

November 2022

Issue 51



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

### Contents

Milk Market Update Global and domestic situation	1
<b>Straights Update</b> Cereal prices and market information	2
Mating Programs for Breed Improvement The benefits of computer mating programs and how they work	3
Upcoming Options for Steading Improvements Funding opportunities for water management around steadings	4
<b>Cystic Ovaries</b> Causes, prevention and treatment	5
<b>Downer Cow Syndrome</b> Looking after the downer cow	6
Thoracic Scanning in Calves A novel approach for BRD detection	7
Dates for Your Diary Webinars and events	8
This month's editor: Lorna MacPherson	



### Market Update

#### **UK Wholesale Dairy Commodity Market**

- Fonterra's latest on-line GDT auction (1<sup>st</sup> November) resulted in a 3.9% fall in the weighted average price across all products, reaching US \$3,537/t. This is the 3<sup>rd</sup> consecutive drop with only butter and cheddar returning very slight upward movements in price since the previous auction. Butter milk powder and skim milk powder (SMP) showed the biggest declines: -11.4% (to \$2,973/t) and -8.5% (to \$2,972/t) respectively. Full results are available at https://www.globaldairytrade.info/en/productresults/
- Closely following the trend seen in the GDT auction, domestic wholesale prices of dairy commodities fell slightly over the last month, although there was no movement in the average mild cheddar price. Falling prices were attributed to rising milk volumes both in the UK and on the continent, accompanied by reduced demand.

Commodity	Oct 2022 £/t	Sep 2022 £/t	% Difference Monthly	Oct 2021 £/t	% Diff 2022- 2021
Bulk Cream	£2,807	£2,858	-2	£1,855	+51
Butter	£5,860	£5,980	-2	£3,780	+55
SMP	£2,980	£3,110	-4	£2,330	+28
Mild Cheddar	£4,860	£4,860	0	£3,240	+50

Source: AHDB Dairy - based on trade agreed from 26<sup>th</sup> Sep - 21<sup>st</sup> Oct 2022. 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.

- Low butter stocks in the UK have helped minimise the fall in price, which has arisen on the back of the strong cream and spot milk prices over the trading period, diverting more milk into cream production and less butter manufacture.
- More recently, however, spot prices for cream have been falling due to a combination of increased milk volumes and some factory shutdowns meaning more product has been available. The lowest traded cream price over the last four weeks was £2,550/t.

- Declining prices on the GDT auction and negative sentiment in the marketplace contributed towards the decline in SMP prices, with buyers cautious about stocking up and waiting to see if the price falls further.
- The market indicator AMPE showed a slight drop from September but there was no movement in the MCVE indicator as a result of the very stable mild cheddar price. The butter and SMP components of the AMPE price fell by 0.61ppl and 1.19ppl respectively, with butter milk powder only falling 0.06ppl. The Milk Market Value of milk was 53.42ppl for October, back 0.35ppl from September.

	Oct 2022	Sep 2022	12 months previously	Net amount less 2.4ppl average haulage – Oct 2022
AMPE	51.27ppl	53.13ppl	36.57ppl	48.87ppl
MCVE	53.95ppl	53.92ppl	36.56ppl	51.55ppl

Source: AHDB Dairy

- Defra put the UK average farm-gate milk price at 48.86ppl for September, up 1.78ppl from August. The volume for September was 1,157 million litres, which was 2.6% less than the previous month and only 0.2% higher than September 2021.
- For the week ending 6<sup>th</sup> November, the spot milk price showed a huge range, trading from as low as 42-53ppl delivered, with the majority trading between 44-46ppl. This is similar to the previous week with a range of 42-49ppl, where prices had eased on the back of half term holidays and plant shutdowns. Bulk cream prices fell from the previous week to as low as £2.25/kg ex works and up to £2.40/kg on the back of rising milk volumes.

#### **GB Milk Deliveries and Global Production**

Milk production has recovered after the drought, with deliveries now well above the same time last year and higher than forecasted levels. For the week ending 29<sup>th</sup> October, deliveries were up 0.3% on the previous week and 3.4% above the same week last year, equivalent to an extra 1.1million litres/week. If production is sustained above 2021/22 levels over the winter months, commodity markets will likely continue to see an easing of prices.



