



Sweetgrass/Sweet Sustain



Farmers looking to make their swards more resistant to drought conditions this summer should be considering applying sodium as part of their nutrient management plan to alleviate heat stress on grass and livestock.

The recent warm spell has reminded farmers of last year's heatwave, where high temperatures stunted grass growth and reduced quality, and forced some farmers to feed additional feedstocks during the summer. However, grass with access to good levels of sodium can withstand extended periods without rainfall for longer.

Potassium/Potash uptake in grass will increase in drought conditions causing an increased risk of hypomagnesaemia, or grass staggers. Sodium is a key nutrient in regulating the relationship between potassium and magnesium, and potassium and sodium.

A greater percentage of sodium taken up by grass will increase digestibility and improve sugar content, making grass more palatable to livestock even as it starts to become fibrous/stemmy. Sodium encourages a greater percentage of live/leafy herbage, which will help livestock increase dry matter intake and get more from grass.

Recent trial work carried out by Gouldings/Arrabawn has shown that products

such as Sweetgrass can grow the same amount of grass as straight CAN while improving intakes. The trial showed increased intakes of grass for the year by 13% when using Sweetgrass.

Cleanouts



Sweetgrass on the left, CAN on the right
Sodium is available in Sweetgrass (CAN based, 23N + 2S + 5Na) and Sweet Sustain (protected Urea, 35N + 5S + 5Na)

We Can Supply And Deliver To All Our Milk Suppliers Nationwide. Speak To Our Team

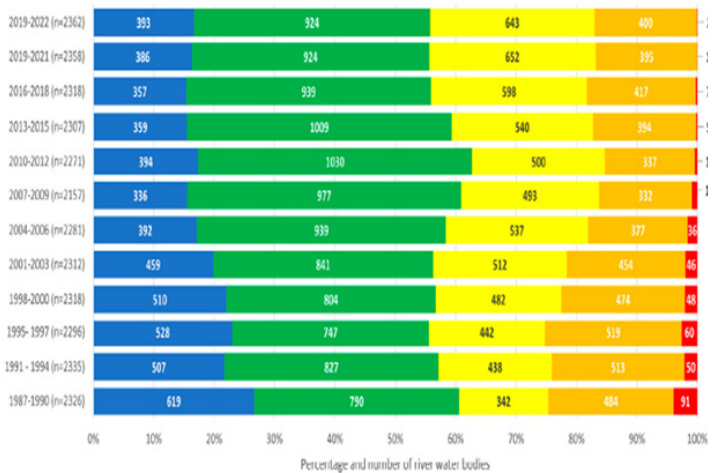
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Arrabawn
Together we grow

EPA Water Quality Report 2022

River Biological Quality 1987-2022

Q-Value (water body level)

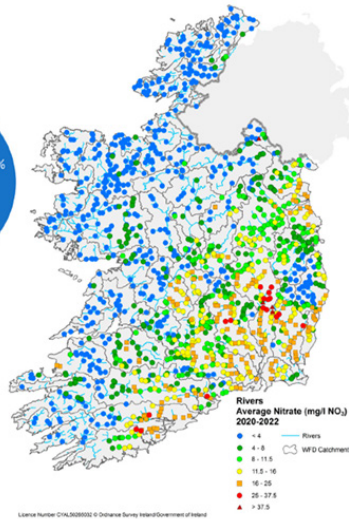
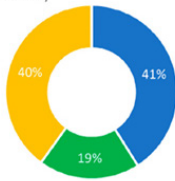


- 56% (1,317) of the river water bodies assessed over the period 2019-20226 were in high or good biological quality.
- The remaining 44% (1,045) were in moderate, poor, or bad quality.
- The number of river water bodies in bad condition has reduced to two; Annagh (Clare)_010 in Co. Clare (the cause of this recent deterioration is currently under investigation) and Laune_010 in Co. Kerry (where urban wastewater is a pressure).
- 671 (out of 2362) river water bodies were assessed in 2022. Of these, 84 improved while 77 declined. This is a small net improvement in biological quality in seven river water bodies when compared to their previous survey.

