

Issue 41 March 2021

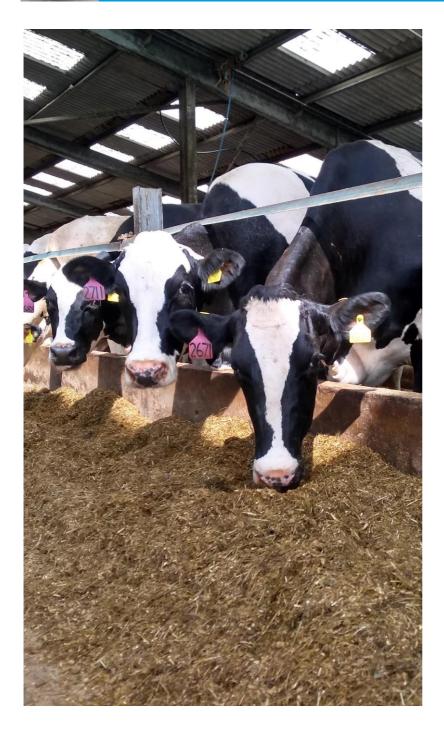
## Milk Manager NEWS



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

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This month's editor: Lorna MacPherson	









### **Market Update**

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

- Fonterra's latest on-line GDT auction (2<sup>nd</sup> March) resulted in a massive increase of 15% in the weighted average price across all products, reaching US \$4,231/T. This is the 8<sup>th</sup> rise in a row and the highest average price in seven years. The increased demand for dairy products is partly down to the Chinese Government aiming to secure higher levels of food stocks, as well as the seasonal decline in New Zealand milk production. All products on offer returned price increases from the previous auction (expect for a 0.3% decline in butter milk powder). The biggest movements were in whole milk powder (+21% to \$4,364/T) and butter (+13.7% to \$5,826/T). Full results available are at https://www.globaldairytrade.info/en/productresults/
- UK prices for fresh dairy products are slightly back compared to EU prices, as a result of Brexit's higher costs to trade and some resistance on the continent to UK products. While UK cream is still being sent to the EU, volumes are below pre-Brexit trade. There was little trade in domestic markets over the month of February due to good stocks pre-Brexit and buyers holding off as the spring milk flush approaches and the prospect of lower prices.

Commodity	Feb 2021 £/T	Jan 2021 £/T	% Difference Monthly	Feb 2020 £/T	% Diff 2021- 2020
Bulk Cream	£1,335	£1,237	8	£1,250	7
Butter	£3,150	£3,060	3	£2,930	8
SMP	£2,070	£2,040	1	£2,180	-5
Mild	£2,940	£2,940	0	£2,870	2
Cheddar					

Source: AHDB Dairy - based on trade agreed from 1<sup>st</sup> - 25<sup>th</sup> February 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)

 Spot milk price for the week ending 5<sup>th</sup> March remained fairly steady at 27.5 to 30ppl delivered, with domestic cream prices continuing to increase to £1.40 to £1.43/kg ex works (and about 6p/kg more on the continent due to stronger sterling).

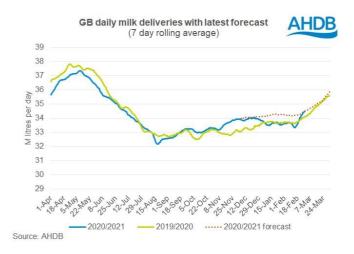
- Higher cream prices allowed butter prices to firm slightly throughout February, along with strong retail sales and decent export demand.
- SMP prices have also been rising on the back of firmer prices in the EU, as well as increasing demand from China as they start to rebuild their pig herd.
- The cheese market remained steady with continued good retail demand but increases in product requirement in the food service sector are not expected to increase significantly until the summer period when hospitality is likely to open up more.
- On the back of rising butter and SMP prices, AMPE rose by 0.75ppl to 30.85ppl in February. While the butter milk powder component only rose 0.02ppl, the butter and SMP components rose by 0.45ppl and 0.29ppl respectively. The rise in MCVE was only 0.4ppl from January, with no change in the mild cheddar component, with whey powder increasing 0.36ppl and whey butter by 0.04ppl.

