INSIDE ▸

Pre-weaned calf growth

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Continued on page 3

TOMORROW'S FARMER

CMC crediton milling company
Feeding Tomorrows Farmers Today

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YOUR **NEWSLETTER** FROM **CREDITON MILLING COMPANY**

Monitoring the mineral status of your forages

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Balancing diets is not just about ensuring you provide the correct energy, protein and starch etc. Minerals are essential for health, fertility and production. With forage contributing a major proportion of the diet between 65 and 80%, its mineral status will have a considerable impact.

Testing gives an indication of mineral levels in forages and highlights and gives an opportunity to correct deficiencies by supplementation and just as importantly highlight areas where you can reduce levels of key nutrients that tend to be kept high in standard minerals. Phosphate is one of these, it is not unusual to see this as high 4% in many standard minerals but using forage mineral analysis and formulating a farm specific mineral this can be cut by over half in many cases. This will help reduce P levels in your slurries and mucks making it easier to match them to crop and soil requirements.

A forage mineral report will not only allow you to establish the correct mineral supplementation required, it also provide information about the mineral status of your soils.

This will also help in the balancing of P and K applications from farmyard slurries and FYM applications and is why it is very important that slurry testing becomes an essential tool on farm going forward.

As the closed period for applying organic manure draws to a close dairy farmers would be wise to test their slurry before spreading.

This will ensure crops are provided with the correct level of fertiliser, many slurry samples I have tested have revealed a huge variation in slurry nutrient content.

More than 1,500 slurry samples taken between 2006 and 2015 found dairy slurry was not delivering the balance of nutrients expected, when compared to recommended figures in Defra's RB209 fertiliser manual. (This was a study conducted by NRM)

Taking a Slurry Sample

1. Take a number of samples from a range of positions.
2. Mix them together, then take another sub-sample.
3. Send the sample away immediately for testing.
4. Mix together in a large container and pour a two-litre sample immediately into a smaller, clean container.
5. The sample should be analysed for dry matter, total nitrogen, ammonium-N, phosphorus, potassium, sulphur and magnesium.

...continued from page 1

Another major factor affecting the variation of slurry nutrient content was through water dilution, which will be a big problem for many producers after unprecedented levels of rain and winters generally becoming wetter. This can be because of large areas of unroofed concrete or gutter water going into the tank or lagoons.

Diet variations

Something that is not given much thought but Variations in diet – especially the ratio of grass or forage to concentrates – can also affect nutrient concentration.

We know that a high maize inclusion diet will have on average 30% less potash in slurry sampled but 10-15% higher level of Phosphorous which makes it harder to balance on farm nutrient plans using standard book figures and can be the main reason crop potential is not met.

Also high concentrate users slurry usually contains higher levels of phosphorous in the slurry sampled but this is not always the case.

Forages (Grass and Maize) will have a low phosphate/high potash content, whereas cereal-based concentrates are higher in phosphate than potash.

Results from the NRM study found:

2% of the samples were within 5% of the RB209 recommendations for nitrogen.

4% were within 5% of the RB209recommendations for phosphate.

4% were within 5% of the RB209recommendations for potash.

48% of slurry applications had less than the recommended amount of nitrogen.

81% had less than the recommended levels of phosphate.

86% had less than the recommended levels of potash.

This lack of information on slurry nutrient content can lead to incorrect fertilisation of crops, especially if the soil has not been analysed for its contribution to the nutrients available.

My advice is to find out exactly what is in your slurry and calculate how much the soil will contribute with the price of bagged fertiliser still high its in your interest to be purchasing the correct fertiliser more than ever this year.

MARK TUCKER 07703734530
FORAGE SPECIALIST

What are the benefits of being a member of the British Cattle Breeders Club?

I may be a little biased when I ask you to consider becoming a member of the British Cattle Breeders Club (BCBC), but I promise you that will not regret it!

I have had the huge privilege of being Chairman of BCBC for the last twelve months and a member of the Club for many years.

The British Cattle Breeders Club was founded by the late Sir John Hammond in 1946. Its aim then, as now, was to provide a forum for exchange between scientists and breeders of beef and dairy cattle. As a Club, we pride ourselves on attracting a huge diversity of farmers, researchers, students, lecturers, veterinarians and industry professionals, in addition to the next generation of young people hoping to make their way into our fantastic industry. This provides the perfect opportunity for discussing and sharing ideas, challenging and encouraging debate and driving businesses forward.

Membership is just £45.00 a year and will provide you with:

- **Discounted delegate fees at the annual two-day British Cattle Breeders Conference or attendance at the virtual conference.**
- **Access to previous conference presentations and papers.**
- **Invites to occasional group visits to research facilities and farms around the UK.**
- **Subscription to the BCBC e-newsletters.**
- **A digital copy of the Digest (the proceedings of the Conference).**

A reduced membership fee is available for students and young people under 28 years of age for just £25 a year.

I absolutely love being a member of BCBC and value all the great friends I have made over the years.

Every Conference brings up-to-date, factual, science-based but practical information that helps me with my career and the networking opportunities within the Club are endless.

This years' conference 'A Breath of Fresh Air' took place on Tuesday 25th January but if you sign up now, you still have access to watch the conference from the comfort of home for a year.

