

# TECHNICAL NEWS



April 2022

## Navigating through the key input challenges of spring 2022

Alan Hurst, Product and Technical Manager,  
Lakeland Agri



As everyone is aware, the spring of 2022 has brought with it another raft of major challenges to all those involved in the agricultural sector. Russia's recent invasion of Ukraine has highlighted just how vulnerable our industry is to supply chain disruption across all key inputs including fuel, power, fertiliser and raw materials for feed manufacture. Whilst the challenges at this stage are significant, the short to medium term outlook for dairy commodities is positive and we want to assure all our milk suppliers and feed customers that we in Lakeland Agri will be doing all in our power to assist our customers navigate successfully through the challenging months ahead.

At the time of writing this article, fertiliser in particular looks like it will be both tight in terms of supply in the immediate term, and trading at price points that we have never seen before. **However, from an overall farm efficiency perspective, the objectives must remain the same. Farms must aim to produce and utilise as much homegrown forage as possible in 2022, albeit under a lower fertiliser input regime in many cases.** In a separate article in this month's edition of our technical notes, Sean Mc Mahon from Grassland Agro focuses on the importance of harnessing nutrients available in both slurry and soil reserves, in an effort to address the challenge of tight fertiliser supplies and forage production in the year ahead.

On the closely related issue of stock carrying capacity on farms, and given that grass production will be reduced on the majority of farms due to lower fertiliser usage, **we strongly encourage all farms to take a closer look at the overall stock numbers that will be competing for the forage available in the months ahead.** Given where key input prices are today, now is the time to sell any surplus stock or passengers/problematic cows that may exist in the system.

Although our autumn calving herds are at the end of the breeding season, our spring calving herds are less than a month away from the start of their breeding season. Whilst the temptation will exist to reduce concentrate feed inputs in the current climate, **it is essential we take a realistic view of what energy supply the cow actually needs to ensure high submission and conception rates are achieved,** and also be clear on what grass can realistically deliver in terms of meeting these requirements.

Looking beyond the first half of 2022, it is essential we have a very high percentage of animals back in calf to ensure the longer-term financial viability of the system.

### Lakeland Agri Grass Watch Programme

To ensure Lakeland Agri are providing the most up to date and accurate information on what grass can supply towards an animal's energy requirements, once again a number of Lakeland Agri farms will participate in the Grass Watch programme. In this particular programme, fresh grass samples are collected from the paddocks of participating farms every Monday morning, which in turn will be analysed for a number of key grass quality parameters.

In total, grass samples from approximately 14 farms will be analysed on a weekly basis and the information is then combined to generate a weekly report, which will detail a minimum and maximum range, and a mean value for each of the important parameters that should be considered when trying to maximise output from grazed grass. It will also detail for us a useful maintenance + guide figure for the grass being fed which will be driven by predicted intake in that specific week (influenced by grass quality, grazing conditions and daylight hours).

Together with the milk data generated from our milk supplier farms on Butterfat, Milk Protein and Milk Urea's, **this information further enhances our ability to provide the correct and most appropriate advice to our milk suppliers and feed customers when it comes to ration selection and appropriate feeding levels.** It will also help identify opportunities to reduce crude protein levels in concentrate feed at grass and help provide solutions where farms are under pressure from a milk composition perspective.

To find out more information about how we can help you navigate these challenges on your farm, please contact your local Lakeland Agri Technical Sales Representative or call our Customer Services Centre today on 0818 47 47 20 (ROI) or 028 30262311 (NI).

## BALMORAL SHOW 2022 DATE FOR YOUR DIARY!

Visit us at the 153rd Balmoral show

**11th - 14th May 2022,  
Balmoral Park, Lisburn.**

Please make sure to pop by the Lakeland Dairies stand at **C18.**

We look forward to seeing you there!