Source: AHDB

 Global production for August in the six main milk producing regions was 0.3% behind August 2021, with only Argentina and the US showing slight improvements in deliveries. Heavy rains in Australia were responsible for production being back 4.9% and New Zealand has been struggling with poor grass growth, resulting in milk deliveries being back 5.9%. Overall, global daily milk deliveries for August were 783.8 million litres.

#### Monthly Price Movements for November 2022

Commodity Produced	Company Contract	Price Change from Oct 2022	Standard Litre Price Nov 2022
Liquid &	Arla	+1.28ppl liquid	50.24ppl
Cheese	Farmers	+1.33ppl	liquid
	UK	manufacture	52.24ppl
			manufacture
Cheese,	First Milk	+0.3ppl	49.69ppl
Liquid &			manufacture
Brokered			
Milk			
Cheese	Fresh	+0.41ppl liquid	48.21ppl
	Milk	0.42ppl	liquid
	Company	manufacture	50.12ppl
	(Lactalis)		manufacture
Liquid &	Grahams	No change	46.0ppl
Manufacture			
Liquid &	Müller	No change	47.75ppl
Manufacture	Direct		(includes
			1ppl direct
			premium
			and
			-0.25ppi
			Scottish
			naulage
Liquid 8	Müller	No obongo	47.67pp
Liquid & Monufacture	(Co. on)	No change	47.67ppi
	(Co-op) Müllor	No change	19nnl
Manufacturo		No change	4оррі
Liquid		No chango	/8nnl
Dowder &	Dairies	NU Change	40µµi Standard ^
Brokered	Dairies		litre price
Diokeieu			nue price

#### **Other News**

- At the end of September, the Tesco Sustainable Dairy Group released their latest cost of production figures, which had fallen 0.91ppl to 42.0ppl from their June tracker review. Costs for the 12-month period between October 21 to September 22 were as follows:
  - Variable costs: 23.03ppl
  - Overhead costs: 13.79ppl
  - Depreciation: 2.37ppl
  - o Total: 39.19ppl

Applying the feed, fuel and fertiliser adjustments from July to December 2022 adds an extra 2.81ppl, bringing the full cost of production up to 42ppl.

- AHDB's recent October survey of the main milk buyers in Great Britain estimated that producer numbers were at 7850. Compared to October last year, this represents a drop of 150 producers, with only 30 less producers since April this year. It is thought that the rise in input costs having been offset by the increase in milk prices is the reason why fewer farmers have stopped dairy production compared to previous years.
- Arla has unveiled its new C.A.R.E initiative, . which stands for Co-operative, Animal welfare, Renewable energy and Ecosystem. Higher standards in welfare and sustainability will be required for all farmers signing up to the C.A.R.E initiative, which will cover milk used in a wide range of their products including Cravendale, B.O.B and Big Milk. Some of the requirements of the initiative include grazing cows when weather conditions allow, having a plan to increase renewable energy sources and reduce energy consumption and supporting the natural ecosystem and biodiversity through implementing at least five various activities, such as creating habitats for wildlife.

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

### **Straights Update**

#### **Global News**

 Australia is currently experiencing extremely high levels of rainfall and flooding but despite this, the country could still be looking at a bumper wheat crop of 34 million tonnes. However, it is estimated that up to half of the

wheat grown on the eastern grain belt, an area known for premium hard wheat, could be downgraded to animal feed. Flood water will need to recede before the extent of the damage is known. Record yields of oilseed rape are still expected. While the east of the country is seeing the worst of the wet weather, there is less oilseed rape production in this area. With harvest about to start, the impact of the weather on yields will be known shortly.

