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Milk Manager NEWS



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This month's editor: Lorna MacPherson	







Market Update

UK Wholesale Dairy Commodity Market

- Fonterra's latest on-line GDT auction (6th July) resulted in a 3.6% decline in the weighted average price across all products, reaching US \$3,924/t. This is the largest drop since March this year and the 6th consecutive fall in price. However, the current average price is still significantly higher than 12 months ago, which was \$3,197/t. All products on offer sold at lower prices compared to the previous auction two weeks ago (except lactose which remained the same). Butter milk powder and cheddar showed the greatest declines, with butter milk powder falling 9.8% to \$3,298/t and cheddar by 9.2% to \$3,949/t. Skim milk powder (SMP) was also back 7.0% to \$3,126/t. Full results available are at https://www.globaldairytrade.info/en/productresults/
- UK trade of dairy commodities butter, cream, SMP and cheese have been fairly quiet throughout June. With less demand, butter and SMP prices have fallen slightly as buyers remain well covered and uncertainty around when lockdown restrictions are going to end.

Commodity	Jun 2021 £/T	May 2021 £/T	% Difference Monthly	Jun 2020 £/T	% Diff 2021- 2020
Bulk Cream	£1,433	£1,348	6	£1,390	3
Butter	£3,320	£3,350	-1	£2,980	11
SMP	£2,150	£2,210	-3	£2,050	5
Mild Cheddar	£2,980	£2,980	0	£2,910	2

Source: AHDB Dairy - based on trade agreed from 24th May – 20th June 2021. 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.

- Prices in May for butter and cream dropped slightly on the back of peak production being reached and an excess in cream supply. On a positive note, there was increased buying interest for the food service sector as further restrictions eased on hospitality. Going into June, butter stocks were reportedly ample and speculation over future demand mainly in the food service sector meant a fall in trade.
- UK cream prices continue to be discounted compared to prices on the continent, with

those exporting cream to the EU able to command a higher price than selling into the UK market. However, EU cream sold within the EU is still at a higher price compared to UK export prices due to trade friction and increased customs regulation for products of animal origin entering the EU from the UK.

- SMP prices in May were up slightly, following the global market where animal feed demand continued for powder in the far east. However, throughout June, there has been a lull in trade as there has been no shortage of product on the back of the spring flush and the futures market price falling.
- Cheese prices have remained stable as stocks of mild cheddar are thought to be fairly tight and the seasonal decline in milk production. Continued strong demand for retail and exports is also helping keep prices firm.
- On the back of falling butter and SMP prices this month, it is not surprising that AMPE has come back by 0.74ppl. However, the market indicator for the value of milk at the factory gate going for butter and SMP manufacture is still 9% (2.79ppl) more than June 2020. MCVE has not changed from last month (only up 0.01ppl) due to stable mild cheddar prices and only marginal changes to whey butter and whey powder prices. MCVE is 7% higher (+2.11ppl) than the June 2020 price.

		Jun 2021	May 2021	12 months previously	Net amount less 2.4ppl average haulage – Jun 2021
4	AMPE	32.46ppl	33.20ppl	29.67ppl	30.06ppl
Ν	ICVE	33.62ppl	33.61ppl	31.51ppl	31.22ppl

Source: AHDB Dairy

• For the week ending 2nd July, spot milk and cream prices were up, with cream trading at £1.48 to £1.52/kg ex works and spot milk at 32 to 34ppl, up 5 to 7ppl on the previous week due to increasing demand and falling production.

UK Milk Deliveries and Global Production

 GB milk deliveries have declined sharply throughout June and are 2% less than the previous week (for the w/e 19th June). Deliveries to milk processors are now very much in line with 2020, at just 0.1% or 50,000 litres above the same week last year.



 Grass growth has declined significantly in June according to Grasscheck GB on the back of very dry conditions, which will have partly contributed to the decline in milk production. At the end of June, grass growth across GB monitoring farms was only 42.7kg DM/ha/day, which is 66% of the two-year average at this time.



