

Teagasc Notes for week ended Friday August 23rd 2019

Autumn Grazing Targets for Drystock farms:

Demand on drystock farms will vary, but generally tends to be lower than dairy farms. Using days ahead can be the best way to know if enough grass built for the autumn. Stretching rotation length by bringing back in silage ground is usually best way to do this. Remember demand will grow as stock grows.

Date	1st Sept	Mid- Sept	1st Oct	Mid-Aug
Days Ahead	18-20	25-28	25-28	12-14
Rotation (Days)	25	30	35	40

Every day at grass in autumn is worth €1.80/cow at stocking rate 2.5LU/Ha this is a difference of €27/Ha between applying N fertiliser now versus waiting until next month. On a 30Ha farm this is worth €810. Remember the cost of 30 kg N/Ha is about €30/Ha. So by applying earlier we are getting most of the cost of the fertiliser back in the extra grass we can grow when compared to September.

Liming

The autumn is the ideal time to apply lime to correct soil pH on mineral soils. This has been a really good grass growing year and on some farms, the cover of grass is very high. Be prepared and apply lime when the opportunity presents itself after grazing paddocks or where reseeding is being done.

Lime will bring many benefits from increasing the availability of soil nutrients [nitrogen (N), phosphorus (P), potassium (K) and sulphur (S)] to improving soil structure. Soils maintained at pH 6.3-6.5 will release up to 80kg N/ha/year from soil organic N reserves. This will help reduce chemical fertiliser N bills on farms by approximately €80/ha/year. Lime will increase the availability of soil P and is the first step in improving/building soil P levels cost effectively.

1. Check recent soil test results and apply lime to fields based on lime recommendations.
2. Target fields with the lowest soil pH first.
3. Apply a maximum of 7.5t/ha (3t/ac) ground limestone in a single application.

Cover Crops in Tillage

It is a requirement for tillage farmers to maintain a continuous green cover on tillage ground from cereal harvest to the 1st of December each year. This can be done by natural regeneration or by purposely sowing a cover crop such as kale, rape and oats amongst others. A green cover crop on the land over the autumn and winter will take up N, P, K nutrients left over (especially Nitrogen) from the previous cropping season.

Using cover crops in your cropping system offer many soil, crop and environmental benefits. Catch crops have been shown to increase productivity in tillage systems due to the additional organic matter, leading to improved soil structure and soil nutrient availability. Organic matter also provides food for soil biology leading to more earthworms, biodiversity and improved biological activity.

The main advantages of green cover crops are: reduced nutrient loss to rivers and streams; improved soil structure by breaking up the soil; increased organic matter and provides a better soil environment for earthworms and other soil microbes to thrive in. Crops should be established rapidly after cereal crops have been harvested to get the full benefits from the crop in terms of soil and carbon capture.

Preventing nutrient loss

If there is little or no green cover nitrogen and phosphorus can be leached from the soil and lost to ground water or streams. Cover crops reduce the risk of soil erosion and phosphate leaching following heavy rainfall as they provide a green canopy over the soil and a root mass to bind the soil together. Where animals are grazing catch crops in situ, careful planning of fields is critical as on sloping fields erosion and runoff can occur when the catch crop is grazed off. Buffer zones where natural vegetation is allowed to develop fully along drains and streams can also help to reduce nutrient losses.

Upcoming Event:

Grass 10 Farm Walk, Profitable Stocking Rates on Dairy Farms will take place on the farm of Pierce and Adrian Casey, Faha, Kilmacthomas, Co. Waterford, (Eircode X42 VP92). Thursday 22nd August 2019 at 11am to 1pm sharp

Topics

1. Assessing what is the optimal stocking rate on a dairy farm?
2. Getting the basics of soil fertility right
 - How have the Casey's increased grass grown on farm by 25% since 2012?
3. Autumn management to build grass covers

This farm has grown from **80 cows** in 2008 to **230 cows** in 2019, but profitable stocking rates have been the guiding principle along the way.

