

# TECHNICAL NEWS



April/May 2021 | NI Version

## O'Kane family farm exploit the value of grazed grass in 2021

Just outside Maherafelt, Co. Derry, father and son Bernard and John O'Kane are currently milking a herd of 80 cows on their family farm. The farm has been on a progressive curve over the past numbers of years, and 2019 saw the installation of two Lely Astronaut milking robots, along with additional cubicle housing for the herd.

The O'Kane's have been working with Lakeland Agri for the past 12 months and performance has been good across the expanding herd of cows. Recently John has put the farm forward to be enlisted as one of the two farms on the **Lakeland Agri-Trouw "Grasswatch" Programme**, as he can see the value that grass will have for his herd going forward.

This coming year, 80 cows will be milked, and John will utilise an out-by-day and in-by-night system. Further investment is required



John O'Kane

in a graze-way system along with additional laneways to access land parcels, however in the future the hope is to have 110-120 cows milking on the two robots with an A/B grazing and C housed system in action.

Despite the performance of the herd indoors, and the current favourable milk prices, John was keen to get the cows out grazing, to lower the costs of production, take the pressure of animal's feet and to exploit the value of fresh grass in the diet of the animals.

### Lakeland Agri-Trouw "Grasswatch" Programme

Alongside his Lakeland Agri Nutritionist, Christopher Cahill and Technical Sales Representative, Gary Tubman, John will test his grass quality once per week to establish the feed value in the grass and will balance the diet accordingly with silage TMR and concentrate in the robots.

To date, John has completed three grass samples as part of the **Lakeland Agri-Trouw "Grasswatch" Programme**, and at the time of writing this article (26/03/21), John hopes to introduce a fresh grass component to the milker's diet over the coming days, weather permitting. As John is coming to the end of the calving season and 73 out of the 80 cows are milking already, it is important to note that he will have a large demand for grass immediately once stock commence grazing. Therefore it is important to budget this grass throughout the first grazing rotation, to allow sufficient time for the regrowth to be at the correct stage before commencing the second round of grazing towards the end of April.

Not only will the Grasswatch Programme benefit the O'Kane's but also the wider Lakeland Dairies milk supplier and feed customer pool. This will give us accurate grass quality results on a weekly basis throughout the grazing season representative of the Lakeland Dairies region. This in turn will allow Lakeland Agri to assist all milk suppliers and feed customers to maximise the performance of their stock from grazed grass while ensuring that all energy and protein requirements are met for the animal.

If like the O'Kane's, you would like support utilising the full value that grazed grass can offer your herd over the coming season please contact your local Lakeland Agri Sales Representative or call our Customer Service Centre on 028 3026 2311.

# Reseeding is the key to profitability

**Christopher Cahill,**  
Technical and Nutritional  
Support Representative,  
Lakeland Agri

Reseeding of underperforming grassland provides an excellent return on investment. When the extra grass growth and stock performance is calculated, it provides a return on investment in under 2 years on dairy farms, and under 3 years on drystock farms. It also helps improve the sustainability of the enterprise, giving a greater grass growth response to fertiliser applications.

The long-term success of a reseeded project will largely reside with the varieties chosen, to suit the purpose of the sward as well as the nature of the soil underneath. At Lakeland Agri, our aim is to supply the highest performing grass seed mixtures to our milk suppliers and feed customers.

## Grass Seed Delivery

Delivery can be organised onto farm for orders of 15 bags or more. For more details on our latest grass seed mixtures, please visit [www.lakelandagri.ie](http://www.lakelandagri.ie) or contact your local Lakeland Agri Sales Representative or the customer Service Centre on 028 3026 2311.

## Grass Seed Mixtures for 2021

### Lakeland Agri LFS Intensive Grazing

Formulated to deliver a leafy, nutritious and highly digestible sward across the entire grazing season.

Abergain (T)	4.0 kgs
Aberchoice	4.0 kgs
Ballyvoy	3.0 kgs
White Clover blend	0.75 kg
	11.75 kgs

### Lakeland Agri LFS Hi-Density

High-quality dense mixture designed to perform and persist in more challenging soil types. Offers outstanding sward density and longevity.