	Feb 2021	Jan 2021	12 months previously	Net amount less 2.4ppl average haulage – Feb 2021
AMPE	30.85ppl	30.10ppl	30.95ppl	28.45ppl
MCVE	32.47ppl	32.07ppl	31.18ppl	30.07ppl

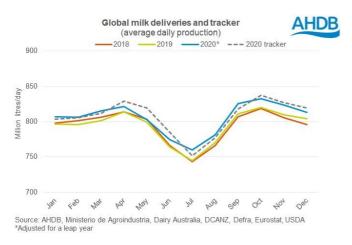
Source: AHDB Dairy

#### **UK Milk Deliveries and Global Production**

• Milk deliveries for the week ending 27<sup>th</sup> February were 1.8% up on the previous week and 1.1% (370,000 litres) ahead of the same week last year.



- UK production dropped mid-February due to the cold snap and substantial snow fall over many parts of the country. However, the impact on milk collection was very limited and freezing temperatures in some parts will likely have impacted on cows' milk production, with more energy going towards thermoregulation (which can occur below 5°C).
- Global production for December 2020 was 1% above the previous December at a daily average of 813.2mlitres. For the 2020 calendar year, milk production was up 1.4% on 2019, a growth of 4.0 billion litres, with most of this growth coming from the US. Average daily deliveries for December were up by 3.1% in an increase of 8.2mlitres/day. the US. However, in the EU, milk production declined in December, with 3.0mlitres less per day compared to December 2019. While production increased in Ireland and Poland, two of the biggest milk producing countries in the EU block, France and Germany, both showed declines due to high feed prices, a reduction in herd size and cold weather.



Rabobank analysts are predicting that there will be a significant slowdown in milk production in 2021. They estimate global growth to be about 2.7 billion litres, well below the extra 4 billion litres reported in 2020, resulting in cautious optimism for milk prices this year. The biggest reductions in growth are predicted to be in the EU and South America. There is positivity in milk markets due to increasing raw material prices (particularly crude oil), anticipated recovery in economic growth and expectations of increasing demand of some large milk importing countries.

#### Monthly Price Movements for March 2021

Commodity Produced	Company Contract	Price Change from Feb 2021	Standard Litre Price Mar 2021
Liquid & Cheese	Arla Farmers UK	+0.44ppl liquid and +0.45ppl manufacture	28.94ppl liquid 30.03ppl manufacture
Cheese, Liquid & Brokered Milk	First Milk	No change	28.0ppl liquid 28.93ppl manufacture
Cheese Liquid &	Fresh Milk Company (Lactalis) Grahams	No change No change	27.75ppl liquid 28.91ppl manufacture 27.0ppl
Manufacture		•	
Liquid & Manufacture	Müller Direct	No change	27.0ppl (includes 1ppl direct premium and -0.25ppl Scottish haulage charge)
Liquid & Manufacture	Müller (Co-op)	No change	29.88ppl
Liquid & Manufacture	Müller (Tesco)	No change	31.27pl
Liquid, Powder & Brokered	Yew Tree Dairies	No change	27.1ppl Standard A litre price (to be paid on 81% deliveries)

#### **Other News**

- Despite such positivity in the recent GDT auctions and UK wholesale prices for dairy products, some UK milk buyers have dropped their milk price for March (reductions between 0.5-1.0ppl include Freshways, Medina. Pensworth, County Milk Products and Paynes Dairies). However, there has been no drop in milk price by the main Scottish milk buyers and Arla have bucked the trend by announcing a 0.5 eurocent increase for March and M&S have declared a 0.606ppl increase from 1st April, taking their liquid standard litre price up to 33.11pp.
- The outcome of the UK Government's consultation into legislation on milk contracts has resulted in the current voluntary code being replaced in future by a mandatory code of conduct. All four UK nations will have to work together to establish a workable code

with a list of minimum standards that both farmers and milk buyers will have to adhere to.

