

BEEF

December 2023

Check BCS of spring calvers

Now is the time to body condition score (BCS) your spring-calving cows and correct any issues. The old adage that cows should be fit not fat is critical to ensure a successful calving season. BCS is an excellent tool for ensuring cows are in the correct condition. The target at calving for a mature cow is 2.5, while a heifer should be 2.75. If condition needs to be corrected, December/January is the time to do this.

Cows below or above the required BCS of 2.5 at this time of year for spring-calving herds should be identified, grouped and fed accordingly. Thin cows or cows with a BCS of below 2.5 should be fed good quality silage of 70 DMD, along with 1-2kg

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of concentrates to help improve condition. Cows that are too thin at calving will have reduced colostrum quality and poorer energy reserves, thus increasing the chances of milk fever/calving difficulties and a slower return to breeding. Where cows are above a BCS of 3 they may need to be restricted or fed more average quality silage as they will have an increased risk of encountering calving difficulties. Over fat cows will have fat deposited around the pelvic area, thus reducing the amount of space for the calf to come out during calving. Once cows have reached a BCS of 2.5, they can then be moved onto a 65 DMD silage *ad lib* and monitored.

Feed a good pre-calving mineral

What price do you put on cows that calve down with no issues, no retained cleanings, plenty of milk, a vigorous calf, don't suffer from milk fever and most importantly, go back in calf? That is

the value you place on a good quality mineral. Every extra €200 per tonne of mineral will cost an extra €1.20 per cow for a 60-day period, so purchase a good one.

What mineral to feed

Ideally, you should mineral test your silage to see if you are particularly high or low in macro minerals or trace elements. This will also tell you if you have antagonists that may “lock” up minerals and if you should be feeding a protected mineral. A common example is high molybdenum, which locks up copper. In this scenario, you can use what is called protected

copper, which basically means that it is already bound at manufacturing to another compound allowing it to pass through the rumen and be absorbed in the small intestine.

If you do not test your silage at least ensure your mineral meets the requirements in **Table 1** for macro minerals. Talk to your advisor for more information.

Table 1: Showing suckler cow requirement for macro minerals pre calving.

Major elements	Required g/day	What you see on label	Feeding 100g/day	Feeding 120g/day	
*Magnesium (Mg)	17-20g	17%	17g	20g/day	If potassium levels are high in silage, you may need to increase to 30g.
Calcium (Ca)	0	0-2%	0	0	
**Phosphorous (P)	4.5g	4.0%	4g	4.8 g/day	>3% if feeding straw
Sodium (Na)	15g	13%	13g	16g/day	

*The lower end of the scale is for routine feeding, the higher end is if you are advised if stock are at risk of a severe deficiency. *If potassium (K) levels are high in silage, you could have to increase Mg levels to 30-40g. **If feeding straw ensure the P level is >3%.*

Top tips for feeding minerals:

- feed 80-100g per day for a least 60 days pre calving – many problems with minerals are caused by feeding the incorrect rate for too short a time, not by the spec. of the mineral itself;
- to ensure you are right, measure out the total needed to feed each pen and adjust if the

number of animals changes – it is a good practical guide to monitor the number of bags being used – a 25kg bag should feed 35 cows for one week;

- dust on top of the silage in the morning and evening; and,
- ensure all cows are able to feed at the same time.

Vaccination

For January-calving herds, it's time to think about vaccination. Rota and corona vaccines need to be administered three to 12 weeks pre calving, while

infectious bovine rhinotracheitis (IBR) vaccinations should be administered three to four weeks pre calving to ensure adequate build-up of immunity.

12 STEPS TO REDUCING EMISSIONS

Over 12 months, the Teagasc advisory newsletters will outline actions farmers can take to reduce their emissions.



Step 12: Incorporate white clover into grassland swards

How does this reduce emissions?

