

Early spring nitrogen decision making

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Early nitrogen (N) is a key driver of grass growth, however care must be taken to use this N efficiently. Where grass response to applied N is low or absent, N loss from the soil and financial loss of fertiliser

resources is more likely during this early spring period. For this reason, decision-based early N application should be used. **Table 1** provides decision support guidance on the first application of early N.

Table 1: Decision support guidance for early N decision making on your farm.

Check	Consider	Where to check
Soil temperature	No growth below 5.5°C.	Met Éireann
Soil moisture conditions	When conditions allow prioritise dry soils for early spreading first. If soils are saturated or near saturated (SMD -10 to 0) soil structure damage from machines is likely to occur.	Met Éireann
Forecast	Predicted forecast for cold weather (air temp <4°C) – little growth. Forecast for wet weather – N loss likely.	Met Éireann
Grass growth rate	Grass growth rates/expected grass response to N fertiliser ≤5kg dry matter/ha will not cover the cost of N fertiliser.	On-farm measurement or PastureBase Ireland (PBI)
Rate	Economic response is more likely at lower N rates.	No more than 30kg/ha
Current sward	Higher sward grass cover will have a higher N uptake rate compared to low or bare swards. Swards reseeded in the last three to five years have better N utilisation.	Farmer knowledge Minimum cover of 300-400kg DM Cattle slurry to bare swards Recently reseeded fields
Choosing area of farm	Start with the kind, sheltered fields, avoid watercourses.	Farmer knowledge

Beep beep – time to start weighing

The Beef Environment Efficiency Pilot (BEEP), which was flagged after the budget in October 2018, is set to be launched this month for suckler farmers, with application forms available on the Department of Agriculture, Food and the Marine (DAFM) website. Application forms will be straightforward and essentially only need to be signed and returned promptly to the DAFM expressing your interest in joining the one-year pilot. The application period is likely to be short so you need to watch the farming press for further details.

The pilot will require participants to weigh suckler cows and calves, while the calf is on the cow (pre weaning). The weights will then be submitted to the Irish Cattle Breeding Federation (ICBF). There will be several options available to get stock weighed including using your own scales if you have them.

The BEEP is not restricted to farmers already participating in the Beef Data and Genomics Programme (BDGP) and will not be based on the current reference number people have in the BDGP.

There is likely, however, to be a reference number set for those that participate based on 2017/2018 calvings. Payment will be the equivalent of €40 per eligible cow/calf team weighed.

Although people have expressed disappointment at the rate of payment, for a small herd with 20 cows/calves, it is worth €800 for what is essentially a few hours work. For people with their own weighing scales and who are already weight recording, the BEEP will prove a just reward for carrying out what should be a routine task on all beef farms.

Apart from the bonus of the payment, you will gain a great amount of information from weighing in terms of individual cow/calf performance, differences between calves from different sires, and whether your calves are ahead or behind target at various stages of the year.

It is highly likely going forward that any future beef efficiency programmes will incorporate some degree of animal weighing, so BEEP is a good opportunity to get started.

HEALTH & SAFETY

Keep safe as workload increases

Workload on farms increases in February. Tiredness and hurrying lead to accidents, particularly during busy periods. It is vital to maintain concentration on health and safety to avoid accidents when you are busy. Accessing heights is an area to think about, as the risk of a fatality is seven times greater when at a height. Using a ladder, especially in a hurry, is a high-risk task. Alternatives to using a

ladder should be considered. When using a ladder, ensure that it is sound and is adequately supported and secured. Also, keep walkways clear of trip hazards and ensure lighting is adequate to prevent ground level trip hazards.



Support and secure ladders before use.

BETTER FARM UPDATE



Decent growth over winter

James Flaherty of Castleisland, Co. Kerry started grazing some of his heavier paddocks with weanlings in January.



James has 46 cows due to calve in a five-week period.

Grass growth has performed extremely well over the winter on James Flaherty's farm, which consists of moderate quality land. The average farm cover stood at 1,400kg DM/ha on December 31. This includes some covers as high as 2,800kg DM/ha on paddocks that were closed early.

Dairy-bred weanlings were allowed out to graze some of these heavy covers on New Year's Day and have remained out since. This has brought significant savings on silage and also allowed young stock to readjust their diet to grazed grass. James hopes to be able to keep these light weanlings out grazing through the spring but weather will dictate if this is the outcome.

Slurry has been spread on some of the few

paddocks with low covers and any paddocks that have been grazed early by weanlings at a rate of 2,500 gallons per acre. Urea has been ordered and a half bag per acre will be spread on paddocks with a cover of 800-1,200kg DM/ha in early February, weather permitting. Cows have been vaccinated and calving will begin in early February. James changed to using 100% AI in 2018 on his spring-calving herd and has 46 cows due to calve in a five-week period. While this will put pressure on labour and housing for a period of time, he plans to leave cows and calves out to grass on some of his drier ground once weather allows. Calves will be vaccinated against respiratory syncytial virus (RSV), Pi3 and infectious bovine rhinotracheitis (IBR) before turnout.

RESEARCH UPDATE



Passive immunity in Irish calves

Dr Bernadette Earley and Dr Mark McGee of Teagasc, AGRIC, Grange, Co. Meath report on their research into the health of Irish dairy and beef calves.

This research study had two main objectives:

1) evaluate the diagnostic performance of passive immunity tests for classification of failure of passive transfer (FPT) risk, based on their relationships with calf health and performance; and, 2) describe the epidemiology of morbidity and mortality in suckler beef and dairy calves. A total of 1,392 suckler beef calves (n = 111 farms) and 2,090 dairy calves (84 farms) were included in this study. Blood samples were collected by jugular venepuncture from all calves and were analysed for total immunoglobulin (IgG) concentration using an ELISA assay, total protein concentration by clinical analyser (TP-CA), zinc sulphate turbidity (ZST) units, total solids percentage by Brix refractometer (TS-BRIX), and total protein concentration by digital refractometer (TP-DR). Overall, 20.4% of suckler beef calves and 14.8% of dairy calves were treated with antibiotics for disease by six months of age. Suckler beef calves had greater odds of bovine respiratory disease, navel infection, and joint infection/lameness during the first six months of life than dairy calves. In addition, from birth to six months of age, suckler beef calves had decreased rates of diarrhoea compared to dairy calves. Optimal

test cut-offs for classification of morbidity and mortality outcomes in suckler beef calves ranged from 8-9mg/ml ELISA, 56-61g/l total protein, 12-18 zinc sulphate turbidity (ZST) units, and 8.4% total solids-BRIX. Optimal test cut-offs for classification of morbidity and growth outcomes in dairy calves ranged from 10-12mg/ml ELISA, 57-60g/l TP-CA, 19 ZST units, 7.8-8.4% TS-BRIX, and 5.7-5.9g/dl TP-DR. Some of the results of the study showed:

- colostrum-derived passive immunity is central to the health, performance and welfare of neonatal calves;
- calves with inadequate passive immunity are at greater risk of calfhood disease;
- the first step in evaluating a colostrum management programme is to assess the effectiveness of passive transfer of immunity to the calf;
- passive immunity test results can be categorised for failure of passive transfer (FPT) using test-specific cut-off values;
- farmers should consider implementing a testing programme to monitor calf passive immune status; and,
- there are still opportunities for improvement in colostrum management on Irish suckler and dairy farms.