Nashota (T)	2.0 kgs
Xenon (T)	2.0 kgs
Bowie	3.5 kgs
Drumbo	3.5 kgs
Coolfin white clover	0.75 kg
	11.75 kgs

**Recommended seed rate:  
14 kgs/acre (1.2 bags/acre).**

### Lakeland Agri LFS Cut & Graze

Superb dual-purpose mixture formulated to maximise yield, quality and persistency when used for a later first cut silage option. It also provides a high-quality sward when used for grazing.

Astonking	2.5 kgs
Oakpark	4.5 kgs
Astonenergy (T)	2.0 kgs
Meiduno (T)	2.0 kgs
White clover blend	0.75 kg
	11.75 kgs

### Lakeland Agri LFS Three-Cut Silage Mix (No Clover)

New for 2021, the LFS Three-Cut Silage mixture is designed for land designated for 3 cuts or more throughout the year. It includes varieties that will maximise silage yields, whilst maintaining quality throughout each cut. Designed to maximise yield and quality where first cut silage target cutting date is between 10th - 15th of May each year.

Fintona (T)	4.40 kgs
Astonconquerer	3.90 kgs
Moira	3.45 kgs
	11.75 kgs



# Understanding how soil fertility affects grass growth.

David Corbett, Product & Marketing Manager, Grassland AGRO

The role of K in the plant is to regulate the opening and closing of the stomata. This controls the rate of CO<sub>2</sub> uptake of the plant which is critical for photosynthesis. Optimal P levels can improve drought and can aid in protein and starch synthesis.

## The challenges of potassium (K)

### 1. Soil Type

K is one of the more abundant and stable nutrients in our soils. The total supply of K in the soil varies with different soil parent materials.

The main driver of K fertility in soils is the ability of the soil to act as a temporary store of K and other nutrients by way of a soil characteristic known as the cation exchange capacity (CEC). This is a measure of the soils ability to hold and release nutrients such as K, and also calcium, magnesium, sodium and many micro-nutrients.

Soils with higher clay contents are better at holding K than soils that are lighter or sandier in texture. Soil acidity (low pH) affects the CEC, therefore K works best in soils that are limed to the optimum pH for the crop.

### 2. Animal Health

Heavy K applications on grazing ground can increase the likelihood of grass tetany, as K displaces Mg in the plant. Excess applications of K to silage crops can lead to luxury uptake which can lead to milk fever.

It is important to understand that K is critical to silage quality and quantity and measures to mitigate luxury uptake should focus on timing of K application.

### 3. Oftakes

It takes 4kg of P and 30kg of K to grow 1t of grass DM. In a grazing situation, 60% of the P and 90% of the K is returned to the soil through excretion from the animal, typically in urine. If a farmer grows 15t DM/ha and utilise 12t DM/ha, the offtake is only 19kg P/ha and 36kg of K/ha.

The rule of thumb is that for every four bales that are removed from a field, 1,000 gallons of thick slurry should go back in. While zero-grazing has risen in popularity, it has a significant draw on soil nutrient reserves as no P or K is being recycled in dung or urine. For every zero-grazing cover of 1,500kg DM/ha, 6kg of P and 45kg of K will be removed, and the nutrient removal will increase as the cover does.

Pit silage is often contracted out on farms and the yield of crops is not being gathered. In many cases, the yield being cut can often be well above the normal 'average' yield of 5t/ha of dry matter (equivalent to approximately 10t of fresh grass/acre). The P and K content per tonne of DM in silage swards is slightly lower due to a higher fibre content, at 3.5kg of P and 25kg of K per tonne DM.

**As part of the Lakelands Grassland Agro Soil Sustainability Programme participating farmers will have their silage crop yield measured. Grassland Agro agronomy advisors conduct silage yield measurements for farmers and provide recommendations for fertiliser plan and how best to replenish soil reserves post-harvest.**

### 4. Late Summer/Autumn K Application

Late summer or early autumn is the best time to build K levels in the soil or to replace off-takes. This allows the soil K and magnesium

levels to normalise and reduce the prevalence of grass tetany on grazing ground or luxury uptake of K in silage crops which can cause milk fever.

On silage ground that will be cut twice or more, it is advisable to apply K (either organic or chemical) to the maximum recommended rate before each cut to ensure that the deficit is not too large to balance in the back end. Where slurry is being applied for silage to meet the P and K requirements, it is essential to apply as early as possible.

