

Management Notes



Christopher Breen

Dairying

Getting calves weaned at the correct stage is critical

Calves can be successfully weaned when adequate rumen development has occurred. Correct nutritional management of the calf helps improve rumen development in those early days. Through careful management early weaning can be successful, helping to reduce the cost of rearing replacements.

- Feed the calf milk or milk replacer at a rate of 10% of birth weight. More recently the use of accelerated growth programmes have been highlighted. These consist of feeding calves up to 9 litres (1350 g) of milk replacer daily. Research shows that calves on these type of programmes can achieve higher live weights pre and post-weaning compared to conventional feeding. However, this programme is more suited to units that have automatic calf feeders due to the volume of milk being fed.
- During the first month of life calves eat small quantities of starter. The aim is to offer small amounts (50-100 g) from two days of age on a daily basis. This keeps it fresh and encourages intake. Starter intake is critical for adequate rumen development. Providing clean water also encourages intake and supports the developing bacterial population in the rumen.
- In most cases calves can be weaned at six to eight weeks if starter intake is adequate; when they consume more than 1.0 kg of starter per day for three or more days. Gradually reduce milk levels, ideally in the last week before weaning. Calves that had scours and were off feed, were fed poor quality starter or did not have water available may require longer. Delay weaning these calves for an additional week to allow for adequate rumen development.



Wean calves when they are over six weeks of age and eating at least 1.0 kg per day of calf starter feed

Electricity usage

There is generally scope on most farms to reduce electricity usage. Make sure you are on the best tariff available. Electricity suppliers offer larger energy users more competitive rates. Change time clocks when required. Cheaper electricity in winter is from 1 am to 8 am. Dairy farms typically use 20-30% of their electricity at the low rate. Change the times on your water heater so that all the water is heated on the night tariff.

Ensure your plate cooler has an adequate water supply. For maximum benefit there should be a flow of two litres of water for each litre of milk. Any investment made to

improve the water supply to the cooler will be repaid with lower electricity bills.

Well insulated hot water tanks and pipes save money. Many of the old water heaters have a thin metal lid which loses heat to the environment. A 30 mm layer of insulation greatly reduces this heat loss. Ensure that thermostat settings do not allow the water to boil.

Lighting can be a bigger cost than is often realised. Installing low energy bulbs can result in real savings. LED lighting is now an economic option where lights are used several hours a day. Remove dirt and dust from light bulbs and turn off unnecessary lights.

December jobs checklist

- Assess weight of young stock, especially maiden heifers. Will they be at the correct weight for service? Does the feed rate need to be increased?
- Carry out any vaccinations due, for example BVD well in advance of the breeding season.
- Calibrate parlour and out of parlour feeders to ensure accurate feeding.
- Empty precast concrete field drinkers to ensure they do not crack in frosty weather due to ice formation.

the results of a silage analysis. Mineral supplementation of ewes is also important in the final six weeks of pregnancy. This is usually achieved in the form of a bolus, dry bagged minerals or lick buckets.

NUTRIENT MANAGEMENT

The only method of establishing the nutrient status of soils is through soil analysis. This allows you to calculate crop requirements by balancing the soil nutrient availability with slurry, farmyard manure or chemical fertiliser applications. Also, for land receiving applications of chemical phosphorus (P) fertiliser or P-rich manures, there is a legal requirement to show a crop need for the applied P. It is recommended that sampling is done at least three months after any application of organic/inorganic fertiliser or lime. December is often an ideal time to soil sample however, if slurry was spread just before the closed period, sampling is better left to January. Samples should be taken every four years. Carry out soil sampling by using a soil auger which samples down to 75 mm and 150 mm for grassland and arable land respectively. To ensure an accurate representation of soil within a field walk in a 'W' pattern across the field and collect a minimum of 25 cores. The more cores you collect, the more accurate the analysis. Collecting one or two samples from a field will not provide you with a reliable soil analysis. Avoid areas where cattle congregate, for example, around water troughs and gateways and dung pats.

Soils can be analysed for pH, phosphate, potash and magnesium. Low soil pH is a common problem across Northern Ireland. Your soil analysis report will indicate the amount of lime required (if any) to increase pH to the target of 5.5 and 6.2 for peat and mineral soils respectively. The report can be used to determine the fertiliser requirement of the soil depending on the crop type for example, grass silage or grazing.

