Teagasc Advisory Newsletter

April 2021

BEEP-S

BEEF

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Earn \in 80- \in 90 per cow/calf pair. The Department of Agriculture, Food and the Marine (DAFM) announced a new Beef Environmental Efficiency Programme (BEEP) scheme for suckler farmers (BEEP-S) last month.

Applications

Applications are open until 23:59 on April 26, 2021 and can be submitted online through your DAFM Agfood account or by your advisor. Calves born in the herd of the applicant between July 1,

Basic Payment Scheme

Deadline May 17, 2021

Applications for the 2021 Basic Payment Scheme (BPS) and the Greening Scheme have now opened online. The closing date for BPS applications is Monday May 17, 2021. 2020 and June 30, 2021 will be eligible for payment in the programme if various actions are completed by you. The actions are the same actions as were in last year's programme. Weighing of the cow and unweaned calf on the same day is mandatory. Optional measure 1: you can then select between meal feeding or vaccinating calves. Optional measure 2: faecal sample suckler cows for liver and rumen fluke. Consult with your local advisor for further details.

With Covid-19 restrictions, applications will be completed over the phone with your advisor. It is important to check through your maps and application before and after the appointment. Please make an appointment with your advisor to ensure your application is processed on time.



Dairy beef calf programme

The DAFM has announced the opening of a new and pioneering dairy beef calf measure for 2021. The core action is the weighing of eligible calves, for which there is a payment of \in 20 per calf up to a maximum of 20 calves. You must weigh a minimum of five eligible calves and submit the weights to the ICBF. All weights should be submitted within seven days of weighing and before November 1, 2021. Only ICBF registered scales can be used and they can be rented, owned or borrowed from a third party.

Eligible calves:

- a male calf of a dairy breed; and,
- a male or female calf of a beef breed sire born to a dairy breed dam in your herd.

These eligible calves must have been in your



You must weigh a minimum of five eligible calves and submit the weights to the ICBF.

herd for at least 10 days before weighing and born on or after January 1, 2021. Calves must be at least 12 weeks old at the time of weighing.

Applications

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HEALTH & SAFETY Spreading and spraying hazards

Spraying and fertiliser and slurry spreading are high-risk jobs carried out in April. With fertiliser, always operate the machine controls from the tractor seat or another safely designed position. Watch out for trap zones, possible collapse of heavy loads and prevent musculoskeletal injury. Use and store pesticides safely. For slurry

handling, always pick a windy day, open all doors and outlets, and keep all persons away when agitating and handling slurry.



Take care when working around slurry tank openings and cover when not in use. Make sure that the power drives of all machines are fully covered. Always stay well clear of machine moving parts. Pay particular attention to the safety of persons in farmyards and roadways, as tractor and machine movements can kill as a

> result of knockdowns. April is also the month to get ready for silage pit filling. Overfilling and excessive pit heights have become an increasing safety issue.

Stay clear of machine moving parts.

Making good quality silage

A crop of grass silage (5t/ha of DM) will require 125kg nitrogen (N)/ha (100 units/acre). Grass silage will take up on average 2.5kg/ha/day of N (2 units/day). Therefore, apply N at least 50 days before cutting to ensure full crop N utilisation. Make adjustments for fertiliser N applied for early grazing. For example, assume ~25% of N applied will be available for the silage crop. Where 40 units/ac of N are applied for grazing, reduce N applied by 10 units/ac for the grass silage crop. Phosphorus (P) and potassium (K) are essential to maximise grass yields (Table 1). Consult your most recent (three to five years) soil test reports to determine the P and K requirements (in organic manure and fertiliser) for silage fields. Organic manures are an effective source of N, P and K and can provide a large proportion of crop P and K requirements at a relatively low cost. Apply crop N, P and K requirements when closing silage fields in early April. Where cattle slurry is applied, delay the top-up fertiliser applications for one week. In wetter soil conditions, fertiliser N can be split 50:50; for example, 50% in early April and the remainder seven to ten days later, to reduce the risk of N losses.

Don't forget sulphur

Sulphur (S) deficiency is most likely on light sandy/free-draining soils with low soil organic matter. Current research shows that S deficiency is not just confined to light textured soils and is occurring on heavy textured soils in early spring. Grass silage crops have a requirement of 20kg S/ha per cut. Apply S with the main N split as N plus S (e.g., CAN plus S/urea plus S).