- First Milk has announced its intentions to invest significantly in its processing sites at Aspatria and Haverfordwest in the coming financial year. A total of £12.5 million is to be invested, with £9 million to be spent at Aspatria to upgrade its cheese and whey processing facilities. The investment will increase production capacity at both sites by over 20%, allowing opportunities for growth in domestic and export markets, as well as help meet environmental goals by cutting water and energy use.
- The new strategy for the Scottish Dairy Sector was launched on the 2<sup>nd</sup> March and details five key focus areas to drive sustainable growth in the sector through improvements in farm efficiency, limiting environmental impact and improving returns for both farmers and those in the supply chain. The main focus areas for 'Scotland's Dairy Sector – Rising to the Top 2030" are:
  - ✓ Driving UK and international market growth.
  - Encourage new investment.
  - Realigning farming support and advice to sector needs.
  - ✓ Managing the sector's response to climate change.
  - Developing market-responsive supply chains.

The strategy has been led by the Scottish Dairy Growth Board and builds on the Ambition 2025 strategy which was produced in 2014. Further details on the strategy can be found here: www.scottishdairy.com/brochure

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

#### **Straights Update**

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

£/T for 29t loads delivery + £8/t haulage to central belt	Mar 21	Apr 21	May 21 - Sep 21	Oct 21 - Apr 22
Proteins				
Hipro Soya	405	400	383	382
Rapeseed Meal	POA	POA	May-Jul 296 Aug-Oct 250	Nov-Jan 245
Maize Distillers Pellets	316	316	May-Jul 300 Aug-Sep 255	-
Starch				
Wheat	207	208	May 209 Sep 169	Nov 172 Mar 175
Barley	165	166	May 167 New crop 142	Trading £20-25/t less than wheat but differential reduces into 2022
Maize	235	235	235	213
Fibre				
Imported Sugar Beet Pulp	230	230	235	193
Soya Hulls	POA	208	181	-

Source: Straights Direct, Cefetra and MSP Agriculture on 9/10<sup>th</sup> March. 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**

- Weather related concerns continue around the maize and soya crops in South America. The maize crop in Argentina was recently rated at only 24% good to excellent as of 24<sup>th</sup> of February, compared to 61% at the same time last year. Plantings are also well behind in Brazil, with only 32% planted of the "Safrinha" or second maize crop compared to 63% at the end of February 2020. As the ideal planting window has now closed, around 60% of the remaining crop planted late may struggle as it will be in the crucial maturing stages at the peak of the dry season.
- The ratings of the soyabean crop in Argentina are also well below last year, with only 19% rated good to excellent, compared to 66% last year. As the pods are now starting to fill any rain now will be extremely beneficial. The Brazilian soyabean harvest is estimated at

15% complete (as of 24<sup>th</sup> February but was 31% complete by the same time last year) and is progressing at its slowest pace in the last decade. The delay is down to persistent rains which have been responsible for delaying the second maize crop planting.

- The oilseed markets looks like they could continue to remain bullish due to weather concerns in South America and dangerously low stock levels (especially in the US where their stocks-to-use ratio is predicted to be 2.6% by the end of the 2021/22 season. The US is the main global producer of soyabeans and accounts for 36% of exports globally. There is also a big deficit in oilseed supply in Europe and high levels of commodity purchases by China are keeping oilseed markets firm.
- This spring it is estimated that US farmers will sow an all-time high of 182 million acres of maize and soyabeans, of which 90 million acres is set to be in soyabeans. Although this seems good news for supply, even if this acreage is achieved, accounting for increased demand means that it will have little impact on restoring year ending stocks.
- The Australian wheat crop this season is reported to be 33.3mT, a record crop which will likely see exports of 21mT, significantly up from only 9mT last season. The previous record was 31.8mT in the 2016/17 season. This is a great boost to farm incomes with current high global wheat prices on the back of three previous drought years.