Source: https://www.grasscheckgb.co.uk/

 Strong growth in global milk supplies has been seen for the month of April, up 2.2% on April 2020, with average daily production estimated at 840million litres. In April growth mainly came from New Zealand, Argentina and the US (+11.7%, +3.5% and +3.3% respectively compared to April 2020). Milk supply is rising in many areas, at a level that normally suggests markets could weaken, but with sharply rising global GDP there remains

upwards pressure on dairy markets and in turn on milk prices.



Monthly Price Movements for July 2021

Commodity	Company	Price Change	Standard
Produced	Contract	2021	July 2021
Liquid &	Arla	No change	31.95ppl
Cheese	Farmers		liquid
	UK		33.2ppl
			manufacture
Cheese,	First Milk	+0.57ppl	30.5ppl
Liquid &			manufacture
Brokered			
Milk			
Cheese	Fresh	+0.5ppl	29.5ppl
	MIIK		liquia
	Company		30.73ppi
	(Lactalis)	. 100/	
Liquid & Manufacturo	Granams	+ ippi	29.0ppi
	Müller	+0.75ppl	28 75nnl
Manufacture	Direct	то. горрі	(includes
Manalacture	Direct		1 ppl direct
			premium
			and
			-0.25ppl
			Scottish
			haulage
			charge)
Liquid &	Müller	No change	30.39ppl
Manufacture	(Со-ор)		
Liquid &	Müller	No change	32.13ppl
Manufacture	(Tesco)		
Liquid,	Yew Tree	No change	29.1ppl
Powder &	Dairies		Standard A
Brokered			litre price

Other News

- The Sainsbury's Dairy Development Group (SDDG) will receive an extra 0.89ppl from 1st July, bringing their liquid standard litre price up to 32.69ppl for Müller producers. Arla SDDG farmers will receive the same price increase, but with a 0.12ppl haulage charge, their July milk price will be 32.57ppl. This price increase is based on the increase in feed, fuel and fertiliser costs over various time periods:
 - Feed was costed at 12.02ppl (+0.75ppl over a 6-month period up to April 2021). This was based on prices of Brazilian soya, rapeseed meal, maize gluten, London wheat futures and average compound feed prices for the group for the winter period and three months of the summer feed tender (which saw a £39/t increase for the summer period).
 - Fuel was costed at 0.72ppl (+0.09ppl) based on the red diesel price over a three-month period up to April 2021.
 - Fertiliser was priced at 0.79ppl (+0.05ppl), based on the price of ammonium nitrate over a twelve-month period up to April 2021.
- Members of the Tesco Sustainable Dairy Group (TSDG) will benefit from a 0.53ppl price rise from August, bringing their liquid standard litre up to 32.66ppl (for a Müller producer). This is the 3rd price rise this year since +0.4ppl in February and +0.86ppl in May. Promar calculate the cost of production to be 31.99ppl based on the following:
 - Variable costs = 17.86ppl.
 - Overhead costs = 11.9ppl (including £61,678 for unpaid family labour).
 - Depreciation at 2.23ppl.

Taking into account the quarterly adjustment for feed, fuel and fertiliser adds 0.67ppl onto the cost of production to bring about the new quarterly price of 32.66ppl.

• The Müller Cooperative Dairy Group is also raising its August milk price by 1.06ppl to 31.45ppl, which is 1.92pppl above the August 2020 price. The Coop price is based on prices from the TSDG, SDDG and the Müller Milk Group Direct.

