

BEEF

May 2020

BEEP-S

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In last month's newsletter we gave the details of the Beef Environmental Efficiency Programme-Sucklers (BEEP-S) programme, which builds on the BEEP pilot from last year. This year's Programme also requires you to weigh the unweaned calf and cow on the same day and to record the weights with the Irish Cattle Breeding Federation (ICBF) within seven days. There are also an additional two optional measures:

Option 1

Meal feed calves for four weeks pre and two weeks post weaning.

OR

Vaccinate weanlings for respiratory syncytial virus (RSV), PI3, *Mannheimia haemolytica*, and infectious bovine rhinotracheitis (IBR) before weaning.

Option 2

Collect faecal samples from suckler cows, send

samples to a Department of Agriculture, Food and the Marine (DAFM)-approved lab to check for liver and rumen fluke.

As can be seen in **Table 1**, the rates of payment are attractive – typically €80-90/cow. In a year where there is so much uncertainty, drawing down efficiency programme monies from BEEP-S should be given serious consideration by all suckler farmers. Your advisor will give you more details, but the closing date is midnight on May 15. More information is available at: <https://bit.ly/BEEP-S-Note>.

Table 1: Value of BEEP-S according to herd size

Herd size	All options	Weigh only
20 cows	€1,700	€900
45 cows	€3,700	€1,900
100 cows	€8,100	€4,100

Easing dairy-beef calves to grass



Calf shelters ease dairy-beef calves' transition to grass.

The labour-intensive rearing period is coming to an end for early-born calves on the farms of the Teagasc Green Acres Calf to Beef Programme participants. After ensuring calves were weaned correctly, in a stepped down manner, the focus is now moving to getting calves out to grass. The key requirement during this period is to ensure calves suffer no setbacks when transitioning from indoor to outdoor life, while also facilitating rumen development. JP Hammersley, the Tipperary-based representative in the Programme, is implementing a strategy to reduce stress and to avoid a dip in performance post turnout for his dairy-beef calves.

JP's first step is to ensure that the calves are adequately weaned. This is achieved by stepping back the volume of milk replacer offered over a number of days and by making sure calves are consuming at least 1kg/day of a high-quality concentrate prior to weaning. After this and when weather conditions allow – not too cold, wet or windy – calves are turned out to a sheltered paddock adjoining the yard. Calves are moved out in small batches by age and weaning date to allow ease of herding in the immediate period post turnout. The addition of calf shelters this spring has

further eased this process, as young animals have a sheltered area to gather if weather conditions worsen. This infrastructure is particularly important for JP, who has off-farm work commitments.

Ideally, calves need to gain 0.8kg/day over the first season at pasture to ensure animal performance is not compromised at a later date. To achieve this target and to further aid rumen development, calves are supplemented with concentrates at a rate of 1.35kg/day. In June, the calves will be regrouped on the basis of their visual performance; any young or under-performing calves will then be retained on meal feeding until an adequate level of performance is achieved, while their comrades will be on a grass-only diet.

Over recent weeks, JP noticed that calves were reducing their daily concentrate intake in favour of fresh grass. In order to ensure that rumen development was not hindered and to maintain the 'scratch' factor of the concentrate in the diet, a strip wire has been used to allocate grass to calves on a daily basis. The practices outlined above proved positive in training calves to a forage-based diet in 2019; spring-born weanlings achieved 0.81kg/day of liveweight gain from birth to housing in late November.

Making quality silage

One thing to remember is that “good quality silage gives you flexibility”, so we should try to get it right.

Time of harvest

On average, grass digestibility decreases by 2-3% per week from the second half of May (Table 2). This decline reflects the increasing proportion of stem in the grass plant as the crop matures, together with the continual rapid drop in the digestibility of stem:

- a leafy sward with little or no stem should typically give a 75-80% DMD silage;
- on the point of the seed head emerging, i.e., some stem, typically you should get 70-72% DMD; and,
- if the seed head is emerging/emerged silage quality will typically be less than 68% DMD.

Ensiling:

- ensure there are adequate sugar levels in grass before cutting – above 2.5%;
- ideally cut grass in the afternoon and evening, when sugars are highest;
- nitrate levels should be ideally below 600ppm but can be up to 800ppm if adequate sugars are present;

- fill clamp evenly and quickly;
- roll grass in clamp thoroughly to remove air – very important with wilted grass;
- cover with at least two sheets of polythene plastic (0.125mm);
- seal and cover with sandbags and tyres;
- monitor cover and retighten as necessary – covers should be tight to surface of pit, no ripples or flapping plastic; and,
- do not overfill silage clamps as it leads to an increased risk of machines toppling over and danger of collapse when feeding out. Health and safety should always be the number one priority.

Risk factors for reduced silage quality:

- weather – silage quality is influenced by temperature, if weather is very warm and growth is fast, every week delayed will reduce silage quality due to a higher proportion of stem;
- lodging can have the greatest reduction in silage quality (Table 3);
- check silage regularly to assess crop quantity and quality and ground conditions; and,
- keep your contractor informed of your planned cutting date well in advance.

Nitrogen:

- nitrogen (N) application for first-cut silage should be between 100kg and 125kg N/ha (100 units N/ac);

Table 2: Yield and digestibility of silage harvested on different dates.

Date of cutting	May 1	May 8	May 15	May 22	May 29	June 5	June 12	June 19	June 26	July 3
Grass yield (t DM/ha)	2.92	3.99	4.98	5.96	6.79	7.82	8.48	8.93	9.50	9.83
DMD (%)	79.9	77.9	77.5	76.6	74.6	69.2	67.9	64.3	63.5	58.2

- the old rule of thumb was to allow two units/day for N uptake – this means that 50 days, or seven weeks, is required for all N to be utilised by the crop;
- in good growth conditions with very responsive swards, N uptake may be greater than two units/day;
- so if conditions and crop are suitable for harvesting, get grass tested for sugar and nitrates; and,
- sugar levels are generally lower when nitrates are high, and high nitrates are also related to high buffering capacity, which resists acidification. But if sugar levels are adequate, nitrate level in the grass has little or no effect

Table 3: Causes of DMD reduction in silage and size of relevant reductions.

Causes	Size of drop in DMD (%)
One-week delay in harvesting	2.5-3.0
Old pasture (no/little ryegrass)	5-6
Lodging	7-9
Not grazed (dead butt)	6-7
Bad preservation	2-3
Heating at feed out	2-3

on the efficacy of preservation and a fast wilt will also help preservation.

Improve your six-week calving rate

For weanling producers in particular this is an area which, if improved, will increase calf weight at weaning, reduce labour input, make heat detection easier, and potentially reduce disease risk. Your current HerdPlus Calving Report will show you exactly where your herd currently sits compared with the average spring herd at 53% of cows calved in the first six weeks:

- plan your breeding season and be disciplined – have a definite date for removing bull/ceasing AI (10-12 weeks);
- late calvers – can they be pulled back in line?;
- extra replacements may need to be introduced for a few years to improve the six-week calving rate – this may be the fastest way to achieve your target of 75-80%;
- having cows in the correct body condition score (BCS) at calving and breeding is critical – cows need to be cycling at the start of breeding, and poor nutrition in the run-up to and during breeding will impact fertility;
- record service dates – this is important to monitor conception rates to AI or natural service – a subfertile bull would soon undo any progress made (if conception is 60%, then over two services 84% of the cows should be in calf); and,
- herd health is critical. Any factor that affects fertility/conception needs to be addressed in advance or early in the breeding season. Leptospirosis, mineral deficiencies, and uterine infections will ultimately decrease the likelihood of getting cows in calf.