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

- Barley is still around £50/T discount to wheat and so has been favoured in animal feed rations this winter, resulting in wheat usage being over 1.5mT lower year-on-year. Barley inclusion in compound animal feed is up by 38% this season, but usage is down by 13% by distillers and maltsters. Despite this, AHDB report that the UK still has exportable surplus to clear. Barley is forecasted to be in good demand for the rest of the season and is viewed as in short supply, with it being good value against other straights.
- Even though wheat imports have doubled this year on the back of the smaller 2020 harvest, total UK supply is still down by 5mT. Demand

for wheat is set to increase with the Government announcing that the bioethanol component of petrol will increase from 5% to 10% as of September 2021. The Vivergo bioethanol plant in Hull is set to reopen later this year to resume ethanol production, which previously used 1mT wheat a year to produce ethanol, as well as wheat distillers feed for the animal feed sector. This increase in demand coupled with more wheat being used in animal feed rations following this year's harvest, means that the supply and demand balance sheet for the UK could remain very tight. However, the UK wheat harvest could rise to 15mT this year and it is predicted that soft wheat production in the EU could increase by 10.4mT from last season's output to 129.6mT.

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

## Dealing with Saturated Grazing Fields this Spring

It has been an extremely wet winter in some parts of the country with heavy snow fall and high rainfall, meaning that many grazing fields are saturated and heavily compacted. However, there are several things you can do to help get swards back into shape for spring grazing.

Assess your fields visually for those that require the most attention. Any patchy areas can indicate poor soil structure and compaction (see photos below). Swards that are yellowy in appearance imply the grass plants have been under stressful conditions.

#### Difference between compacted and noncompacted soil



Very compacted soil

Friable soil

Soil structure should also be visually assessed with the VESS (Visual Evaluation of Soil Structure) method by digging out a block of soil to look at appearance and feel of the soil. Digging down to 30cm depth will help give a good indicator of whether compaction is present at grass root level and where the compaction zone exists.

A guide on soil evaluation can be found in the following link:

Visual Evaluation of Soil Structure Score Chart -SRUC

If the plant roots are not penetrating deeper than four inches, compaction is an issue. Another sign of compaction is if the soil below three to six inches depth is significantly drier than the top layer. These conditions will greatly affect grass productivity, reducing the growth rate of young grasses by 10 to 20% and affecting nutrient uptake. Compaction must be addressed and the best way to do this is to aerate the soil with a sward lifter, especially if the soil is compacted down to six to eight inches. If the compacted layer is much shallower then an aerator (surface spikers or slitters) can be used instead up to a depth of Note that sward lifting can be four inches. damaging to root growth and should ideally be carried out in the autumn as there can be a lag in grass growth afterwards. It can be done in the spring, but the ground must not be too wet or too dry and it must also be warm enough so that the plants are actively growing.

Soil testing is also important at this time of year. High moisture content in the soil can greatly affect pH, with the target for grass and clover leys being 6 to 6.5. More acidic soils will affect nutrient uptake and can reduce grass yields by as much as 40% at a pH of 5.5.

The soil's nutrient status should be analysed for P and K, with P being essential for root development and energy transfer within the plant, and K for water regulation. If soil reserves are not sufficient, calculate what needs to be applied through manure and/or slurry and bagged fertiliser to achieve a soil index of 2 for both P and K.

As a last resort, consider overseeding or reseeding to improve production from badly affected fields (only once compaction and soil status have been rectified). If directly reseeding in spring, consider including Westerwolds at 3kg/acre. This annual ryegrass is extremely fast growing and provides significant bulk in the year of sowing so that the sward can be grazed within eight weeks or cut for silage 10 to 12 weeks after sowing.