FARM SAFETY

Winter provides time on some farms to carry out maintenance and repairs to machinery and equipment. It is also the time of year damage to roofs is more common as a result of high winds. Be mindful of the risks involved in the specific task and take measures to remove or reduce the risks where appropriate. It could also be a good time to assess safety features in the calving shed in advance of the busy period. A calving gate is probably the most important of these to consider. 'Stop and Think SAFE' is a farm safety campaign developed by the Farm Safety Partnership to address the high rate of farm related injuries and fatalities in Northern Ireland. The word 'SAFE' focuses on raising awareness of the four main causes of accidents on local farms; slurry, animals, falls (from height) and equipment. More information on the campaign can be found at: www.hseni.gov.uk/articles/stop-and-think-safe.



Andrew Thompson

Environment

Do you have a fertilisation plan?

It is now a requirement to complete a fertilisation plan to demonstrate that there is a crop need, before applying chemical phosphate fertiliser to grassland, high phosphorus (P) manures or anaerobic digestate to any land. A valid soil analysis is required to determine the P index of your soil. Soil sampling kits and augers can be obtained by emailing or telephoning your local DAERA Direct office on 0300 200 7840.

To complete a fertilisation plan for your farm, use the CAFRE Crop Nutrient Calculator available at www.daera-ni.gov.uk/onlineservices. Enter your crop details and soil analysis results; the calculator will identify the crop requirement. Choose the appropriate manure type and chemical fertiliser to be applied. The Crop Nutrient Calculator report can then be printed off or saved and used as your fertilisation plan.

Winter slurry store checklist

Over winter, as slurry tanks fill, it is important to carry out regular checks to ensure



structural defects don't develop resulting in unintended leaks. Always follow health and safety advice when working near slurry and never enter a slurry tank. Never take risks.

Below ground slurry stores:

- Is the tank filling too quickly?
- Does the tank appear to be filling slower than expected?
- Where exterior walls are visible, are there any cracks or weak joints?

Above ground metal and concrete stores:

- Are there any signs of mechanical damage or abrasion of metal panel surfaces?
- Is there any evidence of corrosion along panel edges or around bolts?

- Are any concrete panels cracked or joints weeping?
- For post-tensioned concrete above ground stores, is there any corrosion of the hoops? Are all cables and straps tight?
- Are all valves sound and secure?

Earth banked slurry lagoons:

- Are earth banks intact and free from subsidence?
- Are there any visible signs of damage to the liner?

- Are there any signs of damage from burrowing rodents?
- Are safety fences and gates secure?

All slurry stores:

- Is the surrounding area free from debris and vegetation to allow inspection?
- Are there any signs of increased/excessive plant growth in the area surrounding the tank?

Good maintenance will extend the lifespan of all slurry stores. Where a slurry tank is at risk of failing, the tank should not be used and must be emptied to allow for necessary repairs. If repairs are required always seek professional advice.

Urgent reminder to complete EFS training

2020 has been a year where the changes to our routines have kept us all preoccupied. For businesses that joined the Environmental Farming Scheme (EFS) in 2020, it is important to complete the training component of your

agreement. Training is completed online and consists of a short video typically five to ten minutes long followed by a few questions. This needs to be completed for each of the options that you have chosen to undertake. You should finish your training as a matter of urgency, as your payment for 2020 cannot be processed until training has been completed.

For more information about how to log-in and complete EFS online training go to www.daera-ni.gov.uk/publications/online-training-efs-agreements-guidance-documents.

Rethink hedge management

The Northern Ireland landscape is characterised by hedges, many of which are cut annually in the autumn or winter as part of a modern tradition. With insects, birds and mammals under increasing pressure to find food and shelter in an intensively farmed landscape, it is important to maximise the value of our hedges for wildlife.

It is probably not widely known but hawthorn branches need to be at least two to three years old before they can produce blossom and berries. As a result, many hedges that are cut every year or every other year may not flower and produce berries. Where feasible, consider moving to a rotation where you cut only up to a third of your hedges each year. This approach allows hedges to provide flowers for insects upon which birds and mammals feed, as well as producing fruit for wildlife in the winter months. Modern flail cutters can cope with three year's growth so where it is feasible reduce your cutting frequency and maximise the value of your hedges.



