Teagasc Advisory Newsletter

BEEF

August 2017

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Pasture Profit Index – what is it?

Grassland farmers now have the option of selecting their grass seed varieties using a new index developed by Teagasc, in conjunction with the Department of Agriculture, Food and the Marine (DAFM) and the industry. This Pasture Profit Index (PPI) works in the same way as breeding indexes, such as the beef €urostar index, i.e., it is a combination of many different traits to give one overall Euro value per hectare for each variety, with some traits being given more value in the Index than others. Every trait is measured on the amount of money that it will deliver to the farmer. While the overall yield of grazed grass and silage produced per year is measured, the varieties that deliver either more spring or more autumn grazed grass receive a higher Euro value because extra grass at these times of the year is worth more (by replacing expensive winter feeds). Grass varieties with a higher digestibility (quality) are also given a higher value, as are varieties that last longer in a sward (persistency). Using this list, farmers can easily rank grass varieties against each other. For those that are more interested in some traits over others, e.g., silage yield, the sub-indexes, which are also published for each trait, can be used to find the best varieties for that particular trait.

In the 2017 recommended list of intermediate and late perennial ryegrass varieties, published by the DAFM, the variety at the top of the list is a tetraploid called aberclyde. It has a

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PPI of €206/ha. In comparison, varieties at the bottom of the list have PPIs of less than €50/ha. This means that aberclyde is ranked to deliver over €150/ha per year in extra production, compared to these varieties. While this new index is a huge aid to farmers when choosing the right grass seed mixtures, they should continue to also follow best management practice, such as choosing mixtures with similar heading dates, and deciding on the correct proportion of tetraploid and diploid varieties for their farm. The up-to-date 2017 PPI list is available on the DAFM's website (enter PPI in its search facility).

Give a cow a home?

Ask yourself if you could take in a number of suckler cows this autumn, free of charge, to keep over the winter. All that is asked is that you would house them and feed them for four to five months and next spring they would leave your farm. There will be no payment and the costs will be carried by you (including the cost of any deaths). Not too many farmers would be this charitable, and yet this is happening all over the country when cows are not scanned to find those that are not in calf. At its most basic, scanning identifies empty cows (from 30 days after the breeding season ends), which can then be weaned earlier and fattened off grass, hence avoiding the unnecessary expensive feeding of them over the winter.

Can you take in a number of cows free of charge this autumn?

Scanners will also tell you the expected calving date, which farmers find very useful in the spring time, as they can then focus most of their attention on those that are closest to calving. It is worth noting that a dry suckler cow that is not in calf over the winter months will not make you any profit, and the cost of keeping her will eat up the annual profit of at least one more suckler cow in your herd.

HEALTH & SAFETY

Always be cautious around bulls

Caution is required with suckler herds in August, as the breeding season is over with spring calving herds and bulls are separated from cows. Isolation can make bulls aggressive, so they should be at grass with companion animals. Never enter a field or yard with a bull without protection and a means of escape. Always keep a bull's temperament under review. Caution is also required when herding cows, as getting between a cow and its calf can arouse aggression.

Have a means of protection and escape. A Teagasc/Health and Safety Authority (HSA) video on the safe handling of stock bulls is available on the Teagasc Beef Facebook page.

Isolation can make a bull very aggressive.

BETTER FARM UPDATE

Plans take shape

Kieran Noonan from Cork is looking to transform his very heavy land into profitable pasture.

The Teagasc/*Irish Farmers Journal* BETTER farm beef challenge participant Kieran Noonan, who farms in Freemount in north Cork, has a very heavy farm consisting of 45ha. Some 50% of his land is densely covered in rushes, with little or no grass produced. The farm carries 54 suckler cows, who calve in the autumn (100% AI is used).

Approximately half of the cows are pedigree Limousin or Hereford, with the remainder a mix of commercial stock. Progeny are sold at roughly 18 to 20 months of age. Given the amount of land that is currently unproductive, the stocking rate on the better quality land is very high, leading to a requirement to purchase silage and meal to provide enough winter feed.