Soil index	N kg/ha (units/acre)	P kg/ha (units/acre)	K kg/ha (units/acre)	SUGGESTED No slurry ¹ (bags/acre)	FERTILISER OPTIONS ^{3,4} Plus cattle slurry ⁵ 3,000gal/ac
1 ¹	125 (100)	40 (32)	175 (140)	3.5 bags/ac 13-6-20 1.4 bags/ac pro urea	1.9 bags/ac pro urea plus S
2 ¹	125 (100)	30 (24)	155 (120)	3.5 bags/ac 13-6-20 1.4 bags/ac pro urea	1.9 bags/ac pro urea plus S
3	125 (100)	20 (16)	125 (100)	3.0 bags/ac 13-6-20 1.6 bags/ac pro urea	1.9 bags/ac pro urea plus S
4 ²	125 (100)	0	0	2.5 bags/ac pro urea	2.5 bags/ac pro urea
1. On index 1, 2 and 3 soils apply P and			year and revert to index 3 advice		4. Pro urea plus S = protected urea (urea

Table 1: First-cut grass silage N, P and K requirements (5t/ha DM) and suggested fertiliser programme.

 On index 1, 2 and 3 soils apply P and K balance to build/maintain soil P and K levels to after grass, for example, apply as 18-6-12/0-7-30/cattle slurry, etc.

2. On index 4 soils: omit P for two/three years and retest; and, omit K for one

year and revert to index 3 advice thereafter until next soil test. Don't apply cattle slurry on index 4 soils. 3. For new/older swards with

higher/lower yield potential, reduce N, P and K by 25kg N, 4kg P and 25kg K per tonne of grass dry matter (DM).

- Pro urea plus S = protected urea (urea 38% N plus 7.5% S plus NBPT or 2-NPT or NPPT).
- Cattle slurry (6.3% DM) assumed to be applied by low-emission slurry spreading (LESS) techniques – slurry N-P-K = 9-5-32.

RESEARCH UPDATE

Does finishing on grass affect eating quality?



AIDAN MOLONEY, MARK McGEE and EDWARD O'RIORDAN of Teagasc AGRIC, Grange, Dunsany, Co. Meath reveal how carcass fat score is not related to the eating quality of bull beef.

Some beef markets require bull carcasses to have a minimum carcass fat score of 2⁺ (6.0 on a 15-point scale). Bulls for these markets are usually finished indoors on high-concentrate rations. Finishing bulls from pasture would decrease the cost of production but would this affect meat eating quality? To address this question, spring-born, late-maturing breed suckler bull weanlings were offered grass silage *ad libitum* and 2kg concentrates per head daily during the winter period. They were then assigned to one of four experimental treatments until they were slaughtered 200 days later at an average age of 19.3 months.

Although none of the grazing groups achieved the current market specification for carcass fat score, this was not reflected in inferior eating quality.

Treatments were: (1) grazed grass for 100 days, then concentrates plus grass silage *ad libitum* indoors for 100 days (GOAL); (2) grazed grass supplemented with concentrates (0.5 dietary DM intake) for 200 days (G50G50); (3) grazed grass for 100 days, then supplemented with concentrates (0.5 dietary DM intake) at pasture for 100 days (G0G50); or, (4) grazed grass only for 200 days (G0). After slaughter,



Carcass fat score is a poor indicator of the eating quality of bull beef.

carcasses were weighed and graded for conformation and fatness. After 48 hours, Longissimus thoracis (striploin) colour was measured. After 14 days' ageing, striploins were assessed for eating-quality characteristics by trained assessors. Carcass weight averaged 399kg, 381kg, 374kg and 361kg for G0AL, G50G50, G0G50 and G0 bulls, respectively. Corresponding carcass fat scores were 7.5, 5.1, 5.5 and 4.8 - only GOAL exceeded the minimum fat score specification of 2⁺. Meat from bulls finished at pasture tended to be darker but the differences were small. There was no difference in tenderness, flavour or acceptability between striploin steaks from any of the treatment groups. Although none of the grazing groups achieved the current market specification for carcass fat score, this was not reflected in inferior eating quality, implying that carcass fat score is a poor indicator of the eating quality of bull beef.



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