Nigel Gould

Beef and Sheep

SHEEP

Flock grazing management

Challenging grazing conditions in recent weeks has, in some cases, led to flocks moving through grazing quicker than expected. Utilisation wasn't as good on some farms with higher residuals left than desired. Avoid the temptation to re-graze closed ground. Generally, March lambing flocks should have 60% of ground grazed by the beginning of December, with 80% grazed by mid-December. If grass supply is scarce, offer supplementary feeding or consider early housing. Although it has been shown to be beneficial for ewes to lose some weight during mid-pregnancy, this needs to be limited to 5% of ewe liveweight.



Scan ewes 80-90 days after the introduction of rams. Ewes can then be grouped by litter size and body condition score and fed accordingly in the last six to eight weeks of pregnancy. 70% of foetal growth occurs during this time, increasing total energy demand of the ewe. However, feed intake also decreases by up to 30% at this time due to the increasing foetal spatial requirement. Housed ewes on a grass silage diet generally require concentrate supplementation in the final six weeks of pregnancy. The rate of feeding depends on

Pigs

The do's and don'ts of taking a water sample!

Both the quantity and quality of drinking water for pigs is important. Inadequate water affects feed intake, growth rate and feed efficiency and bacterial contamination can affect pig health. It is therefore a good idea to check the quality of drinking water on a regular basis. This can be done by taking a sample and getting it analysed at an accredited lab for bacteria such as E. Coli, Coliforms, Enterococci and Clostridia.

When taking a sample of water it is important to avoid contamination. The following are a few do's and don'ts of taking a sample:

- Do use a sterile sample bottle.
- Don't use an empty milk carton, even if rinsed out.
- Do wear disposable gloves and change gloves between samples.
- Do keep the bottle closed until you are ready to fill it.
- Don't touch the mouth or cap of the bottle.
- Don't let the water flow over your hand when taking the sample.
- Do fill the bottle to the top to eliminate air.
- Do label the bottle with your name, date and time of sampling.

- Do keep the sample chilled (3-5°C) until ready for delivery and during delivery to the lab.
- Don't freeze the sample before delivery to the lab.
- Do deliver the sample to the lab as soon as possible after collection.

African swine fever

If you are a regular reader of the pig management notes you will know that I have written about African swine fever (ASF) before. Due to the devastating effect an outbreak could have on your business and the industry I make no apology for writing about it again!

In mid-September ASF was confirmed in wild boar in Germany. At the time of writing the number of wild boar testing positive to the disease had increased to 123. Thankfully it has not been found in commercial pigs in Germany.

Irrespective of the number of pigs you keep, whether it is one or thousands, you are responsible for keeping ASF out of Northern Ireland. This means taking biosecurity seriously, not just paying lip service to it but actually putting strict measures in place. It also means educating your family, your staff and others about the risk of feeding food waste to pigs. The ASF virus can survive for weeks and even months in meat products, with frozen meat posing a very high risk.

Visit the DAERA website at www.daera-ni.gov.uk/articles/african-swine-fever for more advice.



Liz Donnelly

Preparing for winter!

It is only a matter of time until night time temperatures drop below freezing and the Met Office issue weather warnings. Although you can't prevent low temperatures and freezing conditions you can prepare for them!

When preparing for winter weather most people are aware of the need to protect the water supply system. As a farmer there is nothing worse than not having any water due to frozen or burst pipes. Fixing dripping water taps or leaking pipes now and insulating exposed pipes will help ensure this doesn't happen this winter.

However, heating and ventilation systems are often overlooked when preparing for colder weather. It is extremely important these systems are in 'tip top' condition, as there is a fine line in winter between providing good air quality and keeping the pigs warm and

comfortable. To ensure they are in ideal condition:

- Clean fan grilles and ducts to improve air flow.
- Check fans are running freely at minimum ventilation rates and motors are not overheating.
- Clean and adjust air inlets. If vents are dirty or pull cords stretched they will not close properly leading to heat loss.
- Clean heaters to increase efficiency of the reflectors and prevent fire risk.
- Check alarm temperature settings are appropriate for colder weather.
- Check and replace batteries in backup systems/sirens.

If you have a back-up generator now is the time to check it is working. There is no point checking it when the electricity is off!