One of the main areas of improvement needed on the farm is to reclaim the rough grazing land to reduce the costs of production. This will involve clearing boundary ditches of scrub, cleaning boundary open drains and spraying off ground with glyphosate. Land will be ploughed and reseeded along with receiving 2.5 tons of lime per acre and three bags of 10-10-20 per acre.

A post-emergent spray will be applied after six weeks. Lime will be applied again in two years at a rate of 2t/acre and 18-6-12 will be used after each grazing to build on the extremely-low phosphorus (P) and potassium (K) levels. Water troughs will be positioned in the centre of the fields if possible, to allow temporary divisions to be installed for greater control of grazing groups.

Reclaiming neglected land is expensive, with reseeding costing over €300 per acre before digger work and water costs are accounted for. Therefore, Kieran will aim to work on 15 to 20 acres annually, as cash flow allows. The aim will be to have all of the poor land back in production within four years, and a whole farm stocking rate of 2.0LU/ha by 2021.

Upcoming events

Quality assurance event

The Teagasc advisers in Wexford, Wicklow and Carlow have organised an event to highlight the requirements under the new Bord Bia Quality Assurance Scheme. Speakers from Bord Bia and Teagasc will outline how farmers can avoid the common mistakes that inspectors are regularly coming across when they visit farms.

There will also be a health and safety village, with a focus on farmer health and well-being. The event will take place on the farm of Harry and Amanda Murphy near Ferns, Co. Wexford on Thursday, August 24 and runs from 2.00pm-5.30pm. This is a DAFM-approved knowledge transfer beef and sheep national event.

All are welcome (Eircode Y21XR62).

Find out about the new Bord Bia Quality Assurance Scheme.

Kildalton farm walk

A farm walk will take place in Piltown, Co. Kilkenny in the Teagasc Kildalton College suckler and beef unit on Wednesday, September 6. The focus will be on autumn management of the Kildalton herd including weaning, grassland management and finishing cattle off grass.

The walk will also examine the physical and financial performance of the Kildalton herd, including the various beef finishing systems in the College. The walk starts at 6.00pm.

This is a DAFM-approved knowledge transfer beef national event. All are welcome (Eircode E32YW08).

RESEARCH UPDATE

Beef finishing systems

A.P. Moloney,[1] E.G. O'Riordan and F.J. Monahan[2] look at whether beef from grass-finished cattle is different to beef from concentrate-finished cattle.

There is increasing consumer interest in grass-fed/grass-finished beef. However, there is little objective information as to whether this beef differs from concentrate-fed beef. The objective of this study was to determine the effect of long-term pre-slaughter grazing or concentrate feeding on beef quality. Fifty Charolais heifers (BW = 275 +/- 27.0kg, age = 252 +/- 28 days) were assigned to either a pasture or concentrate ration on December 1. The pasture animals grazed a predominantly *Lolium perenne* pasture, while concentrate animals were housed in a slatted floor shed and offered a rolled barley/molasses beet pulp ration and 20% barley straw. The strategy was for the pasture cattle to achieve their growth potential and to restrict the allowance of concentrates/straw such that both groups had similar carcass weights (270kg). Rations were offered for 332 days prior to slaughter. Post mortem (48h), the pH and colour of the striploin (longissimus muscle) were measured and after 14 days of ageing, sensory characteristics were assessed by a trained taste panel. There was no effect of pre-slaughter diet on ultimate pH (5.54). Muscle from pasture heifers was darker ($P<0.05$) (34.3 vs 35.60), less red ($P<0.05$) (15.2 vs 17.2) and less tender ($P<0.05$) (4.23 vs 4.48 on an eight-point scale) than muscle from concentrate heifers.

There was no difference between rations in juiciness, beef flavour intensity, abnormal flavour intensity, or in the flavour attributes of greasy, bloody livery, metallic, bitter, sweet, rancid, fishy, acidic, cardboard or vegetable/grassy. It is concluded that while statistically significant, the absolute differences in colour and tenderness were small and may not be detected by consumers.

[1] *Teagasc, Animal and Grassland Research and Innovation Centre, Grange, Dunsany, Co. Meath.*
[2] *University College Dublin, Belfield, Dublin 4.*