- Arla Foods is looking to build a commercial dairy farm in Nigeria, housing 400 cows on a 200-hectare farm. The aim is to increase local food production and help meet the country's increasing demand for dairy products, as well as support and train up to 1000 local dairy The state-of-the-art facility with farmers. modern milking equipment and technology and housing for 25 employees is planned to open in 2022. The goal is for the herd to produce over 10T milk/day, supplying Arla's dairy plant in Kaduna State. Nigeria is currently just less than 10% self-sufficient in dairy products but its population is one of the fastest growing and is expected to reach 400 million by 2050.
- A very positive outlook for dairy was presented Torsten Hemme (CEO of the bv Dr International Farm Comparison Network) at the Alltech ONE conference in May. He said that while liquid milk consumption is decreasing, this is more than compensated for by the demand for butter and cheese as the global population continues to grow. As feed costs have increased, this has been offset by the increase in milk price. However, on the whole grazing farms are financially better off with better feed costs compared to housed systems. His prediction was that global milk prices should continue to rise over the next three to four months, giving a positive outlook for farmers, as long as costs do not continue to increase. A 50% increase in demand for dairy products is expected by 2050 and dairy farmers must focus on the environment, reducing emissions and preserving trust with consumers.

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Straights Update

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

£/T for 29t loads delivery + £8/t haulage to central belt	Jul 21	Aug 21	Sep 21 - Oct 21	Nov 21 - Apr 22
Proteins				
Hipro Soya	368	368	368	367
Rapeseed Meal	252	247	247	246
Wheat Distillers Pellets	253	247	247	245
Starch				
Wheat	199 (old crop)	167 (new crop)	167	176
Barley	189 (old crop)	149 (new crop)	149	156
Maize	255	255	255	216
Fibre				
Imported Sugar Beet Pulp	POA	225	225	187
Soya Hulls	194	194	194	192

Source: Straights Direct, Cefetra, Graindex and AHDB on 8th July. Barley and wheat prices are based on delivery to central belt (for North-East, deduct £5/t for wheat), courtesy of Mark Bowsher-Gibbs, Senior Consultant, SAC Consulting. Prices do not include seller's margin.

Global News

- Planting and emergence of the US soyabean crop is ahead of last year as of 20th June. Plantings were reported at 97% complete, compared to the five-year average of 94% at the same time. Emergence was 91% compared to the five-year average of 85%. However, only 60% of the crop was rated good-excellent (2% down on the previous week) and 10 points less than the same time last year.
- Shipments of soyabean meal out of Argentina have been affected by low water levels in the Parana River, with ships only being loaded to 75 to 80% of capacity. It is thought that this issue could continue for several months.
- Dry weather in the US corn belt is still causing some concern. Although there has been recent rains in some parts of Iowa, Nebraska and Minnesota, about 30% of the corn belt is struggling with dry conditions. US corn ratings this time last year were 72% good-excellent but are currently only 65% as of w/e 25th June. The US corn crop makes up about 16% of global grain production. Continued hot weather would jeopardise the very small global

grain surplus, pushing prices higher. The US spring wheat ratings have also fallen to 27% good-excellent compared to 37% in the previous week.

- Closer to home, the Russian 2021 wheat crop could reach record yields being estimated at 84.6mT on the back of a larger sowing area and favourable weather conditions. Russia is the world's largest exporter of wheat. It is a similar trend in Ukraine, with the country's wheat crop increased by 300,000t to 29.2mT, and an estimated maize crop of 38.3mT.
- It is estimated that the global grain output in 2021/22 will exceed demand by a very small margin of just 2.0mT, the first time since 2016/17 (International Grains Council).

UK and Scottish News

- Forward prices for new crop grains continue their steady decline (Nov 21 wheat futures lowest since April) in light of a recently improved weather outlook across N America. This coupled with the potential of big EU/Black Sea wheat crops could exert further downward pressure on prices short-term throughout harvest. On the positive side imported maize remains expensive and will focus buyer's attention on securing home-grown supplies.
- There are good prospects for UK crops with the current favourable weather conditions. UK wheat production is estimated at 15.2 to 15.5mT by ADM although this will be heavily influenced by weather now as wheat enters the important grain filling stage.
- The UK is still likely to be a net importer of wheat in the coming season, despite a slightly higher carry out of the 2020 harvest crop now expected and a decent 2021 wheat crop predicted.

