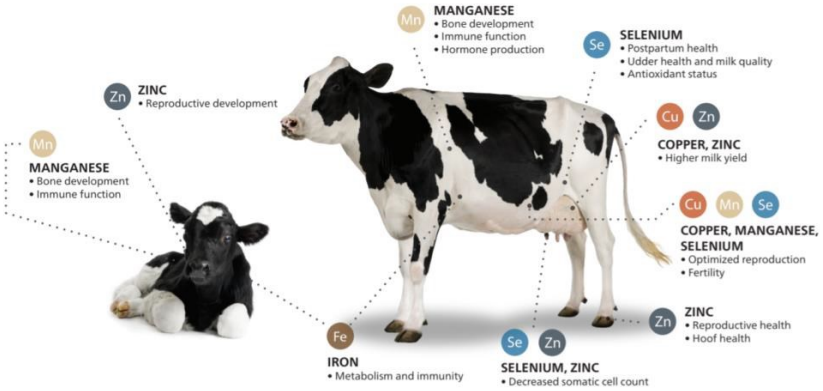
Welcome to our March newsletter, we have had a fairly settled winter, hopefully cows have performed well and made the most of the strong milk price. However the looming economic uncertainty and some farmers struggling with forage stocks, an early spring is going to be a warm welcome for many.

In this month's newsletter we will be looking at some exciting new developments to our SCN range, how to make the most of your spring grazing, farmer experiences and exploring soil biodiversity...

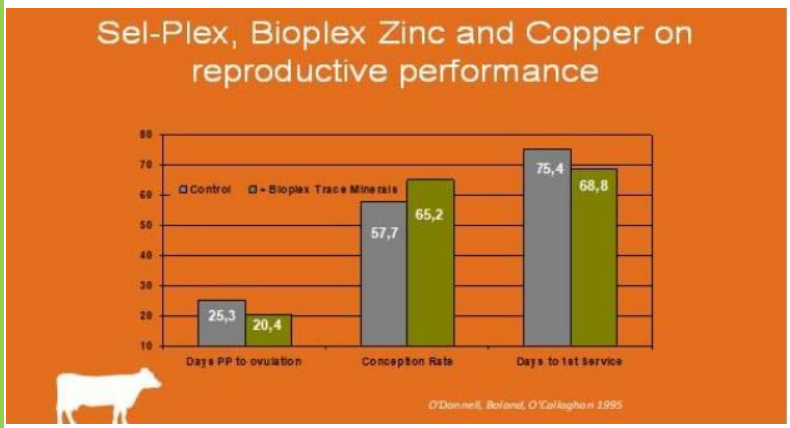
SCN SPRING PROTECTOR

For a long time, S C Nutrition Ltd has been researching how best to support cows as they transition from winter housing to summer grazing. As a team, we have been focusing on the most successful way to arm our cows against the three traditional diseases that occur at this time of the year. Namely, Mastitis, Lameness, and Infertility.

To help combat these issues, SCN Ltd has designed a new mineral premix, **SCN Protector**, to raise cow immunity levels. By increasing the Bioavailability of key nutrients, such as Copper, Manganese, Zinc and Selenium, scientific research has shown we can successfully reduce these economic diseases in our herds. Problems such as Lameness, Mastitis, and Herd Infertility, on average, can cost a 200-cow herd £29,068; a staggering 28% increase on 2021's average (Kingshay July 2022).



SCN Protector is designed to be used in parlour compound feeds or blended trough feeds, to allow the herd management team to deliver the required mineral booster pack with minimal increase in workload and at a cost which is beneficial to the farm business.



In addition, this micro-pack has the added advantage of containing a unique combination of buffers, such as Sodium Carbonate, helping to reduce the risk of Sub Acute Rumen Acidosis **(**Sara) at grazing as well as avoiding issues associated with the Freezing Point Depression in milk and its collection from the farm bulk tank.

Speak to Steve, Tori, or Fiona for more information on this unique micro-nutrient pack.