- Dry weather has also been impacting the 2023 US wheat crop, with only 28% of the crop rated good to excellent condition, the lowest percentage rating for 35 years. The drought is also affecting the cost of shipments on the Mississippi River, in that farmers in the midwest and midsouth are receiving lower cash bids for their maize and soyabeans (as much as \$2/bushel less for soyabeans). The lower water level on the river means that barges cannot be fully loaded, and towboats can move fewer barges at a time, so barge companies are having to charge more for transport. The costs are being passed onto the growers and in addition, it is costing them more to transport fertiliser up the river. Grain transport tonnages were 40% lower on the Mississippi in September and October compared to recent vears.
- The oilseed market is keeping a close eye on weather conditions in South America as Argentina and Brazil are currently planting their soyabean crop. Conditions are not ideal due to drought. Coupled with concerns about Brazil's current export capabilities, saw Chicago soyabeans reach their highest level for six weeks at the beginning of November. Protests about Brazil's recent election results have disrupted fuel deliveries and meat production, affecting deliveries of grains and oilseeds to ports. Brazil is the world's biggest exported of soyabeans.
- Data from Ukraine's government indicate that winter wheat plantings are 87% complete on just 3.5 million hectares, which is 57% of the normal area. At this time last year, plantings had been completed on 6.1 million hectares.

#### **UK and Scottish News**

• The UK's 2022 wheat harvest production is now estimated at 15.6 million tonnes (AHDB), which

indicates the need to export the one million tonne surplus over our domestic requirements. The weak pound is incentivising prompt action on exports (UK wheat currently being the cheapest European source bar that out of Ukraine). Over 400,000 tonnes have already left the country and potentially the remaining surplus could all follow and be cleared by early new year. That would indicate a firming of prices thereafter. However, it is worth keeping an eye on UK ethanol production plans as rumours that plants may cease production in the new year would reduce price competition into the feed sector. News on Ukrainian exports remains the key price driver across markets. Russia's recent resumption of participation in the Black Sea export corridor deal saw UK feed wheat futures fall by almost £10/t over two days. However, with Russia due to review again in two weeks' time we could see more short-term spikes in values. Such is the uncertainty in the markets currently over future supply, we are seeing November 23 futures (£264.45/t) at parity with current ex farm prices (£262/t). At £247/t, exfarm feed barley is currently £15/t off wheat values, and this looks to be widening to £25/t as we move into 2023 based on current forward contracts.

Ex farm	Feed wheat	Feed barley	Oats
November 2022	262	247	
January 2023	275	250	245
Futures			
July 2023	274	249	
November 2023	264	239	

• Ex farm prices for cereals are as follows:

Sources: SAC Consulting, AHDB and Graindex.

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

### Mating Programs for Breed Improvement

Twenty-five years ago, the average size of the dairy herd in the UK was around 70 cows, and back then most farmers would know each individual animal inside and out, from their temperament and milking speed to the sires and dams within their pedigrees. There would usually be one person who made all

the breeding decisions, and they had a limited selection of bulls to choose from. Nowadays, however, the average herd has more than doubled in size, the list of bulls to choose from is endless, and the task of selecting the ideal sire for each cow can be both time-consuming and challenging.

Computer mating programs assist with allocating sires, providing a list of mating recommendations that can be followed by anyone involved with breeding the cows, saving time and reducing operator error. The programs are usually customisable, allowing the user to 'design' the ideal cow to suit their management system and production goals. Breeding to a set model can help achieve uniformity within the herd, making managing the herd easier whilst enabling the cows to perform to their genetic potential.

#### **Protecting Against Inbreeding**

The priority for most mating programs will be to minimise the risks associated with inbreeding. Considered to be one of the largest 'hidden' costs to dairy producers, inbreeding reduces productivity and lifespan and can lead to pregnancy losses and birth defects. Research suggests that every 1% increase in inbreeding results in a loss of 34kg of milk per lactation. A safe level of inbreeding is considered to be below 6.25%. Pedigree data is used to calculate the inbreeding coefficient of each mating. The more data that is provided, the more accurate the inbreeding coefficient is likely to be. The increase in inbreeding coefficients over time are shown in the following graph.





Source: Dairy Cattle Reproduction Council, Available from: <u>http://www.dcrcouncil.org/wp-</u> <u>content/uploads/2017/04/Implications-of-inbreeding-in-the-</u> <u>dairy-industry.pdf</u>

#### **Achieving Production Goals**

Milk recording and production data for each individual animal will be taken into consideration when influencing mating recommendations. Where production data is not provided (i.e., for maiden heifers) then production estimates will be made based on the animal's pedigree.