If conditions are still wet when you want to turn cows out, is it possible to graze for just a few hours in the day? Walk the farm to identify which fields are the driest and could carry some cows without causing too much damage. Perhaps late lactation, lower yielding cows could graze the driest areas (with high yielders kept inside to maintain intakes and production). Fence off very wet areas, manage gateways with multiple access points to the grazing area and hardcore gateways that will receive the most traffic to reduce soil damage.

As a rule of thumb, cows should manage to eat 5kg of dry matter in about three hours of grazing under reasonable sward and weather conditions, and perhaps more as long as they go to grass with an appetite. Aim for feed troughs to be empty about two to three hours before going to grass and bring cows back inside once they have eaten their allocation, appear full and are looking to lie down. Under wet conditions, it is difficult to achieve the target 1500kg DM/ha residual. Aim for around 1600-1700kg DM/ha to minimise sward damage.

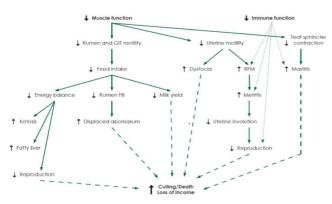
lorna.macpherson@sac.co.uk, 07760 990901

#### Subclinical Milk Fever – Is it More Prevalent than you Realise?

Calving down comes with important physiological changes within the dairy cow due to the onset of lactation. In the two to three days prior to calving, the concentration of calcium within the blood decreases as calcium is diverted to the mammary gland for production of milk. This change in blood calcium concentrations can overwhelm the homeostatic mechanisms of the cow, resulting in hypocalcaemia, otherwise known as milk fever. Clinical milk fever occurs in approximately 5% of cows whereas subclinical milk fever can have a higher incidence rate of up to 50% in cows in their 2<sup>nd</sup> lactation or more.

Subclinical milk fever may not have the severity on health as the clinical cases, however these cases are just as important, if not more important. It is not easy to diagnose these cows, although blood sampling for calcium within 24 hours of calving can help identify if subclinical milk fever is an issue. Despite no obvious clinical signs, there may be an impact on the longevity and productivity of the cow. Dairy cows that have been diagnosed with subclinical milk fever have shown delays in the first oestrous after calving and signs of oestrus reduced in the first 60 days of lactation. Similarly, these cows are more susceptible to developing ketosis, displaced abomasum, metritis and retained placenta post-calving. In the following figure, the effects of low blood calcium can be seen and how it can lead to other metabolic diseases and early culling.

#### The milk fever cascade



Source: <u>https://www.arn-ltd.co.uk/newsroom/latest-news-</u> <u>from-advanced-nutrition/2019/11/18/subclinical-milk-fever-the-</u> <u>silent-killer/</u> (dashed lines indicate a tentative association)

During the dry period, calcium requirements of a dairy cow are approximately 21g/day which allows the cow to maintain her normal body functions. During lactation, requirements increase by approximately 55g/day to support the production of colostrum and milk. Typically, this sudden increase in calcium requirement is often not met by the cow's dry matter intake, leading to an increased drop in blood calcium concentration.

Prevention of any transition period disorder is key in the dairy cow. Management of milk fever is usually through the dry cow ration by means of a low calcium diet or supplementation with a calcium binder or anionic salts such as magnesium chloride. For any diet to lead to a successful transition, dry matter intake must be maximised prior to calving. A variety of factors can affect dry matter intake including body condition, feed presentation and over-crowding at the feed face, so if your herd is experiencing clinical or subclinical milk fever, these are areas to consider and investigate. Cows in a high body condition score at calving are four times more likely to develop milk fever, with a target body condition score at calving of 3 and no more than 3.5.

Hypocalcaemia is known to reduce the motility and muscle contractions of the rumen and abomasum which increases the risk of a displaced abomasum. Therefore, feed intakes can be reduced in early lactation and the cow will have a higher mobilisation of her body fat and body condition will drop. Muscle contractions are reduced when cow presents with а this includes the hypocalcaemia, and teat sphincter muscle which is important in the closure of the teat following milking, increasing the risk of mastitis.