# The Lakeland Agri and Grassland Agro Soil Sustainability Programme

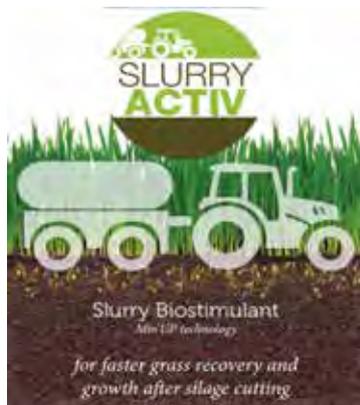
Sean McMahon, Product and Marketing Manager, Grassland Agro

The Lakeland Agri and Grassland Agro Soil Sustainability Programme was designed to guide farmers on how to use nutrients efficiently and develop more sustainable farming systems. With the current supply issues surrounding chemical fertiliser, it is important that greater efficiency is achieved from the nutrients being applied. Slurry is a valuable nutrient on farm (€40/£33 per 1000 gallons in 2022 vs €25/£21 per 1000 gallons in 2021). It is crucial that maximum efficiency and availability are obtained from the mineral and organic fraction of slurry. Much of the value of slurry comes from Phosphorus (P) and Potash (K). Nutrients in slurry come in two forms, mineral and organic. The mineral form is available for plant uptake straight away. Of the mineral content in slurry, 40% of nitrogen (N), 100% of P and 100% of K is available to the plant. For this reason, it is best to target slurry applications to soils that require P and K.

1000 gallons of thick slurry (7% dry matter (DM)) is the equivalent to a bag of 6-5-30 (ROI) or 6-11-36 (NI). This figure is expressed as available nutrients at optimum soil fertility levels, however a slurry analysis does not take into account N losses at spreading. These losses will be minimised significantly through the use of Low Emission Slurry Spreading (LESS). Once slurry is spread, as much as 60% of N is lost through volatilisation. Spreading slurry during the grazing season with a LESS applicator will give approximately 6 units of N per 1,000 gallons vs 3 units when using a splash plate. For this reason, it is important to use LESS methods if possible. Using a soil conditioner such as **PHYSIOLITH**, or a slurry additive such as **SLURRY ACTIV** will increase plant nutrient uptake and drive on-farm efficiency and sustainability.

The other form of N mentioned is organic. In slurry, 70% of N and 20% of P is organic matter (unavailable to the plant). The organic fraction of slurry is incorporated into the soil via soil microbes through mineralisation or by weathering. This organic material is then mineralised however this process can take a considerable amount of time. Physiolith and Slurry Activ will make the organic fraction in slurry more plant available in the short term. Slurry Activ is a slurry stimulant used to speed up the mineralisation process and increase plant nutrient availability.

**SLURRY ACTIV** contains organic matter components which stimulate soil microbes to mineralise nutrients in slurry. Slurry Activ also contains root and plant stimulants which increase nutrient absorption from the soil. The recommended application rate of Slurry Activ is 1 litre per 1,000 gallons. Slurry Activ can be applied through the slurry pipe before filling the tank or directly into the tank when agitating. On farm trials have shown that using Slurry Activ at 2 litres/acre (2,000 gallons/acre) can increase grass yields by up to 800kg DM/ha.



**PHYSIOLITH** is an additional product that farmers have been using to reduce their reliance on chemical fertiliser. This unique soil conditioning product is formulated using highly available marine calcium. It increases soil

microbial activity, fast tracking mineralisation and as a result converts the unavailable N in the soil to a plant available form. Physiolith contains a root stimulant called Physio +. This is an amino acid extract from seaweed which triggers calcium and nutrient absorption. Enhancing calcium absorption through Physio + favours the development of roots. More roots, more nutrient uptake, more grass. Physiolith is best when applied in the spring to give the maximum effect. Rates vary from 2-4 bags/acre. On farm trials have shown Physiolith releases an extra 50kg N/ha over the grazing season which equates to an extra grass yield of 1.6T DM/ha. Based on current market prices, 50kg of N/ha would cost circa €80/£66 acre. The investment to apply Physiolith at 2 bags an acre is approximately €40/£33 per acre.