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Heat Stress in Calves

When it comes to temperature stresses on calves we tend to think about cold weather and the impact of low temperatures on the calf's ability to keep warm and grow at the target rate. However,

for summer-born calves, heat stress can also impact on health and growth performance.

Heat stress is likely to affect calves at temperatures over 25°C, with the first sign of stress being an increase in respiratory rate. The calf will use extra energy to divert heat away from its core to try and maintain body temperature. This means less energy is available for growth and immune function and a higher risk of mortality. Energy requirements for maintenance and hydration needs can increase by as much as 20 to 30%.

Signs of heat stress include:

- Drinking more water.
- Reduced milk and starter feed intake.
- Higher respiratory rate/panting (for calves less than one month old, 24 to 26 breaths/minute is normal. For older calves the normal range is between 15 to 30 breaths/minute).
- Spending more time standing and less time lying down.
- Lethargy.
- Sweating.

Any sick calves which are scouring will dehydrate more quickly in warmer weather, making electrolyte treatment even more important. If calves are scouring and little water is available, they will be much more susceptible to the effects of heat stress.

Water requirements greatly increase with temperature, with an extra one litre being required at a temperature of 30°C compared to 20°C. While prolonged temperatures over 25°C are uncommon in Scotland, lower temperatures can still cause heat stress effects when humidity is high.

Starter feed intake tends to reduce during periods of heat stress, meaning calves have less energy to meet their maintenance requirement and have less energy available for growth, resulting in lower weaning weights. This will be especially true in calves over three weeks of age where starter feed intake become significant. As healthy calves are most likely to drink more milk if it is offered to them, increasing the milk allowance provides a means to help increase energy intake during times of heat stress. Steps to reduce heat stress:

- Provide shade to calves in hutches and increase spacing between hutches to allow more air flow.
- Situate hutches to have the opening facing the prevailing wind.
- Alter bedding material from straw to materials like shavings, sand (although can heat up in direct sunlight) or oat husks which retain less heat.
- Lift hutches six to eight inches off the ground to increase airflow.
- Increase frequency of bedding to reduce disease built up (warmth will increase growth of pathogens).
- Increase milk allowance.
- Replace water with fresh water regularly.
- Improve ventilation in buildings; either natural or provide mechanical ventilation but avoid drafts at calf level.
- Adjust feeding times to take place during the cooler times of the day. Calves are likely to eat more, and feed is less likely to spoil.

Heat stress in the dam and subsequently the calf in utero can also affect performance of that calf further down the line. An article in Hoard's Dairyman last month indicated that calves from dams that had experienced heat stress before birth showed lower antibody absorption from colostrum, lower body weight, poorer immunity, reducing milk production over their lifetime, and a decrease in herd survival for two generations.

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Ketosis: A Gateway Disease

Ketosis, sometimes called acetonaemia, is technically defined as elevated levels of ketones in the blood, milk and urine. The condition can occur when cattle go through a period of negative energy balance, often around calving.

Why does it happen?

When the cow is in negative energy balance, it will try to covert body fat to glucose. If there is significant negative energy balance where cows are mobilising excessive amounts of body fat, the liver will struggle to completely break down fatty acids and will produce ketones.

Identifying Ketosis

The classic tell-tale sign of clinical ketosis is a "pear drop" smell on the breath and a moderate drop in milk yield. Sometimes it can trigger neurological symptoms, such as excessive licking, disorientation or even aggression. This is known as nervous ketosis.

These are obvious symptoms, but it is more difficult to identify subclinical ketosis. This can be done with a blood test or, with increasing accuracy, a milk test.

If there are no symptoms, why bother testing?

