



BEEF

August 2019

Weight recording in BEEP

Edited by
Aidan Murray,
Beef Specialist

With the way things have been going in the beef industry over the last few months any opportunity to avail of additional funding in the sector has to be welcomed but more importantly claimed. Approximately 18,000 farms have signed up to the Beef Environmental Efficiency Programme (BEEP) and indications are that we are falling behind with getting our weights into the Irish Cattle Breeding Federation (ICBF).

Animals eligible for payment under the BEEP are suckler calves (beef sire x beef dam) born from July 1, 2018 to June 30, 2019. The suckler cow and her calf must be weighed on the same day and must be weighed individually.

The optimum time to weigh the cow and calf unit is when the calf is between 150 and 250 days (five to eight months) and while the calf is still on the cow. **Table 1** shows the optimum dates to weigh calves based on their dates of birth.

Table 1: The ideal times to weigh calves.

Calves born between	Optimum weighing period
July 1, 2018 – Sept. 30, 2018	March 8, 2019 – April 30, 2019
Oct. 1, 2018 – Dec. 31, 2018	May 1, 2019 – July 31, 2019
Jan. 1, 2019 – March 31, 2019	July 1, 2019 – Sept. 30, 2019
April 1, 2019 – June 30, 2019	Sept. 1, 2019 – Oct. 31, 2019

Remember the final date for weighing will be November 1, 2019. Make sure if you are using your own scales that they are registered with the ICBF. You can use rented scales, which are available through: www.mybeep.ie. If you are using/borrowing third-party scales then you will need the registration number of the scales when submitting the weights. Weights that are submitted without a valid scales registration number will not qualify for payment. At this stage, make sure you have everything in order and don't leave things to the last minute.



Which lime to use?

Calcium ground limestone is the most common and is:

- fast acting and offers rapid pH adjustment.

Magnesium (dolomitic) ground limestone is:

- slower to react but has a higher liming value; and,
- a good source of magnesium for soils with low levels.

With **granulated limes**, you should consider the costs over a three- to five-year period, but these limes are:

- finely ground (less than 0.1mm particle size) and very reactive; and,
- applied as a maintenance product where soil pH is in the optimum range.

Lime grows more grass

Liming acidic soils (pH <5.5) and improving soil pH to the optimum (pH 6.3) will grow approximately 10-15% more grass during the growing season. Why? By maintaining soil pH 6.3, soils will release major nutrients (nitrogen (N), phosphorus (P), potassium (K) and sulphur (S)) from soil organic matter and mineral reserves. For example, soils with an optimum soil pH 6.3 will release up to 80kg N/ha/year. This will reduce fertiliser N bills by up to €80/ha/year. Research from Johnstown Castle has shown that soil P availability will also be increased in the majority of soils; for example, soil P levels can increase from Index 1 to 2 from lime alone. This

is a low-cost route to improving soil P fertility and increasing the utilisation of P applied as either organic manures or bag fertilisers. In effect, lime is conditioning soils to release and make more major plant nutrients available for grass growth during the growing season. Now is the ideal time to apply lime as soil conditions will be good and it will allow time for the lime to work over the winter months. Apply lime only based on the most recent soil test report. Ground limestone is the most cost-effective tool to control soil acidity in the long term. Don't exceed 7.5t/ha (3t/ac) in a single application.

August grass

Grass growth returns to the vegetative (leafy) stage in August and this coincides with the build up of grass for the autumn period. Beef animals are also getting more mature (heavier) so demand for grass also increases. The grazing rotation needs to lengthen to about 30-35 days by September 1. On many farms, this lengthening of rotation happens through silage areas returning to grazing, and animals being sold or housed for finishing, etc. Every day that animals can graze quality grass is keeping the cost of production down and achieving cheap weight gain. The grazing rotation should lengthen further during September to have a long grazing season, but this will be difficult to achieve without August build up of grass. From August 1 there is only six weeks left to apply N and P fertiliser. Applying fertiliser N in August will boost autumn build up of grassland to help lengthen the grazing rotation. The