Clinical milk fever is costing approximately £200 -£300 per cow for an uncomplicated case. However, it is unclear the cost of subclinical milk fever as it generally remains untreated. Nevertheless, these subclinical cows are highly susceptible to other problems as discussed above and are at a higher risk of early culling. Cows that are culled early bring a loss of income to the business, therefore it is difficult to put a cost on subclinical milk fever. Prevention of milk fever through dry cow management and diet is key to reduce the losses associated with milk fever.

cara.campbell@sac.co.uk; 01586 552502

## Mycoplasma bovis – Effects in the Milking Herd

We tend to think of Mycoplasma bovis (M bovis) as being a bacterial disease of calves, with the main symptom being respiratory disease. Infected calves may also develop ear infections, as indicated by an ear drop and a head tilt in more severe cases. The disease is very difficult to treat, as the bacteria does not respond well to some commonly used antibiotics due to the absence of a cell wall. The bacteria also have some adaptive mechanisms so that they are not recognised by the animal's immune system. While a US vaccine is in the trial stages on some UK farms, control of this disease must focus on strict herd biosecurity

and maintaining a closed herd. If its presence is suspected, waste milk must not be fed to calves.

In adult cows, there are several ways in which the disease may be evident. Lameness, inexplicable death, poor fertility, abortion, mastitis, arthritis and low milk yield are just some of the reported symptoms. Early detection is critical as antibiotic treatment is likely to be more effective in the early stages. Some animals may act as carriers of the disease although show no symptoms. However, they may still shed the bacteria through milk, faeces and mucosal surfaces (such as the eyes, nose and vagina).

Mastitis caused by M bovis is classed as a contagious mastitis pathogen, most likely spread in the parlour via the milkers hands or milking equipment and it responds poorly to antibiotics. Even if affected animals are treated successfully, they will always carry the bacteria and are therefore still a source of infection to others. Mastitis outbreaks often occur a few weeks after a respiratory disease outbreak in the herd and often a higher percentage of 1<sup>st</sup> lactation heifers are affected. Typical characteristics of M bovis mastitis infections are:

- Cows appearing healthy but mastitis is severe.
- Individual quarters or the whole udder suddenly swells up. It is common for more than one quarter to be affected.
- Milk may be yellowish or watery in appearance, with sandy/flaky sediments present.
- Milk yield is significantly reduced, and some quarters may not produce any milk.
- Longer milking times.
- Ineffective treatment.

Testing for antibodies in milk will identify cows with M bovis mastitis but not arthritis or pneumonia caused by the bacteria.

Lameness tends to manifest itself through severe arthritis, with swelling in lower limb joints, with at least one limb being affected (see picture below). M bovis should be suspected if lameness prevalence is higher than normal with no obvious signs of the common lameness problems on farm (e.g. digital dermatitis or claw horn lesions). Affected cow with swelling of the fetlock and knee joints due to M bovis infection



Source: https://phys.org/news/2018-07-procedures-dairycows-mycoplasma-bovis.html

The disease is now endemic in UK beef and dairy herds so unless you have a very strict closed herd policy, it is very difficult to keep the disease out. It most commonly enters a herd via non-lactating heifers or subclinically affected cows. Unfortunately, its prevalence is on the rise and there are concerns around antimicrobial resistance to the disease.

Any sick cows or those with mastitis where M bovis is suspected, should not be housed in the same pen as fresh cows to reduce the risk of spreading the bacteria. Infected animals may not necessarily show clinical signs of disease but they can still shed high levels of bacteria in milk or respiratory secretions. Waste milk should not be fed to calves where the disease has been diagnosed in the herd, although pasteurisation of colostrum is effective in destroying the bacteria.