Our Vision is to Empower and Support our Farmers to Maintain a Healthy Herd and Busir
Sharing Scientific Knowledge and Expertise to Provide Targeted Solutions to the Farming

Is your soil biology working for the benefits of your crops?

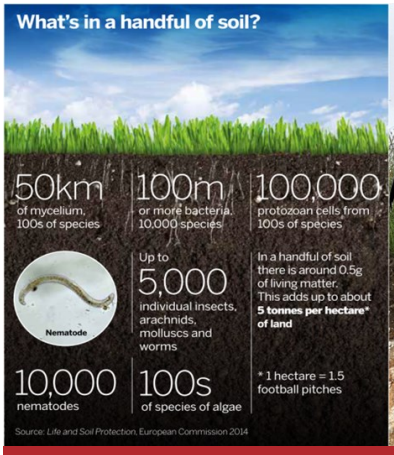
Growing crops has its challenges every season. The weather in 2022 certainly gave both arable and livestock farmers more than a fair share of problems. In addition, the cost of raw materials such as fertiliser increased dramatically. Therefore, doing the same as previous years, is unlikely to be a good strategy for the future. We need to start asking ourselves some questions. Should we cut back on our inputs and potentially reduce yields? Or, are there some other actions we could consider?

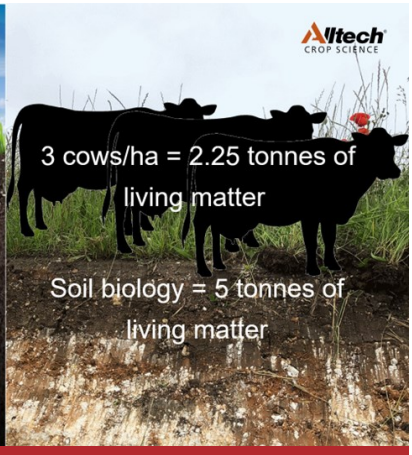
It's well established that a healthy soil has a good physical structure, with both water and air. A highly productive soil must also have a plentiful supply of available nutrients, but how many of us have considered how important a strong soil microbiome is? As livestock farmers we know how important a heathy rumen is, and the same applies to highly productive agricultural soil.

In a handful of soil there's approximately 0.5g of living matter** including microbes, arachnids, molluscs and worms, equivalent to around 5 tonnes per hectare. On a grazing system with 3 cows/ha the land is supporting just 2.25 tonnes of living matter! Where's our focus? And what are we doing to enhance the beneficial living matter in the soil and in particular the soil microbiome?

Today, we can enhance our soil microbiology by using naturally occurring bacterial metabolites and naturally occurring soil microbes to reduce soil pathogens and enhance beneficial microbes. These technologies allow farmers to utilise more of the soil nutrients. Many soils have moderate to high P +K indices, but plant availability is poor. Adding more fertiliser, just adds cost and increases the risk for nutrient loss and pollution.

Andrew Linscott, Technical Manager at Alltech Crop Science, says "Some countries are already on this path of improving the soil microbiome to improve crop production, for yield, quality and improved sustainability. Contribute ibN is an example of a microbial formulation applied to the soil to fix nitrogen from the air. This means the grower saves money and reduces the use of nitrogen fertiliser. These technologies from Alltech Crop Science have been used in commercial crops for the last 7 years and demand across Europe is increasing.





With the high prices of nitrogen fertilisers, these technologies now give farmers the opportunity to reduce their chemical fertiliser inputs, save money and make better use of their existing resources on the farm

Alltech Crop Science is a division of Alltech, a biotechnology company that has grown through innovation, research and successful practical implementation. Alltech Crop Science started in 1994, providing solutions to benefit to plants, the environment and the consumer. Today, we work with farmers and growers in 29 countries and over 60 different crops.

Alltech Crop Science provides a diverse range of products derived from yeast fermentation, focusing upon soil health, plant performance, protection and nutrition.