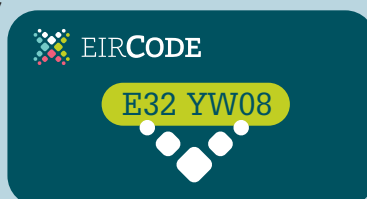


amount of N fertiliser that needs to be applied will depend on stocking rate and demand of cattle for grass. However, where stocking rate is not very high, applying some N fertiliser (20 units/ac) will help build the autumn supply of grass. Application of P fertiliser will need to be considered if soil index is low and stocking rate is high. Every 100kg of liveweight removed from the farm removes 1kg of P. Applying lime to low pH soils this autumn will also release P from the soil and is a cheaper source of P.

HEALTH & SAFETY

Display your Eircode

Everything should be done to prevent injury and ill health. However, when an emergency arises it is crucial to call the emergency services immediately using 112/999. It is vital to have an Eircode readily available as this allows emergency and medical services to locate an exact rural location speedily.



It is also advised to have the Eircodes of elderly relatives and neighbours available if needed.

Display your Eircode in a prominent and accessible place on the farm and save in mobile phones. Undertaking first-aid training is also strongly advised to deal with emergencies.



RESEARCH UPDATE

Different systems, collaborative research



The 'US-Ireland Tripartite Collaborative project: characterisation of the respiratory microbiome and virome associated with bovine respiratory disease complex' brings together researchers from both sides of the Atlantic, including: Bernadette Earley,¹ Tara McDanel,² Louise Cosby,³ Mark McGee,¹ Lary Kuehn,² Aspen Workman,² Gavin Conant,² Paul Cormican,¹ Matthew McCabe,¹ Catherine Duffy,³ Ken Lemon,³ Michael McMenamy,³ Victoria Smyth,³ and, Tim Smith.²

This three-year project, which was recently funded, was submitted as a tripartite collaborative grant application through the National Institute of Food and Agriculture (NIFA) research initiative in the USA (with Ireland (ROI) and Northern Ireland (NI)) for the animal health and disease programme area priority. Work on the project will commence in autumn 2019. The research proposal is comprised of three interrelated projects, which will each investigate specific research objectives and benefit from the complementary expertise of principal researchers that are integral to the project. The project will pool research resources available at the US Meat Animal Research Center (USMARC), Clay Center, Nebraska (US), Teagasc, AGRIC, Grange, Co. Meath (ROI), and the Agri-Food and Biosciences Institute (NI). Bovine respiratory disease (BRD; pneumonia) is one of the most significant health problems in cattle and the most expensive animal disease afflicting herds in the cattle industry. Effective immunisation or antimicrobial therapies that substantially reduce the prevalence or severity of BRD have not been developed despite decades of research. This is due to the

multifactorial nature of the disease that encompasses an array of infectious agents, as well as environmental and management potentiating factors.

In this multidisciplinary project, we aim to:

- a) investigate the prevalence and distribution of the respiratory bacterial (microbiome) and viral (virome) pathogens associated with BRD in beef herds at USMARC and in beef and dairy herds in Ireland (Teagasc);
- b) employ next-generation sequencing (NGS), third-generation sequencing (TGS), bioinformatic technologies, and high throughput sensitive and rapid diagnostics to identify respiratory viral and bacterial agents associated with BRD (USMARC and Teagasc); and,
- c) elucidate the dynamics of secondary viral and bacterial infection by monitoring experimentally virus-infected animals in longitudinal studies (AFBI, N. Ireland).

- 1 Teagasc, Animal & Grassland Research and Innovation Centre, Teagasc, Grange, Dunsany, Co. Meath.
- 2 USMARC, Clay Center, Nebraska, USA.
- 3 Agri-Food and Biosciences Institute (AFBI), Veterinary Sciences Division, NI.