#### A Cow to Fit the System

Cow conformation can also be factored into the mating recommendations. Some programs take into consideration more linear traits than others, and some focus only on improving the cow's most undesirable traits. The cow's linear scores will be taken from classification results, or scores obtained from an evaluator. The ideal linear score and the amount of emphasis placed on each individual trait will depend on the 'type' of animal that the farmer is aiming to develop. For example, the program may put more emphasis on chest width when focusing on animals bred for an extensive system, than it would for an intensive system. A stature score of 8 may be more desirable in a show cow, compared to a score of 6 for a commercial cow.

#### **Genomic Testing**

When genomic test results are provided, they will typically override all other data. The phenotype of each animal (the traits the animal displays) is greatly influenced by its environment. The genotype, or genetic potential of the animal, may have been suppressed under certain circumstances and will not necessarily reflect the traits which will be passed on to the next generation. Inbreeding-derived problems such as haplotypes and recessives can also be detected in genomic evaluations. Calculating the genomic PLI of each animal can help prioritise those to be bred to high-value bulls/sexed semen, allowing those ranked lower in the herd to be bred to beef.

<u>marcus.fox@sac.co.uk</u>; 01539 889990

# Upcoming Options for Steading Improvements

Readers of Milk Manager News will be accustomed to me waxing lyrically over the environmental options available to the sector and how farms can make best use of these. In the shadow of another round of the Agri-Environment Climate Scheme (AECS), I thought it might be worthwhile looking at the funding available for those businesses that

cannot target conservation outcomes at field level but can make changes at steading level.

Since the launch of the scheme back in 2015, Scottish Government has made provisions for a series of options aimed specifically at mitigating pollution and the protection of the water environment. For many, these provisions have really only meant one thing: slurry storage, be that a tower or lagoon. In addition to slurry storage support, the scheme does offer limited support for options around managing water quality and flood risk.

In most applications relating to this scheme, farmers and landowners are required to provide a farm environment map, outlining the various habitats and features of interest on and around the farm. This is normally followed up with a management map of some kind, which lays out which field scale management options a business is opting into. When applicants target steading drainage, the emphasis changes somewhat, and applications are judged less on the perceived scale of delivery and nature conservation benefits (though in some cases these are still relevant), to mitigation of pollution issues, namely the separation of dirty and clean water.

Farmers preparing this kind of application instead provide assessors with a farm steading assessment and farm steading management map, indicating where the various options will be located in relation to dirty and clean water.

In terms of funding options available, you might remember an article some months ago about constructed farm wetlands. These are very much still a thing but included with these is funding support for:

- 1. Protected riparian/water margins
- 2. Provision of support for new gates and relocation of existing ones
- 3. Grass swales
- 4. Ponds
- 5. Sediment traps and bunds
- 6. Alternative watering
- 7. Hardstanding for gateways and feed sites
- 8. Livestock tracks
- 9. Livestock crossings
- 10. Irrigation lagoons

In practical terms, the most appealing thing about AECS in a steading context is probably funding for

concrete through the management option Managing Steading Drainage and Rural Sustainable Drainage Systems, though care must be taken to remain on the right side of the option eligibility. The option funds up to £10,000 towards the cost of concrete, where it is linked to another option (swales, ponds, wetlands, sediment traps) and could be used to channel and separate clean water from dirty. In that regard it is complimentary to recent efforts to increase slurry storage capacity and use of precision application methods.

This last round of AECS funding has been incredibly challenging for many and the bar on value for money continues to rise year-on-year. However, with increasing interest in concepts like natural capital and changes phased in with the amendments to the Water Environment (Controlled Activities) (Scotland) Regulations 2011 now could be just the time to take stock of how water is managed on your farm steading.

Preparing and developing an AECS application up to the point of submission and even beyond requires significant input from farmer and advisor, so those interested in looking at their funding options should get in touch as soon as possible. With all applications focusing on the farmed water environment, early engagement with SEPA is also recommended, as well as input from initiatives like Farming & Water Scotland.