Subclinical ketosis will leave cows more susceptible to a range of other conditions (see table below). These will have serious economic and welfare implications for the cow.

Disease	Increased risk with subclinical ketosis
Retained placenta	2 times more likely
Left displaced	8 times more likely
abomasum (LDA)	
Metritis	3 times more likely
Cystic ovaries	5 times more likely
Clinical ketosis	4 to 6 times more likely
Mastitis	1.61 times more likely
High SCC	1.42 times more likely
Lameness	2 times more likely
Early culling (<60 days	2 times more likely
in miik)	

Increased risk of disease with ketosis

Source: Kate Heller MRCVS

The consequences of these conditions can include reduced milk production, increased calving interval and increased antibiotic use. An estimated cost for a case of ketosis can be as much as £220.

How can it be avoided?

Clinical cases can be treated with propylene glycol, with care taken not to overdose. This can be toxic to rumen microbes. Up to 300ml a day can be beneficial to help raise blood glucose levels.

It is, of course, better to prevent the condition rather than curing it. This can be done by making sure cows are not overfat at drying off or gaining body condition throughout the dry period. In the late dry period, dry matter intake should be maximised to maintain rumen fill. Feed space should be at least 1m per cow during transition. This will reduce stress and encourage dry matter intake as will the use of smooth feed surfaces. Make sure your ration is meeting the cow's requirements.

Cows that are over fat, too thin or carrying twins may benefit from a monensin bolus. This will help with glucose production. Rumen protected choline or methionine can also help improve fat mobilisation out of the liver reducing the risk of fatty liver.

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How Best to Improve Profitability in the Dairy Herd?

Despite the recent milk price rises, significant increases in input costs (especially feed) over the last 12 months means that many farmers are not feeling much better off. Depending on harvest conditions, cereal prices should ease and could be in the region of around £30-40/t lower post-harvest from current levels. However, it is unclear what winter prices will be for commonly used protein sources such as soya, rapeseed meal and distillers dark grains. The consensus is that feed costs are likely to remain high going into the winter period.

Second cuts will already be done on many farms but there is still scope to maximise forage quality on the third cut. It is worth calculating your forage stocks and requirements for the coming winter and whether you can afford to take an early 3rd cut (or 2nd cut if not already taken) to improve forage quality.

It can be difficult to make significant savings in feed without affecting milk output or subsequent fertility and so this can often be false economy. Given previous periods of poor milk prices, it is likely that most farmers have their variable costs well under control. The biggest gain is perhaps to be made not by reducing input costs further but by improving feed efficiency and raising milk output per cow with very little increase in fixed or variable costs. Increasing yield per cow is nearly always cost-effective and can often be done with minimal investment.

When it comes to increasing feed efficiency the key focus areas are:

- Maximising dry matter intake regular push ups, feed bunk management to keep feed as fresh as possible and aim for 3 to 5% refusals. Clear refusals daily and minimise sorting behaviour. Ensuring adequate feed space is a priority.
- Milking cow numbers and stocking density if you are near 100% or more on housing capacity, are there options to cull some less productive/problem cows and reduce stocking density? This may actually benefit milk production per cow by improving lying space and feed space at the trough, as well as reducing aggressive interactions with more dominant animals. Less cows to feed with similar overall milk output equals lower feed costs per litre of milk.
- Transition cow management know the incidence of transition diseases and take steps to reduce these if, for example, milk fever or retained cleansings are greater than 5%. Are cows coming onto their milk quickly after calving or could milk production (peak yield) in early lactation be better? These are areas to discuss with your nutritionist and review dry period feeding and management to include things like pen moves, stocking densities, feed space, body condition score at drying off and management of heifers into the milking herd.
- Look at grouping the herd and feeding accordingly if facilities allow, feeding the base ration or TMR in line with the average production level of the group to minimise overfeeding concentrates to late lactation cows. Care must be taken to minimise any drop in yield when cows move from a high to a lower group yielding.