There are several methods for diagnosis, including bulk tank milk culture, PCR techniques, DNA sequencing and antibody tests in both blood and milk, each with their own advantages and disadvantages. If you suspect M bovis in your herd, discuss testing and treatment options with your vet.

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

## Slurry Storage in a Changing Climate

It is no secret that there are environmental challenges that are disproportionately found in the dairy sector. The production and storage of slurry is a real issue and with the inclusion of spreading and application options in the recent Sustainable Agriculture Capital Grant Scheme (SACGS), Scottish Government view it as an area for investment and improvement, particularly in the fight against climate change. With a new, restricted round of funding recently announced for the Agri-Environment Climate Scheme (AECS) and the application window open until the end of June, there is no better time to consider whether you could benefit from additional slurry storage.

The provisions for slurry storage are intended to safeguard and enhance the water environment broadly and priority water catchments specifically. In co-operation with the Scottish Environmental Protection Agency (SEPA), Scottish Government has provided a spatial targeting tool, allowing anyone interested to see if they are within a target area for support funding targeting.ruralpayments.org. By safeguarding these important water habitats from improper application of slurry at inopportune times, farmers can maximise the nutrient value of their slurry, while minimising environmental damage.

Funding supports the creation of storage required to bring a business to six months capacity at a rate of £15/m<sup>3</sup> up to a maximum of 2,000m<sup>3</sup>, with additional capital support for items like reception tanks, lockable sluice valves, ladders and platforms. Importantly for those considering the funding, towers and lagoons are supported, however below ground storage is not eligible in this funding round. Those farms who have received funding for slurry storage through previous Scottish Rural Development Programme (SRDP) schemes are not eligible for grant aid.

The application process requires the completion of a whole farm waste management plan, identifying slurry and dirty water production on the farm and must be supported by the appropriate maps and diagrams. A field assessment for the spreading of slurry and dung must also be completed. Importantly the application and waste management plan cannot be completed to support or facilitate an increase in herd size. Following this, the applicant or advisor must propose the dimensions for a new store, accommodating slurry production and rainwater capture. For guidance and a clarification of criteria please go to <u>https://www.ruralpayments.org/publicsite/futures/to</u> <u>pics/all-schemes/agri-environment-climate-</u> <u>scheme/management-options-and-capital-</u> <u>items/slurry-storage/</u>

The scheme is now open for applications and will close on 30<sup>th</sup> June 2021, with successful applicants being able to begin work starting January 2022. The scheme is competitive, and farms located within priority water catchments will be viewed preferentially.

For those interested in assessing their slurry capacity, as well as tools and advice on managing and cutting dirty water production around the steading, Farming and Water Scotland have a range of useful materials available at https://www.farmingandwaterscotland.org/.

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

# The Energy Content of Silage Bales - What's It Worth?

There is huge variation in the nutritional value of silage bales but this is rarely taken into account when buying and selling bales. At the very least it is best to get an analysis, so the nutritional value of the silage is known. Perhaps you can command a better price if selling and the buyer is more aware of what exactly they are purchasing and whether it is suitable for the class of stock it is destined for. However, what value should you put on silage bales depending on its energy content and what is, for example, an extra 1MJ of ME/kg DM worth?

From a milk production perspective this is easy to work out based on the extra litres of milk produced from a silage which is 11MJ/kg DM versus a silage at only 10MJ/kg DM. Assuming a cow is eating 12kg of dry matter from the higher quality silage of +1MJ, this is an additional 12MJ intake. It takes 5.3MJ to produce 1 litre of milk at 4% butterfat and 3.3% protein, therefore an extra 12MJ will in theory produce an extra 2.2 litres/day. This is equivalent to 0.183 litres/kg of forage DM. With a

current milk price of 27ppl, 0.183 litres = 4.9p/kg of silage DM.

Assume a silage bale weighs 700kg and is 30% DM, providing 210kg DM. At 210kg x 4.9p/kg, that is an extra £10.29 per bale based on silage being 1MJ higher in ME.