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

### **Cystic Ovaries: Causes, Prevention and Treatment**

Cystic ovaries are most common in the first two months after calving when most health issues occur, and cows are under metabolic stress. The condition contributes to economic loss in the dairy herd by increasing days open and is due to disruption of the normal hormonal systems that control ovarian function, preventing ovulation.

Cysts can either be classified as follicular or luteal and are fluid-filled structures greater than 2.5cm in diameter, which are present on the ovary for over seven days. Cysts are usually accompanied by abnormal oestrus behaviour. Luteal cysts are the most common, where cows do not show any signs of heat. On the other hand, a cow with a follicular cyst will show excessive bulling behaviour, coming

into heat every two to three days. Alternatively, cows may show shortened oestrus intervals.

#### A thin-walled follicular cyst (left) and a thicker walled luteal cyst (right)



Source: NADIS

#### Causes

There are many suggested causes of cystic ovaries, but the most common cause is thought to be a lack of dietary energy, negative energy balance and rapid weight loss. This energy imbalance is thought to interrupt the hormonal signals that pass between the ovary and the brain to stimulate egg release. Uterine infection and inflammation can also affect hormone signals from the ovary to the brain, preventing egg release.

Other suggested causes include calving difficulties, twinning, retained foetal membranes, high milk yields and stress factors such as lameness, poor cubicle comfort and mixing of cows. Older cows are thought to be more susceptible and once a cow has been cystic, she is more likely to have a recurrence. Genetics also plays a part, being more common in the Holstein breed, with a low to moderate hereditary. The incidence may also be greater after a period of heat stress.

#### Prevention

Good management and nutrition during the dry period are vital to ensure that cows calve down at the target body condition score of 3 and do not gain excessive weight during the dry period. Reducing the incidence of transition diseases must also be a key focus, along with adequate nutrition in early lactation to minimise condition loss and the extent of negative energy balance. This includes ensuring appropriate stocking densities for the facilities to allow adequate feeding space to maximise intakes and provide comfortable, available cubicle space.

#### Treatment

Early detection is by ultrasound or manual palpation by your vet. Early hormonal treatment of cystic ovaries is vital to correct the condition and get cows cycling and back in calf. Progesterone, prostaglandin and gonadotrophin releasing hormones (GnRH) are the main hormonal treatments and the hormone used will depend on the type of cyst.

Cysts will rarely resolve by themselves. As cystic cows do not come into heat when expected, good record keeping can help to identify affected cows. The quicker they can be identified and presented for veterinary examination the quicker normal oestrous cycles can be resumed. Conception rates after treatment are likely to be reduced and these cows typically require more services per conception. Chronically cystic cows should be culled.

All cows should be seen by a vet at three to four weeks post-calving to check for uterine infection and whether the cow has ovulated. A further check should be carried out after the end of the voluntary waiting period if she has not been seen bulling. If the incidence of cystic ovaries is more than 5%, investigation should be carried out, particularly focusing on nutrition and management of transition cows.

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

### **Downer Cow Syndrome**

The definition of Downer Cow Syndrome is a cow that has not been able to get up for more than 24 hours. It is sometimes called Bovine Secondary Recumbency. No matter what you call it, it will cost time, money and will have a huge impact on a cow's welfare.

The reason that a cow goes down and cannot get back up are many but can be divided into four main groups. These are Metabolic, Inflammation, Neurological and Trauma or MINT for short. Metabolic reasons can include hypocalcaemia (milk fever), hypomagnesaemia (grass staggers), nutritional acidosis, ketosis or acetonemia, hypokalaemia (low potassium) or fatty liver disease. Infections such as acute septic metritis or acute mastitis fall into the inflammation category. Nerve

damage, often associated with a bad calving, make up the neurological category. Trauma includes bones fractures and dislocations and muscle or tendon ruptures.

