call the KE Events hub on 01904 771216 or email ke.events@ahdb.org.uk

- 23rd January - **Mastitis: Predict, React and Optimise #QuarterPRO**. Stirling Agricultural Centre, Stirling, FK9 4RN. Time: 10.30-14.30. To book your place, call the KE Events hub on 01904 771216 or email ke.events@ahdb.org.uk

- 23rd January - **Recruiting for the Future**. Battleby Conference Centre, Redgorton, PH1 3EW. Time: 10.00. To book a place visit: https://www.eventbrite.co.uk/e/recruiting-for-the-future-in-the-land-sea-sectors-tickets-71638262973

- 30th January - **Building Business Resilience in Changing Times**. The Tinto Hotel, 44 Biggar Road, Symington, ML12 6FT. Time 10.45-14.00. To book your place contact the KE Events Hub on 01904 771216 or email ke.events@ahdb.org.uk

- 5th February - **SRUC Careers Fair**. SRUC Elmwood Campus, Carslogie Road, Cupar, Fife, KY15 4JB. Time: 11.00.
- 5th February - **Dairy Tech**. Stoneleigh Park, Coventry, CV8 2LG.
- 6th-7th February - **National Farmers Union of Scotland AGM**. Radisson Blu Hotel, 301 Argyle Street, Glasgow, G2 8DL.
- 25th February - **New Entrants Gathering**. Perth Racecourse, Scone Palace Park, Park Place, Perth, PH2 6BB. Time: 10.30. For more details contact Val Angus on 01835 823322 or e-mail val.angus@sac.co.uk
- 26th February - **Royal Northern Spring Show**. Thainstone Agricultural Centre, Inverurie, Aberdeenshire, AB51 5XZ.
- 14th March - **UK Dairy Expo**. Borderway Mart, Montgomery Way, Rosehill, Carlisle, CA1 2RS.

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

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