

Sustainable beef farming in Tipperary

Climate change and the influence farming has on it is uppermost in the minds of a Tipperary store-to-beef discussion group, facilitated by Joe Hand.

Joe Hand
Teagasc beef advisor,
Thurles.



At a recent discussion group meeting, the group members outlined the actions they are taking on their farms to reduce the impact of farming on the environment. They also discussed their plans to reduce greenhouse gas emissions, protect water quality in adjoining streams and enhance biodiversity.

Measures adopted in the recent past

1 Spreading cattle slurry in spring when weather and soil conditions are best suited for grass to use the nutrients most effectively. Most, but not all, farms in the group have adopted this practice.

2 Replacing the splashplate with the Lower Emission Slurry Spreading (LESS) equipment. This has been adopted by a number of group members who say they are satisfied with the results. One farmer said that in some cases, slurry caused blockages in the narrower pipes in the LESS equipment.

This appeared to be related to long silage getting into the slurry tank. Slurry collected from cattle on high dry matter silages is itself high in dry matter.

3 Adding white clover to the grass seed mixture when reseeding. While reseeding levels in the group and on cattle farms generally are relatively low, they present great opportunities to establish highly productive and sustainable grass-clover swards.

Some group members add white

clover seed to the swards after a cut of silage. This costs less than a full reseed and establishes highly productive white clover varieties. This is a very simple process and the returns from the cultivated white clovers are very high.

In the Teagasc research farm in Solohead, very high levels of production are achieved without the use of any chemical nitrogen fertiliser.

4 Reducing lifetime methane emissions by reducing age at slaughter. Farmers in the group say they are aware that methane produced over an animal's lifetime is directly influenced by the age when it is ready for the market.

They report having changed their store buying decisions to help reduce lifetime methane production.

5 Managing soil fertility. Spreading lime on fields that need it was only applied on half of the farms, which was surprising. This is despite the fact that a considerable number of farmers had soil sampled their farms and were aware of the need for lime.

Soil sample results also indicated various levels of phosphate (P) and potash (K) deficiencies and these fields are underperforming as a result.

6 Reducing chemical N use. In another possible cost-saving measure, farmers reported that they had reduced their N fertiliser application over the last three years. This reflects relatively weak beef prices and huge fertiliser price increases.

7 Protected urea was spread on a number of farms and the results were judged to be satisfactory when



compared to CAN, being lower in cost and easier on the environment.

8 Field margins along streams and rivers. These are strips of land a minimum of 1m wide between the watercourse and where cattle graze. Wild plants can grow in these strips, which are present on a small number of the group's farms.

While this appeared to be a low priority in the group, all the farms with watercourses present had them in place.

9 Retaining saplings in hedgerows. While the farmers appeared to be interested in this and care for hedgerows in general, only about half of the farmers have implemented this measure.

Planning ahead

Having discussed and considered the various measures that can be adopted to promote sustainability, farmers were asked to choose the top three measures they plan to implement in



Pat and Elizabeth Hayes with Joe Hand.

the next 12 months.

The top three actions identified by the group included:

1 Increased soil analysis and implementation of a fertiliser programme on the farms. Too often soil samples are taken for regulation/scheme purposes without actually using the information to make decisions on-farm.

Using the analysis will allow more precise use of fertilisers and meet the needs of the grass clover swards to feed cattle.

2 Increased use of lime, where needed, according to soil test results. It was identified by the group that there is not enough lime being applied.

Applying lime will provide the opportunity to reduce chemical N use on these farms.

3 Increase the clover in swards. White clover captures N from the air around the roots and makes it available for the grass production.

This is to produce feed for livestock with less reliance on chemical N fertiliser. Improved animal performance

on grass clover swards compared to grass only swards has been observed in the past.

Pat Hayes, Golden, Co Tipperary

Pat Hayes from Golden, Co Tipperary, runs a store-to-beef farm, buying mainly Charolais and Limousin store bullocks from Ennis Mart and having them ready for sale at 25 to 30 months weighing 740kg to 780kg liveweight.

Sustainability is a buzzword on the farm and Pat uses the Bord Bia Sustainability Report, Herd Plus from ICBF and the Teagasc Profit Monitor and Soil Reports to help him make decisions on the farm. He also contributes to his local Teagasc Beef Discussion group, farming to continuously improve his farming each year.

Environmental measures being implemented on the farm include following a

plan for the fertilisers and lime, spreading slurry in spring with LESS equipment, using protected urea instead of CAN and incorporating clover in selected paddocks every year.

Key to cattle performance is the high-quality grass-clover swards, paddock grazing and silage cut in mid-May each year.

Herd health is monitored closely, with the approach of "prevention is better than cure." All these actions are contributing to improved profitability on the farm, but also reducing the impact of farming on the environment.

Hedges are allowed to grow to about 2m and produce flowers in April and May, resulting in berries for the birds in winter. Allowing trees to grow in the hedgerows results in a scenic view up to the Galtee Mountains, as well as shade in the recent heatwave.