Once the downer cow is discovered, a few quick checks can be made. A sunken eye, or a persistent fold in the skin after being pinched, will indicate that the cow is dehydrated. A low temperature shows that the cow is in some level of shock. Pale mucous membranes, especially if accompanied by a weak pulse, is a sign of toxaemia (toxins in the blood). This may be caused by infection.

Post-calving, the most likely cause of Downer Cow Syndrome is milk fever. If treatment with calcium is ineffective, it is important to act quickly to get the cow blood tested and examined by a vet. Treatment is often a process of elimination, so knowing where to start can lead to a better result.

Time is of the essence as pressure from lying can result in reduced blood flow to the muscles. This can cause muscle degradation and nerve necrosis (death). If this is allowed to occur, it is less likely that the cow will get to her feet again.

If the urine appears red in colour, this indicates the presence of myoglobin. This is a protein produced by the breakdown of muscle. Once this occurs the cow has less chance of rising, and the prolonged presence of myoglobin in the blood can lead to kidney failure. Therefore, it is vital to move the cow from side to side to help avoid this.

Obviously, the downer cow should be well bedded with access to feed and clean water. Consider providing fresh feed little and often, as she may not find feed that she has salivated on as appetising.



Lifting a downer cow has a number of associated welfare issues. Good stockmanship should be used in judging how much encouragement should be given. The use of hip clamps can be useful to help a cow rise but be aware that over tightening can reduce blood flow to the limbs. This can result in further damage. Under belly slings do not have these associated risks but can be more difficult and dangerous to place under a lying cow.

These devices should only be used to help the cow to her feet. If she is not carrying her own weight, she is effectively still under the same pressures as lying on the ground. The cow should not be supported in these devices for an extended period of time.

A more novel approach which has been used on farms in the EU and USA is a cow floatation tank. This takes all the pressure off the muscles and allows the cow to stand. For more information on floatation tanks see: <a href="https://www.aquacowsystem.com/">https://www.aquacowsystem.com/</a>

The cow's welfare is of the utmost importance and there may come a point when euthanasia should be considered. As with most things, prevention is better than cure. Paying particular attention to dry cow nutrition can help with most metabolic issues and assessing the cow's environment can help reduce slips and falls.

alasdair.scott@sac.co.uk; 01555 662562

# Thoracic Ultrasound Scanning in Calves

Bovine respiratory disease (BRD) is a very common and costly disease in dairy calves and early detection and treatment is vital to minimise the impact on growth and lifetime performance. The disease is multifactorial and causes damage to the respiratory tract and lungs. Infectious causes can be viral, bacterial, parasitic and fungal, and stress can also increase the risk of BRD. Stress factors include weaning, management practices (e.g., dehorning, regrouping) and variable weather affecting temperature and humidity.

There are several scoring systems based on clinical signs that are used to diagnose BRD. One method (developed by the University of California, Davis) allocates a certain number of points for each symptom and a score of 5 or more, indicates a BRD case:

- Cough (2 points)
- Eye discharge (2 points)
- Nasal discharge (4 points)
- High temperature ≥39.2°C (2 points)
- Abnormal breathing (2 points)
- Head tilt or ear droop (5 points)

From a practical perspective, with this system a rectal temperature only needs to be taken if the visual scores total 4, in which case an elevated temperature could exceed 5, resulting in a BRD diagnosis. There is also a similar system developed at the University of Wisconsin. Both systems have relatively similar detection rates for BRD in terms of sensitivity and specificity. For more information on the Wisconsin Calf Health Scoring System see: https://fyi.extension.wisc.edu/heifermgmt/files/201 5/02/calf\_health\_scoring\_chart.pdf

One novel approach to detect lung damage from BRD is thoracic ultrasound scanning (TUS). This entails using an ultrasound probe, the same as that used in pregnancy detection, on both sides of the calf to scan the lungs and assess whether there is damage. The procedure is non-invasive, quick and can give an assessment of lung condition within a couple of minutes.

BRD can often go undetected in the early stages and TUS can help detect subclinical disease or chronic lesions when there are no obvious visual signs. Calves with subclinical respiratory disease can go on to perform less well as older heifers, with reduced growth rates and poorer conception rates. Therefore, TUS can be used to help identify heifers not to breed from. One study reported that heifer calves with one or more areas of pulmonary consolidation (≥3cm in size) in the first eight weeks of life produced 525kg less milk at 305 days in their first lactation (Dunn et al, 2018).