** Source: Life and Soil Protection - European Commission (2014)

Happy Rumen ~ Happy Cow ~ Happy Farmer

Whilst conducting a routine titration test on one of our farms, in the Lizard Peninsula, we discovered rumen health was not quite where we wanted it to be. With the autumn calving block well underway, the lack of sound transitioning from the dry period to the milking herd seemed to be having a negative effect both on herd butter fat levels and thus the milk price paid to the farmer. The solution applied was to introduce SCN Dettox Gold into the ration, aiming to improve rumen health and enable the gut bacteria to work more efficiently on the diet and support milk quality.

SCN Dettox Gold was added into the milking cow total mix ration in mid-November 2022, and followed up with a dung sieve in early December. The results showed just shy of 50% of the top sieve had shifted to the bottom sieve and butterfat's increased from 3.6% to 3.87% in this short time. In later results we observe, we have just 11.28% on the top sieve and butterfat's have increased to 4.3% with yield being maintained throughout at 30 Litres. To summarise we have a ***Happy Rumen***, a ***Happy Cow,*** and a ***Happy Farmer!***

Targets	**15/11/2022**	**06/12/2022**	**Current**
Top <10%	29.71%	15.06%	11.28%
Middle <20%	21.34%	22.59%	23.44%
Bottom >50%	48.95%	62.34%	65.28%

	15/11/2022	**01/12/2022**	**07/12/2022**	**Current**
Butterfat %	3.6%	3.87%	4%	4.3%

If you feel you would like to boost rumen health, increase milk quality, and maximise your milk cheque give a member of the team a call to arrange an initial on farm visit.

We would like to thank Kevin and James Bloomfield for allowing us to share their experience using SCN Dettox Gold in their herd.

SCN Dettox Gold Cost Calculator:

Average Litre Per Cow	30	30	30	30
Butterfat %	**3.60**	**3.87**	**4**	**4.30**
Pence Per % Butterfat	6	6	6	6
Number of Cows	130	130	130	130
Milk Value *P/C/D*	**£6.48**	**£6.97**	**£7.20**	**£7.74**
SCN Dettox Gold Cost *P/C/D*		£0.104	£0.104	£0.104
Margin *P/C/D After Dettox Gold Cost*		**£0.38**	**£0.62**	**£1.16**
Increase in Margin *(Per Day) After Dettox Gold Costs*		**£49.66**	**£80.08**	**£150.28**

Turn Out Thoughts – Keep an eye on the detail

With Turn Out upon us it is worth spending some time on planning feeding at grass. With potentially large changes to diet it is important to meet the cow's nutritional requirements under the variable conditions grazing presents. With this in mind it is well worth time examining (and challenging) the details of the ration. It is worth doing this in several steps:

- Look at the overall feeding levels of grazed grass and buffer forages
- Decide on the levels of outside blend and straights being fed
- Decide on what supplements may be fed and what is expected of them
- If parlour feeding, what is the feed range of concentrates fed in the parlour
- Having compiled the ration, it is important to monitor through the grazing season as conditions change alongside herd output.

If you decide to incorporate some of the supplements into the blend or concentrate, make sure you know the target dose per cow and through your feed rates you are hitting the target. Even the major macro minerals required by the cow like calcium, sodium, and magnesium can vary in the formulation. With diets changing at this time of year make sure you check the feed ticket to ensure it has the correct level of the 'vital ingredients' in it. The declaration tickets are there to show what's in the feed. These will include background levels from raw materials where applicable.

SC Nutrition Ltd are there to help in the following areas:

- ✓ Help plan the overall ration for cows at grass. (Including grazing assessment)
- ✓ Advise on the best concentrate feeds to supplement grazing
- ✓ Recommend the appropriate mineral and supplement feeds to feed with grazing
- ✓ Services to help with spring feeding
- ✓ Grass and silage analysis
- ✓ Grazing and forage budget plans
- ✓ Ultramix rationing programme including mineral and trace element assessment
- ✓ Dairy herd costings
- ✓ Titration analysis and cow scoring

Forage In Cornwall...

Grass Silage		Fresh Grass
27	Dry Matter %	20
11	ME	11.2
14.9	Crude Protein %	21.4
3.9	pH	
44.9	NDF %	40
4	Sugar %	10

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