For more information or advice on nutrient management planning contact your Lakeland Agri Sales Representative or our Customer Service Centre on 0818 47 47 20 (ROI) or 028 302 62311 (NI).



AVAILABLE TO OUR MILK SUPPLIERS TO HELP MANAGE SPRING/SUMMER CASH FLOW

## LAKELAND AGRI FERTILISER AND MILK REPLACER DEFERRED PAYMENT SCHEME

Full pallet purchases of fertilisers and Lakeland Agri Milk Replacer in April, May and June 2022 are charged to a "03 sub account" and milk deducted in three equal payments in the months of August, September and October 2022.

APR	MAY	JUN	JUL	AUG	SEP	OCT
Fertiliser & Milk Replacer Purchases				1/3	1/3	1/3

To avail of the deferred payment scheme, please communicate when placing your order through your Lakeland Agri Sales Representative or our Customer Service Centre on 0818 47 47 20 (ROI) or 028 302 62311 (NI).



## Multi-species Swards for Sustainable Forage Production

Dr. Thomas Moloney, Product and Technical Manager, DLF

Multi-species swards are a sustainable source of high-quality forage. As well as producing high yields of quality forage, sowing a multi-species sward can lead to significantly reduced nitrogen (N) fertiliser requirement and increased animal performance and health.

These diverse swards are typically a combination of grass, legumes and herb species with traits that complement each other. Under the correct soil conditions, this complementarity leads to greater sward productivity than a grass monoculture. For example, the inclusion of legumes like white and red clover can provide the equivalent of 200kg N/ha per year, thus a multi-species sward requires little or no inorganic N fertiliser. Furthermore, herb species like chicory and ribwort plantain have strong summer growth that greatly extends the window of quality forage compared to grass monocultures.

Every year more and more research trials begin at various institutions to evaluate multi-species swards compared to conventional perennial ryegrass swards. These trials aim to answer a broad range of questions on the agronomic potential and environmental benefits of multi-species swards on farms. There have already been several high-profile projects completed that have reported extremely positive results for multi-species swards compared to perennial ryegrass swards. The Smartgrass project, for example, found significant advantages to multi-species swards over perennial ryegrass in a conventional sheep production system with animals grazing multi-species swards having better body condition and requiring less anthelmintic treatment than their perennial ryegrass consuming counterparts. One of the stand-out findings was that lambs reared on multi-species swards reached slaughter weight 2 weeks earlier than those reared on perennial ryegrass monocultures. This represents a significant gain in the efficiency and profitability of such an enterprise. Another trial in the Smartgrass project looked at multi-species swards for silage production and it found that plots receiving zero N fertiliser produced similar annual dry matter (DM) yields to perennial ryegrass receiving ~200kg N/ha per year. Furthermore, when weather conditions were good the diverse swards could produce decent silage. Several studies at Teagasc Johnstown Castle have reported the environmental potential of multi-species swards in terms of drought tolerance, weed suppression and GHG emissions. The information reported in research is supported by on-farm experience over the last couple of years with farmers seeing high yields with zero N, particularly in summer and excellent animal performance.

Multi-species swards are best used for grazing as they produce a large amount of highly palatable, high-quality forage. As mentioned, they have excellent production in summer, and this can complement the spring growth of grass paddocks nicely on a grazing platform. Although they look very different, the management of multi-species swards for grazing may not be that dissimilar to perennial ryegrass. Rotational grazing where animals are moved every 1 to 3 days is best as this prevents the over-grazing of some of the more sensitive species in the sward. At peak growth in summer it may be possible to graze these swards every 21 days with rotation length extending in the shoulders of the season, as with grass swards. The use of N fertiliser depends on stocking rate and forage demand in the spring. Where N fertiliser is applied it should be no more than a total of 70-80 units/acre and it should be applied in split applications before May. After May the legumes will be active and fixing free N. In many cases a couple of spring slurry applications will suffice to encourage spring growth. It is important to maintain good soil fertility with applications of phosphorus (P), potassium (K) and lime where appropriate.