More often than not, poor milk production is related to longer-term nutritional issues as opposed to a poor-quality cake or blend i.e., forage quality, poor feed access and low dry matter intakes or issues with transition rations and management. All these things can affect feed conversion efficiency. Feed conversion efficiency (FCE) is calculated by dividing milk output per cow (in kg) by kg of dry matter intake. The target for all-year-round calving herds should be about 1.5. FCE is directly related to forage digestibility/quality and rumen health/pH can have a bearing on this. Increasing concentrates is not going to be cost-effective if it compromises rumen health by reducing the forage concentrate ratio too far or pushes starch levels too high.

Feed conversion efficiency guide

			Delle selle se tra t las							
			Daily milk output kg							
		20	22	24	26	28	30	32	34	36
	15	1.33	1.47	1.60	1.73	1.86	2.00	2.13	2.27	2.40
	16	1.25	1.38	1.50	1.63	1.75	1.87	2.00	2.13	2.25
	17	1.17	1.30	1.41	1.53	1.64	1.76	1.89	2.00	2.11
	18	1.11	1.22	1.33	1.44	1.56	1.67	1.77	1.88	2.00
Daily	19	1.05	1.16	1.26	1.37	1.47	1.58	1.68	1.79	1.90
g	20	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80
	21	0.95	1.05	1.14	1.24	1.33	1.43	1.52	1.62	1.71
	22	0.91	1.00	1.09	1.18	1.27	1.36	1.45	1.55	1.64
	23	0.87	0.96	1.04	1.13	1.22	1.30	1.39	1.48	1.57
	24	0.83	0.92	1.00	1.08	1.16	1.25	1.34	1.41	1.50
ł		Prob	lem		Target		Exce	llent		

Source: <u>https://www.josephmorton.co.uk/how-to-measure-feed-conversion-efficiency-fce</u>

FCE will vary with stage of lactation and targets depending on days in milk (and based on fat and protein corrected milk yields) are given below:

Group	Days in Milk	FCE Targets
All cows (whole	150 - 225	1.4 - 1.6
herd)		
1 st lactation group	< 90	1.5 - 1.7
1 st lactation group	> 200	1.2 - 1.4
2 nd + lactation	< 90	1.6 - 1.8
group		
2 nd + lactation	> 200	1.3 - 1.5
group		
Fresh cow group	< 21	1.3 - 1.6
Problem	150 - 200	< 1.3
herds/group		

Do not forget about cow comfort, lameness or mastitis and how that can impact on production. Upgrading cubicle mattresses increased lying times at SRUC's three dairy herds in the region of 1.5 to 2 hours per day and many studies show an increase in milk yield with longer lying times. The investment cost was around £80/cow space. At a

milk price of 29ppl, £80 is equivalent to 276 litres per cow, which is potentially a relatively short payback time of one lactation.

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Should we be More Selective for Polled Cattle?

The disbudding of dairy calves is a necessity but can cause pain, is a welfare issue and can potentially affect growth performance if not carried out properly. Calves should be disbudded between two to six weeks but definitely before two months of age. It is a legal requirement to provide local anaesthetic when using hot-iron disbudding, which should provide pain relief for up to an hour after the procedure. The other alternative is caustic paste, but this is only legally allowed in calves under seven days of age.



Despite providing pain relief, many studies on calf behaviour indicate that disbudding causes discomfort and pain in the following hours. The use of non-steroidal anti-inflammatory drugs (NSAID's) can help to reduce the pain after disbudding as the local anaesthetic wears off fairly quickly. The Red Tractor Assurance Scheme updated their standards in 2019 to include that all animals must receive NSAID's if they are to experience pain either during or after a procedure. However, it is not always the case that calves are given NSAID's after disbudding.

While best practice recommendations and assurance standards are in place to minimise stress and pain of management procedures, wouldn't it be great if disbudding did not have to take place at all and calves were born naturally polled?