Another way of looking at this is 210kg of DM x 1MJ = +210MJ in the higher quality bale. This is equivalent to 39.6 litres of milk or £10.69 extra per bale, a similar result. Although it would be unrealistic for silage bales to vary this much in price depending on their energy content, given that they have recently being selling at around £8-£9/bale, it does raise the issue of silage quality and what that is worth (and also take into account the amount of drv matter in a bale as well!). This is certainly worth considering if you are selling bales and when it comes to making silage this Remember the most important factor summer. affecting nutritional quality of silage is the stage of cutting, with earlier cutting generally resulting in higher energy and protein silage. Other considerations include:

- Avoid cutting too low to the ground. This will increase the amount of fibrous material in the bale, reducing nutritional value, as well as slowing regrowth. Leave a minimum 5cm stubble but if targeting quality over quantity, a 7-8cm stubble will improve nutritional value even more.
- Aim for a rapid wilt (24 hours ideally, up to 36 hours at the very most). Use a spreader mower or ted as soon as possible after cutting to reduce wilting time and nutrient losses in the field. Aim for a minimum dry matter of around 30%.
- Consider using a chopper baler which will increase bale density. This will lead to a more effective fermentation, with better preservation of nutrients.
- Applying six layers of wrap will help prevent spoilage/mould by providing a more effective seal and reduce air ingress.

Baled 3<sup>rd</sup> cut silage at SRUC's Crichton Royal Farm, wrapped with more environmentally friendly clear plastic



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

#### Dates for your Diary -Webinars and On-line Events

- 16<sup>th</sup> March Dispelling the Myths about Carbon Sequestration. Time 12.00. To book your place visit: <u>https://ahdb.org.uk/events/dispelling-the-</u> myths-about-carbon-sequestration
- 17<sup>th</sup> March Reducing Dairy Electricity Costs. Time 13.00. To book your place visit: <u>https://ahdb.org.uk/events/reducing-dairy-</u> <u>electricity-costs</u>
- 17<sup>th</sup> March Integrating Trees on Your Land. Time 19.00. To book your place visit: <u>https://www.eventbrite.com/o/integrating-trees-network-32362737411</u>
- 23<sup>rd</sup> March New Breeding Indices HealthyCow and Gestation Length. Time 12.00-13.00. To book your place visit: <u>https://ahdb.org.uk/events/new-breedingindexes-healthycow-and-gestation-length</u>

- 23<sup>rd</sup> March NE Organic Discussion Group -Mini Conference - Crop and Business Management. Time 19.30-21.00. To book your place visit: https://www.fas.scot/events/event/ne-organicdiscussion-group-mini-conference-crop-andbusiness-management/
- 24<sup>th</sup> March Work Smart not Hard Virtual Workshop. Time 12.00. To book your place email <u>ke.events@ahdb.org.uk</u> or call 01904 771216.
- 25<sup>th</sup> March NE Organic Discussion Group -Mini Conference - Livestock. Time 19.30-21.00. To book your place visit:

https://www.fas.scot/events/event/ne-organicdiscussion-group-mini-conference-livestock/

- 25<sup>th</sup> March Making Your Business Deliver for You and Your Family. Closed workshop for dairy farmers only. Time 12.00. For more information or to book your place contact Shirley Macmillan on 07766 402393 or email: shirley.macmillan@ahdb.org.uk
- 7<sup>th</sup> April Is 3 Times a Day Milking for You? Time 12.00. To book your place on this interactive workshop please contact the AHDB KE Events Hub on 01904 771216 or email ke.events@ahdb.org.uk

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



Lorna MacPherson (Dairy Consultant) SAC Consulting Office Thainstone Agricultural Centre Inverurie Absrdeenshire AB51 5WU Email: <u>lorna.macpherson@sac.co.uk</u> Tel: 01467 625385 Mobile: 07760 990901 Fax: 01467 620607

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