## 5. Sustainability

Ensuring sufficient available P and K in the soil is crucial for the plant to achieve its maximum yield potential and nitrogen use efficiency. The nitrates directive does not limit the rate or timing of chemical K applications.

P however poses a problem in terms of leaching to groundwater but more commonly in overland sediment runoff to water bodies. P also poses a major risk in terms of eutrophication. The nitrates directive limits maintenance P requirement based on stocking rate and limits P build-up allowances based on soil fertility P index.

## Phosphate and Potash recommendations for grazed swards

Source: AHDB Nutrient Management Guide (RB209)

Nutrient	P or K Index			
	0	1	2	3
	kg/ha			
Phosphate <sup>a</sup>	80	50	20	0
Potash <sup>b</sup>	60	30	0	0

- Phosphate may be applied in several small applications during the season, though there may be a small response if it is all applied in early spring for the first grazing.
- Potash may either be applied in one application in June or July, or in several small applications during the season. At index 0, apply 30 kg potash per ha for the first grazing. Where there is a known risk of hypomagnesaemia, application of potash in spring should be avoided.

AVAILABLE TO OUR MILK SUPPLIERS TO HELP MANAGE SPRING CASH FLOW

## PHASE 2: LAKELAND AGRI MILK REPLACER AND FERTILISER DEFERRED PAYMENT SCHEME

Full pallet purchases of fertiliser and Lakeland Agri CalfSmart and SkimSmart Milk Replacer Ranges in April/May/June are charged to a "03 sub account" and milk deducted in three equal payments in the months of August/September/October.

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
			Milk Replacer & Fertiliser Purchases.				1/3	1/3	1/3

To avail of phase 2 of the deferred payment scheme, please communicate when placing your order through your Lakeland Agri sales representative or the Customer Services Centre on 028 3026 2311.



## Time to focus on first cut 2021

As high-quality forage is the cornerstone of any highly profitable milk production system, we recommend all milk suppliers consider the Opticut recommendations for making high quality silage below. For farms that are considering the use of a silage additive this season or wish to discuss the topic further, please contact your local Lakeland Agri Feed representative or call our Customer Services Centre today on 028 30262311.

# FOLLOW THE OPTICUT PROGRAMME FOR BETTER QUALITY FORAGE

## PLANNING



### DECIDE TARGET CUTTING DATE

Plan your targeted cutting date in advance and ensure the crop is cut pre-ear emergence.



### DECIDE AREA TO CUT

based on grazing platform required and measured grass covers



### CORRECT FERTILISER

apply sufficient fertiliser for planned cutting interval



### CONTACT THE CONTRACTOR

make sure they know your plans

## PRE CUT



### TEST GRASS

don't rely on visual assessment. Test grass weekly for fermentation criteria and forage quality



### PRE-CUT TARGETS

NDF between 36- 42%,  
ME greater than 12MJ  
Free nitrates less than 1000mg/kg fresh weight,  
Sugars more than 15% of DM



### CROP HEIGHT

target to cut when grass is 18 - 30cm high and at early boot/flag leaf stage

## CUTTING



### CUT HEIGHT

leave a 6-7cm stubble to allow rapid regrowth



### CUT AND SPREAD

use a conditioning spreading mower or spread grass immediately



### SILAGE IN A DAY

only cut the grass that can be picked up within 24 hours after wilting to improve DM consistency and reduce nutrient losses



### MAXIMUM 24 HOUR WILT

don't over wilt and aim for 27-32% DM when harvested



### MANAGE THE WILT

if drying slowly spread grass out. If drying too fast do not spread and row up 2-3 hours ahead of the forager



### USE THE APPROPRIATE INOCULANT

choose the Lallemand crop and condition specific inoculant for the crop being harvested

## CLAMPING



### LAYERS NOT A WEDGE

build the clamp in small (25cm) layers across the whole clamp, rolling continuously



### SHEET AT NIGHT

if the clamp isn't finished, always sheet at night



### KEEP IT LOW

never build the clamp above 3m high and keep it below the height of the clamp walls

**REVIEW** - estimate how much has been made at the start of planning next cut

For more information, contact the Lakeland Agri Sales team or our Customer Services Centre on 028 3026 2311



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Delivering Sustainable Feeding Solutions