This year's line-up included top quality speakers such as:

Nigel Owens MBE, *former international rugby union referee and beef farmer* 'Building mental resilience for a positive farming future'

Steve McLean, *Head of Agriculture & Fisheries, Marks & Spencer* 'Adapting to change in order to succeed"

Mark Brooking, *Sustainability Director, First Milk* 'How dairy farmers can be part of the climate change solution'

Billy O'Kane, *Farmer & Vet, Ballymena, Northern Ireland* 'Carbon Audit of a 250 Cow Suckler to Beef Herd. Release v Sequestration'

Desi Cicale, *Founder & CEO, Meat Imaging USA* 'Advanced Carcase Grading Technology - what benefits can it bring to UK producers?'

Prof. Myles Allen, *Prof. of Geosystem Science & Head of the Climate Dynamics Group, University of Oxford* 'Methane, Agriculture and Climate'

Prof. Jude Capper PhD, ARAgS, ABP *Chair of Sustainable Beef & Sheep Production, Harper Adams University* 'From the first AI to technologies of the future – what role do genetics play in improving sustainability?'

If you would like to find out more information, please give me a call.

DR KAREN WONNACOTT
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RUMINANT NUTRITIONIST

Improve your pre-weened calf growth rate by 40%.

Last year I was asked to visit a farm to talk about how they could improve and get the most from their calf rearing system.

Breeding their own replacements for their 400 cow dairy herd they were after an easy system, while still getting the best growth rates for the best possible potential and start to the next generation of their herd. So as Birth to weaning is when the calves are most efficient in converting energy and protein into growth, his was the place I decided to start and set up a farm case study to look at two different approaches.

The table below is a good blueprint to be following, making sure that all the calves get a consistent start.

Some key points to take away is to feed concentrate, water and straw from day 1, although they may not take it straight away, we are getting the calf used to the smell and the opportunity to have a nibble, doing this will help increase intakes and uptake from an earlier age.

Water is really important, I hear too many times that "They are getting milk twice a day they don't need water as well". When we think that for every 1kg of concentrate fed a calf will drink 4 litres of water, if no water/not enough water/dirty water is presented the calf will either become dehydrated or will reduce their food intakes, both restricting potential daily live weight gain.

Don't forget to feed good quality straw in racks (not off the floor) until 6 months old. A calve isn't a ruminant until she is 6months of age – her rumen is still developing until then.

Another key point is not to change more than one thing at once. Stress can create a huge impact (trust me, that's why my dad is grey). Changing to much at once creates stress and will restrict intakes, as well as weaken their immune system. When we wean, we change a lot of things, we change their groups, take them away from friends, take them off milk, change forage, change concentrate and sometimes change bedding. All these changes stress out the calf and you will normally see the calves 'not doing', so try and spread the changes out.

The Case study farm had invested into 2 automatic feeding machines and split the calves into two groups. These two groups of Holstein heifers were identical except for the starter feed, with one group receiving CMC Whole Grain and the other on a traditional calf nut, both products were fed adlib. The animals were weighed the calves every 2 week. The headline results were:

Whole Grain Group:

- Earlier intake of concentrate
- Higher daily live weight gains
- 1.07kg average daily liveweight gain average across all weight recorded.

Trinational Calf nut group:

- Later concentrate intake
- Less concentrate intake
- Smaller growth rates
- 0.78 average daily live weight gain across all weight recorded.

The wholegrain product clearly has an advantage when used on farm. If you are unfamiliar with the product it has key selected ingredients. Firstly Soya is used to achieve 21% finished protein delivering superior frame development and muscle confirmation. With the addition of whole Maize and oats to provide high quality slow release starch. Whereas NIS aids digestion and increases daily growth rates and Zinpro Availa Minerals further fortify the calves' immune system. If you would like more information about this case study or a chat about our calf feed range please give me ring.

SARAH CANN 01363 772212
RUMINANT TECHNICAL SUPPORT

Beethoven or Bieber?

With birds in lockdown yet again, you may be wondering what you can do different this year to keep your birds calm.

There is a long list of enrichment ideas such as peck blocks, lucerne bails, string, CD's, the list could go on. But have you thought about what music your hens would like to listen to?

Radio 2 has overtaken Radio 1 as my go to radio station when on the road travelling around farms. Is this the same for your Burford Brown's or your Bovan's?

Studies have shown that music can have a positive effect on both humans and animals. So, chickens do in fact like music, but they can be picky. If the music is too loud or too fast this can potentially cause them stress. However, birds do show a positive response to certain classical music. Each bird, amazingly, has their own individual preference but research at Bristol University has shown that when laying hens are exposed to music, they have laid more eggs compared to their non-listening counterparts. This study showed that when hens listened to classical music, production increased by 6%.

If harmonious music is played that your hens like, the sound from the birds may lower and their movements may become calmer. This is a positive response.

However, if you think you're playing some music you and then hens might like but you get no reaction from the birds, then this music is neither having a positive or negative effect. In the same instance if your birds become stressed and scatty then this is a negative effect, and the music should be changed! Evidence shows that pop music has no effect on egg production and rock music can decrease production and even reduce egg size.

Classical music has a soothing effect on chickens and some birds will even fall asleep to it! Essentially, hens prefer any music that is played below 80 decibels.

So, when you are packing your eggs tomorrow, just think about the hens in your shed. Do they really like listening to the Nirvana you have on, or would they prefer some Classic FM?

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POULTRY SPECIALIST