Teagasc Advisory Newsletter

Hereford/Aberdeen Angus x Friesian calves at grass.

BEEF

June 2018

Grazing infrastructure at BEEF2018

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Preparing the infrastructure village at BEEF2018.

Grazing infrastructure is a limiting factor on a lot of beef farms and significantly reduces the amount of grass utilised each year, which in turn affects profitability. At BEEF2018, a new infrastructure village situated at the start of the open day will showcase the key areas that can be improved on beef farms such as fencing, water systems, roadways, drainage and reseeding.

The village is located in a field that has been drained, reseeded, paddocked and has new roadways and water systems put in place.

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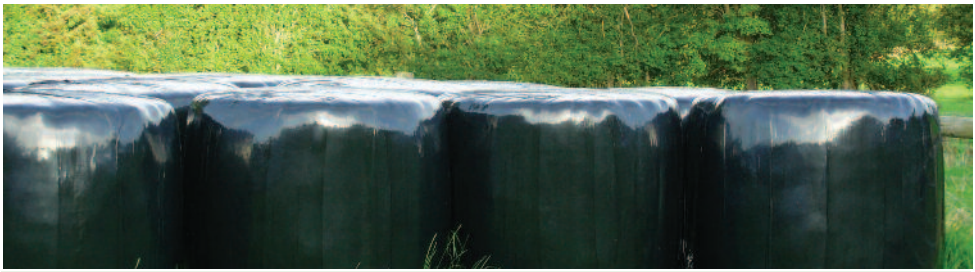
Teagasc
Agriculture and Food Development Authority

The BEEF2018 €nhancing Knowledge open day takes place at Teagasc Grange, Co. Meath on June 26 from 9.30am to 5.00pm. The focus of BEEF2018 will be the application of technologies that will help beef farmers to increase the profitability and sustainability of their family farm business. Other highlights on the day include live cattle demonstrations, a farmer forum facilitated by Richard Curran of Dragons' Den and a cooking demonstration by Kevin Dundon.



Have your first-cut silage done by June 10.

Better to grow than buy

BEEF2018 will have a special focus on fodder budgeting and maximising both silage yield and quality at the feeding and meat quality village.

Tips for June include:

1. **Target first-cut silage to be completed by June 10.**
   Don't delay your first cut. The aim this year is to have two silage harvests by August 1. Further surpluses can be taken after that.

2. **Test grass sugar content in advance of silage cutting.**
   Sugar is the most important measure of ensilability – this test is available at your local Teagasc office.

3. **Try to wilt silage for 12 hours after cutting.**
   Aim to wilt silage for a 12-hour period if possible; this will allow for the crop to dry out and increase sugars.

4. **Continue to spread fertiliser on grazing ground after each grazing.**
   Spread 30-40 units of nitrogen (N) with sulphur after each grazing.

5. **Take out surplus bales of silage if grass is getting ahead of you.**
   Walk the grazing ground. Skip heavy covers for grazing and take them out as bales.

BETTER FARM UPDATE

Fighting disease, growing grass

Brian Doran has dealt with the weather and disease outbreaks this spring and is now looking to increase growth on his land and increase his silage production.

Like the majority of beef farmers around the country, it has been a difficult spring for Brian Doran. He operates a 50-cow suckler to steer beef system on the outskirts of Carnew in Co. Wicklow. This spring Brian experienced more than his fair share of difficulty with a pneumonia outbreak in early spring coupled with a cryptosporidium outbreak later. A vaccination programme was implemented to deal with the pneumonia outbreak and to counteract the cryptosporidium: Halocur was given for seven days post birth. Brian continues to remain upbeat as his focus now turns to breeding and replenishing silage stocks after a severe winter. Silage ground was closed in early April after being grazed off with sheep. The wet weather at the time meant getting slurry applied before closing was not going to be an option, so the decision was made to instead go with compound fertiliser. Four bags of 18-6-12 with sulphur and a bag of cut-sward were applied in a split application with a planned cutting date before May 25. This year a good second cut will be required so as soon as the first cut is taken, slurry will be spread at a rate of 2,000gal/acre to replenish phosphorus (P) and potassium (K), and 70 units of N will also be spread. Along with aiming for two good main cuts from silage ground, the grazing ground will be heavily fertilised, with 25 units of N being spread after every grazing in the hope of being able to take extra paddocks out for bales. Breeding started on April 10 when the Limousin stock bull joined the herd. The highly terminal Haltcliffe Dancer son complements Brian's cow type, which is predominantly first and second cross from the dairy herd. The bull carries a five-star terminal index of €153, an impressive carcass weight figure of 38kg and carcass conformation figure of 2.62. Prior to breeding, all stock were vaccinated for leptospirosis and bovine viral diarrhoea (BVD). A national BETTER Beef Programme farm event will take place on the farm on July 17.

HEALTH & SAFETY

Instruct and supervise for safety.

Lead by example

On a recent visit to Ireland, Dr Barbara Lee, Director of the USA National Children's Center for Rural and Agricultural Health and Safety emphasised the role of parents in preventing childhood farm accidents. Positive attitudes lead to identifying hazards for children, exercising judgement with task selection and providing safety supervision. Positive attitudes also get transmitted to children and young people. In Ireland, the Health and Safety Authority (HSA) 'Farm Safety Code of Practice' gives guidance on accident prevention to children and young people. This month we enclose a farm safety newsletter especially for children. Please distribute and use it within your farm household.

RESEARCH UPDATE

Vitamin D and calf immunity

Kieran Meade of Teagasc Grange reports on the analysis of circulating levels of vitamin D in Irish calves.

The level of calf mortality in Ireland remains high, and therefore, serious research focus has been applied to optimise the nutritional strategies for calves, particularly those raised under artificial systems. Optimal immunity requires fuel, and therefore it is logical that calves suffering from malnutrition are more at risk of acquiring multiple infectious and metabolic diseases. Interesting research is now showing that programming of the immune system begins pre birth and continues during the early neonatal period, and it is increasingly realised that nutritional or disease insults during this time could have a lifelong impact. During this period, as protection from maternal (colostral) antibodies begins to wane, the calf is susceptible to disease until protection via vaccination or natural immunity develops. Vitamin D is a nutrient that bridges the nutritional and immunological systems by providing the metabolic requirements for growth, as well as the activation and regulation of an immune response. The two major forms of vitamin D are plant-based dietary vitamin D2 (ergocalciferol) and meat-based and ultraviolet B (sun)-induced vitamin D3 (cholecalciferol). While the role of the active forms of vitamin D in bone and mineral health has been well established, it is only recently that the diverse mechanisms by which vitamin D influences the immune system are being appreciated. Our research has evaluated the levels of vitamin D in Irish neonatal calves for the first time. While optimal levels of vitamin D have not been established in cattle, values of 30ng/ml are generally thought to be required for optimal health, based on international data. Our results show that it could take four months before Irish spring-born calves reach this threshold, and therefore may have an increased risk of developing disease. Predominantly in recognition of its benefits to animal performance, vitamin D supplementation is extensively practised in calf rations. However, young neonatal calves are not consuming rations, and milk (or milk replacer) is usually their sole source of nutrition. Additionally, in spring, when sun intensity is low, and cows calve indoors, it is possible that calves may be susceptible to disease due to a vitamin D deficiency. Multiple mechanisms may provide opportunities to boost circulating vitamin D levels in calves. Future research will determine if direct supplementation of the calf, as well as increased levels in the diet of the dam, may provide opportunities to boost their innate immune systems during the important early window of disease susceptibility.

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