The trait of being polled or having horns is determined by a pair of genes, one of which is inherited from the sire and one from the dam. The polled gene (P) is dominant to the recessive horned gene (p). Homozygous polled bulls have two copies of the polled gene (PP), meaning that they will transfer one of these to their offspring, which will be naturally polled. Heterozygous bulls only carry one copy of the polled gene (Pp) and so they have a 50% chance of passing that onto their The horned trait is a recessive offspring. condition, with both sire and dam having to transit the recessive gene for its offspring to be horned. The following table shows the expected inheritance of being polled or horned in calves depending on the genetic make-up of their sire or dam. Polled offspring will therefore not need disbudding, a procedure that is coming under more scrutiny from an animal welfare point of view.

The effect of sire and dam genetic status on the chances of calves being horned or polled

Sire	Dam	Calves
Homozygous polled (PP)	Homozygous polled (PP)	100% Homozygous polled (PP)
Homozygous polled (PP)	Heterozygous polled (Pp)	50% Homozygous polled (PP)
		50% Heterozygous polled (Pp)
Homozygous polled (PP)	Homozygous horned (pp)	100% Heterozygous polled (Pp)
Heterozygous polled (Pp)	Homozygous horned (pp)	50% Heterozygous polled (Pp)
		50% Homozygous horned (pp)
Heterozygous polled (Pp)	Heterozygous polled (Pp)	25% Homozygous polled (PP)
		50% Heterozygous polled (Pp)
		25% Homozygous horned (pp)

In the past very few breeders have selected for polledness as they have not wanted to select for a single trait at the expense of genetic gain, which involves selecting for a number of important production and longevity traits. Obviously, the economic return on selecting for production and longevity is significantly greater than the financial benefit of polled offspring.

However, some breeding companies are now able to offer bulls that are guaranteed to produce a polled calf. This means that these bulls have been tested and confirmed as homozygous polled. The numbers are relatively small and care must be taken that selecting these bulls does not hinder genetic progress or lead to inbreeding over time (as some of these bulls are closely related). This risk will reduce, with the more polled bulls that come onto the market.

Polled genetics is still in the early stages but has great potential for the future. However, the number of polled bulls available will only increase if the genetic merit of these bulls is desirable and ideally within 10% total merit of the top horned bulls so that herds can continue to make good genetic progress.

In the September edition we will discuss the practical limitations of permanently eliminating the need for disbudding in the herd.

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On Track for Progress – Looking Back for a Path Forward



In 2019 the Farm Advisory Service (FAS) held a series of meetings across Scotland aimed at

highlighting the benefits of cow tracks for herd health, the environment, lengthening of the grazing season and improvements to grazing efficiency. Here we take a look back at some of the key considerations and practicalities when creating new cow tracks.

Cow tracks allow farmers and landowners to strategically map out and devise a strategy for making best use of the grazing platform, while protecting hoof health. Without cow tracks, cattle can cause harm to grassland through tracking, back-tracking and trampling, making the pasture unappealing or unpalatable.

So, how can we identify if there is a need for investment in a cow track? Some indicators include increasing levels of sole bruising, foul-inthe-foot, white line disease or stone damage, bottlenecks or crowding when herding, cattle walking slower than three miles an hour when herding or raising their heads when gathering. Cows dunging at certain points on a track or choosing to walk single file along routes can also be signs of an issue.

When looking at materials farmer preference and cow preference are both factors to consider and many materials are available. Limestone is a commonly used material and is a good all-rounder, being relatively inexpensive, easy to lay down, comfortable to walk on, maintain and is suitable to use vehicles on (but avoid heavy machinery). Use of a vibrating roller is recommended to compact the dust, stone and chalk and increase stability of the track.