**To find out more about the establishment and utilisation of multi species swards please contact Thomas Moloney on email: [tmoloney@dlfseeds.ie](mailto:tmoloney@dlfseeds.ie) or mobile 00353 (0)87 3961265.**



# Grass Seed Mixtures for 2022

## Lakeland Agri LFS Cut and Graze

Formulated to maximize yield, quality and persistency when used in one or two cut silage systems. The LFS Cut and Graze will also provide a high-quality sward when used for grazing. Contains Astonenergy, which hold a 5-star rating for grazing in the Teagasc Grass Utilisation Trials. Target a late May first cut to deliver a rapid regrowth of good leafy swards which will facilitate high quality grazing or second cut silage production. Exceptional mix for flexible use, also suitable for zero grazing production systems. Average ground cover score of 6.06.

Astonconquer	2.5 kgs
Oakpark	4.0 kgs
Astonenergy (T)	2.25 kgs
Glenfield (T)	2.25 kgs
Crusader and Chieftain White Clover Blend	0.75 kg
	11.75 kgs

## Lakeland Agri LFS Intensive Grazing

This mixture includes the highest PPI scoring late tetraploid, Abergain and late diploid, Aberchoice on the DAFM Recommended list 2022. It delivers a highly digestible sward with excellent graze outs, with Abergain and Ballintoy achieving a 4-star rating, and Aberchoice and Aberbann achieving a 3-star rating in the Teagasc Grass Utilisation Trials. This intensive grazing mixture will deliver excellent growth and high-quality grass not only in the main growing season, but also at the shoulders of the year, facilitating extended days at grass in free draining soils. Average ground cover score of 5.85.

Abergain (T)	2.0 kgs
Aberchoice	2.0 kgs
Aberbann	2.0 kgs
Ballyvoy	3.0 kgs
Ballintoy (T)	2.0 kgs
Aberheald White Clover	0.75 kg
	11.75 kgs

To find out more information about our grass seed mixtures for 2022, please visit [www.lakelandagri.ie/agribusiness](http://www.lakelandagri.ie/agribusiness) or contact your local Lakeland Agri Technical Sales Representative or call our Customer Services centre today on 0818 47 47 20 (ROI) or 028 30262311 (NI).

Recommended seeding rate with all mixtures: 14 kgs/acre. All clover seeds detailed in our mixtures are un-pelleted

## Lakeland Agri LFS Hi Density

Combines excellent seasonal growth with very good scores for quality. The inclusion of the variety Nashota makes this mix perfect for one cut silage followed by grazing. The mixture also includes the later heading tetraploid variety Xenon that has a 5-star rating in the Teagasc Grass Utilisation Trials. It delivers a dense sward of highly digestible grasses suitable for heavier soils. A super all-round mix of persistent and high yielding varieties. Average ground cover score of 6.20.

Nashota (T)	3.0 kgs
Xenon (T)	2.0 kgs
Bowie	3.0 kgs
Drumbo	3.0 kgs
Coolfin White Clover	0.75 kg
	11.75 kgs

## Lakeland Agri LFS Three Cut silage

This mixture is ideal for minimum three cut silage regime. It is a perfect formulation to maximise yield and quality in a multi-cut silage system. Suitable when targeting first cut silage between the 10th and 15th of May. Average ground cover score of 5.87.

Fintona (T)	4.20 kgs
Astonconquerer	3.70 kgs
Moirra	3.25 kgs
Barblanca White Clover	0.60 kgs
	11.75 kgs

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.



For more information, contact the Lakeland Agri Sales team or our Customer Services Centre on **0818 47 47 20 (ROI)** or **028 3026 2311 (NI)**. **Take note of our new ROI number above.**

 Like us on Facebook - @LakelandAgri



Delivering Sustainable Feeding Solutions