

Doing your duty under derogation

It's vital that farmers meet their derogation obligations, to ensure we have continued access to it. This Kilkenny farmer shows how it's done

John P. Kilboyle
Dairy Advisor, Waterford/
Kilkenny Advisory Region



Just outside Piltown, south Kilkenny, Shane Kinsella operates a herd of 90 spring-calving dairy cows. The farm consists of 39ha and is operating at the upper end of the nitrates derogation at a stocking rate of 2.92Lu/Ha.

Over the years, increasing stocking has been closely aligned with growing, managing and utilising larger quantities of high-quality grass. The farm grew 16t of DM/Ha in 2019.

"Each year, I draw up a nutrient management plan with my Teagasc advisor to plan nutrient usage for the coming year on my farm," says Shane.

"My key focus in the plan is a targeted liming programme. We apply lime on paddocks with low soil pH < 6.3 and on paddocks selected for reseeding.

"Once lime requirements have been met, I focus on maximising the use of cattle slurry in my fertiliser programme. This is then balanced up with chemical fertiliser, namely Protected Urea and Sulphur," says Shane.

"The grassland performance has been achieved by having a continued focus on improving soil fertility, enhancing grassland management through grass measuring, and adopting a routine reseeding programme. Many of these aspects driving performance on my farm are included in the recent derogation changes that were introduced in 2020."

Compulsory liming programme

The most recent soil samples on the Kinsella farm were taken in December 2017 and showed a lime requirement of 125t. All will have been applied by the end of this year.

"I feel I get a great return from investing in lime. It not only boosts growth on paddocks where it is required, but it also maximises the return I get from chemical fertiliser/ertiliser and releases P and K from the soil," says Shane.

"I plan to soil sample the whole farm again in December 2020. I'll take 24 soil samples across 39ha. This will give me an accurate profile of the current soil fertility status right across the farm and identify areas to focus on over the next two to three years, in terms of lime and P and K applications."

Low Emission Slurry Spreading (LESS)

All slurry has been applied using LESS in 2020.

"LESS technology has had a huge impact in terms of how we apply our slurry. I feel we are getting much more value out of the nutrients in it now, especially since more slurry can be targeted on the milking platform."

This has resulted in reduced chemical fertiliser purchases.

"We've applied 40kg/ha (32units/ac) less chemical nitrogen so far in 2020 compared to this time last year.

"I am very happy about this, especially with fact that grass grown/ha has increased by half a tonne of dry matter per ha to-date in 2020,



Shane Kinsella.

compared to 2019. I also see a much faster turnaround time – from slurry application to paddocks being grazed – versus the splash plate we used in the past."

Reduction in crude protein

"In 2020, the crude protein in meal fed on-farm has been reduced to 14% for the main grazing season. In previous years, we would have fed meal with 16% crude protein. This is the first year I have gone the full main grazing season on a lower crude protein meal, with no impact noticeable on herd performance.

"I am very happy with the results and will drop crude protein to 12% for the main grazing season in 2021."

Grassland management

"I walk the farm weekly to assess grass growth rate and supply for the coming week. I completed 38 grass covers in 2019. Grass covers are entered into Pasture Base Ireland software.

"I have been measuring grass since 2015. It has really given me the



confidence to make quicker decisions regarding managing grass surpluses and deficits on-farm. That means we can keep high-quality grass in front of the cows at all times.”

Inclusion of clover in grass seed mixtures

A reseeding programme is in place on Sean’s farm, with 85% of the farm reseeded in the last five years. A grass and clover mix (1.5kg/ha naked clover) is used for all reseeding.

“Once I got on top of soil fertility, I began to focus on incorporating a routine reseeding programme, which has transformed the farm in terms of its ability to grow large quantities of high-quality grass and clover.”

Improve farm biodiversity









Along with a keen focus on continued improvement in technical efficiency on-farm, Shane has also targeted maintaining and enhancing biodiversity on his farm.

“There are a significant number of hedgerows in place around the farm. I have been conscious to maintain these biodiversity areas over the years as we have expanded the herd.

“I chose the derogation option to leave at least one mature Whitethorn or Blackthorn tree in every 300m of hedgerow.

“In addition to this, I plan to add to hedgerows on-farm, with 200m of new hedgerow planned for sowing over the next three years.”

NEW Derogation Requirements for 2020

<p>1</p>  <p>Compulsory liming programme</p>	<p>2</p>  <p>Low emission slurry spreading (LESS)</p>	<p>3</p>  <p>Reduction in crude protein % of meals to dairy cows at grass</p>	<p>4</p>  <p>Compulsory environmental training course</p>
<p>5</p>  <p>Grassland management</p>	<p>6</p>  <p>Inclusion of clover in grass seed mixtures</p>	<p>7</p>  <p>Exclusion of commonage / rough grazing</p>	<p>8</p>  <p>Improve farm biodiversity</p>



Find out more: www.teagasc.ie/derogation2020