Pine peelings on a stone base is among the best materials available for cow comfort, taking pressure off the cattle as they walk, and depending on regional availability is usually cheap. However, being organic in nature the woodchips decay over time and retain moisture, lying wet even in dry conditions. Therefore, it may not be the best material for claw health and requires topping up frequently. Tracks like these are most effective the wider they are and ideally are supported by an adjacent hard track for farm vehicles.

Cow carpets are also an increasingly popular option for cow tracks, being tough enough to take heavy farm vehicles, not tearing easily and is at least theoretically, moveable. These carpets are

best placed on even tracks where sand has been laid down first for an element of comfort. Issues with carpets include it can be slippery in wet conditions, does not handle bends well and typically comes in 300 metre lengths, so is labour intensive to lay down and requires other materials to lay the foundations.

Knowing how to construct a new track for longevity hugely important. Firstly, track is also maintenance requires consistent. regular investment. It is not enough to build it and call it a day, as a poorly maintained track can make lameness worse over time and contribute to the issue. Use of ditches on either side will help it stay dry and incentivise cows to stay on the track. A 3 to 6% camber on either side also helps to keep the track drv and prevents water from washing over the breadth of the track. For a standard 200-cow herd a track should be between 4 to 5 metres wide and for every additional 100 cows the track should be made one metre wider. Tracks will sink over time, so it is advisable that you build them up first, this is often a good excuse to use the material from the ditches on either side. Fences should also be on the outside of the ditches so they can be cleared out.

There is no question that the environment and concerns around protecting the farmed water environment are becoming increasingly important. We also see that there are changes coming to the regulations around storage of farm wastes, silages and by-products, as well as the recent consultation on protecting Scotland's bathing waters. The creation and maintenance of cow tracks on the farm can reduce instances of run-off, poaching and contamination.

For more information on the construction and maintenance of cow tracks, including costs and materials available, see Technical Note 730 (TN730) available on the FAS and Farming and Water Scotland websites.

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Dates for your Diary -Webinars and On-line Events

 13th - 16th July - Great Yorkshire Show. Great Yorkshire Showground, Harrogate, HG2 8NZ

- 14th July Getting Started with a Milk Vending Machine. Webinar start time 19.00. To register please visit: <u>https://register.gotowebinar.com/register/10235</u> 02804322558475?source=Webpage
- 14th July Landscape to Carbonscape. Webinar start time 09.30. For more information and to register please visit: <u>https://www.eventbrite.co.uk/e/landscape-tocarbonscape-the-roadmap-to-a-soil-carbonmarketplace-tickets-158644962353?dm_i=6LRU,8RFA,228CB9,11 DI0,1
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- 15th July Funding your Dream. Webinar time 19.00 - 20.00. For more information and to book your place please visit: <u>https://www.fas.scot/events/event/funding-your-dream/</u>
- 19th 21st July DIY Artificial Insemination Course, Aberdeen. For more information and to book please contact Philippa Groves at Embryonics, tel: 01606 854411 or email: accounts@embryonicsltd.co.uk
- 21st July Block Calving Fertility Review with Vet Dave Gilbert. On-line workshop start time 12.00. To register please visit <u>https://ahdb.org.uk/events/block-calving-fertility-review-with-vet-dave-gilbert</u>
- 22nd July Holstein UK Premier Herd Open Day. Berryholme, Helsington, Kendal, Cumbria, LA8 8AQ. Time: 11.00. For more information please visit: <u>https://www.thecis.co.uk/events/huk-premierherd-open-day-21</u>
- 30th July Mobility Scoring Workshop (online). For more information and to book please contact Philippa Groves at Embryonics, tel: 01606 854411 or email: accounts@embryonicsltd.co.uk
- 5th August **RABDF Gold Cup Open Day**. Darnlaw, Auchenleck, Ayrshire. Time: 09.00.
- 19th August Mobility Scoring Workshop (Scottish Borders). For more information and to book please contact Philippa Groves at Embryonics, tel: 01606 854411 or email: accounts@embryonicsltd.co.uk

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



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