Incorporating white clover into grassland reduces the demand for chemical nitrogen (N). Less chemical N fertiliser spread means less nitrous oxide (N₂O) gas being emitted into the air, which is one of the main greenhouse gases. White clover fixes N from the atmosphere and makes it available for plant growth, reducing the requirement for chemical fertiliser N. The advantage in terms of emissions will only be accounted for if there is a reduction in chemical N use. Clover itself doesn't reduce GHG emissions; it's the reduction in chemical N use that reduces emissions.

Is there a gain for me?

The benefits for you include a lower requirement for N fertiliser use by up to 100kg/ha, potential to increase growth compared to grass-only swards, increased animal intake in summer and autumn, increased milk production, liveweight gain and increased N fixation.

What action do I take?

Good soil fertility is critical for clover establishment and performance. Target a soil pH of 6.3+ and a P and potassium (K) index of 3. Select paddocks for a full reseed or oversowing based on soil fertility, current performance, perennial ryegrass content, weed challenge, density and age of the sward. Whether oversowing or reseeding, remove weeds before establishing clover.

RESEARCH UPDATE

Concrete v. rubber slats



BERNADETTE EARLEY, MARK MCGEE, EDWARD O'RIORDAN, and CATHY MCGETTIGAN of AGRIC, Teagasc Grange, Co. Meath report on the effect of concrete slats versus rubber-covered slats on the performance, behaviour, hoof health, and cleanliness of finishing beef steers, and the performance, cleanliness and hoof health of weanling cattle.

Two experiments were conducted to investigate the effect of concrete slats (CSs) and rubber-covered slats (RM; Durapak slatted rubber) on, i) animal performance, behaviour, hoof wear, dirt scores, physiological response and carcass traits of 'finishing' beef steers,

and, ii) performance, hoof health and dirt scores of suckler-bred weanling cattle undergoing a 'backgrounding' period. In experiment 1, finishing steers (n = 140, 597kg, 643 days old) were grouped by liveweight, breed and age, and randomly

allocated to pens of four and assigned to a treatment for 120 days: (i) CS (n = 17 pens); or, (ii) RM (n = 18 pens), at a space allowance of 2.9m² per animal. Finishing steers accommodated on RM had greater average daily liveweight gain (ADG) (1.15 v. 0.98kg), carcass weight (414 v. 403kg) and superior feed conversion ratio (FCR) (10.6 v. 12.4kg DMI/kg liveweight gain) compared to those on CSs. Additionally steers in the RM groups lay down for longer, had more frequent getting up and lying down movements, and lying and standing bouts. No hoof lesions were reported on either floor type. No differences in body cleanliness scores existed

between treatments from day 0 to 56, but from day 56 until slaughter steers housed on RM slats were dirtier than those on CSs. In experiment 2, suckler-bred weanling cattle (n = 200, 315kg, 262 days old) were grouped by breed, sex, age, weight and diet, and randomly allocated to pens of five. They were assigned to one of two treatments for 84 days: (i) CSs (n = 20 pens); or, (ii) RM (n = 20 pens) at a space allowance of 2.5m² per animal. There was no effect of floor type on dry matter intake (DMI), ADG, FCR, cleanliness of these 'backgrounding' weanling cattle, and no reported incidences of hoof lesions on either floor type.

HEALTH & SAFETY



Staying safe over Christmas

It is important to be mindful of the safety of children during this time. Ensure there is a safe secure play area in place when children are outside. When children are in the farmyard they must always be supervised. Easy to read danger signs should be in place and these signs should be explained to children. Give preventing fires in your home and on your farm your attention. Irish

research has shown that farmers and agricultural workers account for 20% of all fire deaths. Almost all fires occur in dwelling houses. This level is proportionately higher than other sectors. Contributory factors include smoking, high alcohol consumption, plugged in or faulty electrical devices, open fires, frying or chip pans, and a small number of fires are linked to candles.

Happy Christmas

We in the Beef team would like to wish you and your family a very happy and peaceful Christmas, and a productive and positive 2024.