Whilst it is not practical for every calf to be scanned by the vet, it would be useful to scan a subset of calves at various ages should there be an issue on farm. This can help identify when BRD is occurring and then consult with your vet about an appropriate course of action. It may also prove useful to repeat the exercise to assess the effects of any remedial action taken, such as effectiveness of treatment protocols and management changes such vaccination or improvements to ventilation in the calf shed.

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

### **Dates for Your Diary**

- 10<sup>th</sup> November Nutrient Planning Workshop South. Greenlaw War Memorial Hall, Bank Street, Greenlaw, TD10 6XX. Time: 12.00-14.30. To book your place please visit: https://www.fas.scot/events/event/nutrientplanning-workshop-south/
- 11<sup>th</sup> November Nutrient Planning Workshop East. Stair Arms Hotel, A68 Pathhead, Midlothian, EH37 5TX. Time: 12.00-14.30. To book your place please visit: <u>https://www.fas.scot/events/event/nutrient-planning-workshop-east/</u>
- 14<sup>th</sup> November **Monthly Sale of Dairy Cattle**. Dumfries Auction Mart, Huntingdon Road, Dumfries, DG1 1NF.
- 15<sup>th</sup> November Fertiliser, Grass and Nutrient Planning. Auchincruive Training Room, SAC Consulting, Auchincruive, Ayr, KA6 5HW. Time: 19.30-21.30. To book your place please visit: https://www.fas.scot/events/event/fertilisergrass-and-nutrient-planning/
- 16<sup>th</sup> November **Agriscot**, Royal Highland Centre, Ingliston, Edinburgh, EH28 8NB. Time: 09.00-17.30.
- 17<sup>th</sup> November GB Calf Week Webinar: Practical Calf Housing and Management (online webinar). Time:13.00-14.00. To book your place please visit: <u>https://ahdb.org.uk/events/gb-calf-week-</u> webinar-practical-calf-housing-andmanagement
- 21<sup>st</sup> 22<sup>nd</sup> November Hannah Dairy Research Conference. Edinburgh. For more information see: <u>https://www.journalofdairyresearch.org/next-</u> generation-dairying-2022.html
- 23<sup>rd</sup> 24<sup>th</sup> November Total Dairy Seminar. Crowne Plaza, Stratford-upon-Avon. For more information see: <u>https://www.totaldairy.com/</u>
- 24<sup>th</sup> November Safe Use of Veterinary Medicines. On-line course. For more information contact event organiser Embryonics on 01606 854411 or email: <u>courses@embryonicsltd.co.uk</u>

- 25<sup>th</sup> 26<sup>th</sup> November **Livescot 2022**. Lanark Agricultural Centre, Muirglen, Hyndford Road, Lanark, ML11 9AX.
- 3<sup>rd</sup> December **Black and White Sale**, Borderway Mart, Rosehill, Carlisle, CA1 2RS. Time: 11.00.
- 6<sup>th</sup> December **Developing the Rumen for Optimum Calf Health**. The Green Hotel, 2 The Muirs, Kinross, Perth and Kinross, KY13 8AS. Time: 11.00.
- 7<sup>th</sup> December Developing the Rumen for Optimum Calf Health. Wigtownshire Rugby

Football Club, Ladies Walk, Stranraer, Dumfries and Galloway DG9 8BN. Time: 11.00.

- 12<sup>th</sup> December **Monthly Sale of Dairy Cattle**. Dumfries Auction Mart, Huntingdon Road, Dumfries, DG1 1NF. Time: 13.30.
- 22<sup>nd</sup> December 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: <u>lorna.macpherson@sac.co.uk</u> Tel: 01467 530445 Mobile: 07760 990901

© SAC Consulting 2022. SAC Consulting is a division of Scotland's Rural College (SRUC). Funded by the Scottish Government and EU as part of the SRDP Farm Advisory Service