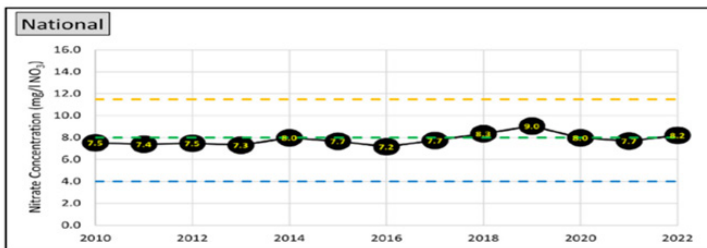
There were 190 Prioritized Areas for Action (PAAs) identified in the second River Basin Management Plan which were subjected to targeted action aimed at bringing about an improvement in water quality. Of the 671 river water bodies assessed in 2022, 174 were in PAAs. There was a small net improvement of biological quality of six river water bodies in the PAAs (27 improved, 21 declined and 126 water bodies did not change).

River Nitrate Quality 2020-2022

■ High ■ Good ■ Unsatisfactory



The 2020-2022 data for nitrate in rivers show that 40% of river sites nationally have unsatisfactory nitrate concentrations (above 8 mg/l NO₃)



Where are you on the 12 Steps to reduce Gaseous Emissions on YOUR FARM?



Step	Action needed
12. Incorporate clover	Incorporating 5 kg/ha (2 kg/ac) will replace up to 100 kg/ha (80 units/ac) of chemical N/year
11. Finish cattle earlier	Use Dairy Beef Index (DBI) to produce earlier finishing cattle
10. Reduce age at first calving	Calf heifers at 22 to 26 months and aim for 20% replacement rate
9. Increase milk solids/cow	Milk record, cull poor cows and aim for 305 day lactation
8. Improve dairy herd quality	Use high EBI bulls and increase herd EBI by >€10/year.
7. Improve animal health	Use sexed semen to accelerate genetic gain
6. Better grassland management	Create a herd health plan
5. Reduce chemical N by 10kg/ha	Weekly farm walk, measure grass and extend grazing season
4. Use 100% LESS	Apply lime, incorporate clover and make best use of slurry / FYM
3. Build or maintain soil fertility	Apply slurry in spring / early summer using Low Emission Slurry Spreading Technology (LESS)
2. Apply lime	Continue to use P & K fertilisers such as 18:6:12
1. Use protected urea	Identify fields low in pH using soil analysis Apply protected urea instead of CAN/straight urea



Farmer Actions to Improve Water Quality

Select the right measure in the right place to mitigate phosphorus, sediment and nitrogen losses to waters by -

1. Find out what the water quality status is for your local river.
2. Use Pollution Impact Potential (PIP) maps to identify the critical source areas (CSAs) for phosphorus, sediment, and nitrogen losses on your farm.
3. Also identify the overland flow pathways on your farm from the PIP maps
4. Once you know the CSAs on your farm you can take on appropriate measures

a) Phosphorus and Sediment

- i. Use 'break the pathway' measures to prevent run off overland into the drainage networks.
- ii. For example – targeted riparian margins and buffer margins, use of low earthen mounds, planting of trees and hedgerows, prevention of livestock access to water, wetland ponds, careful management of CSAs, sediment traps
- iii. Tillage farms – adhere to the buffer margins in the regulations and put in place appropriate 'break the pathway measures' as per above.

b) Nitrogen

- i. Nutrient management is very important to reduce the risk of nitrate leaching.
 - ii. Ensure soil fertility is optimum for P, K, and pH, take soil samples and follow a nutrient management plan.
 - iii. Use sulphur to improve nitrogen use efficiency.
 - iv. Apply nutrient when soil temperature, soil moisture content, growth rates and weather forecast are suitable particularly in the early and late growing season or during drought.
 - v. Add clover and multi-species swards to your pasture.
 - vi. Quantify the nitrogen surplus on your farm and take measures to reduce the surplus, the lower the surplus the less there is to be lost to water.
 - vii. Tillage farms – plant cover/catch crops post harvesting to capture N in the soil in autumn and prevent leaching to ground water.
5. Ensure that your slurry, soiled water, dairy washings, silage effluent and farmyard manure collection and storage facilities meet regulatory requirements.
 6. Make your contractor aware of the locations of CSAs, watercourses, drains etc. on your farm and ensure appropriate buffers are kept when spreading organic manures or spraying pesticides.
 7. Adhere to best practice when dipping sheep to minimise the risk of dip entering the drainage networks.

Use protected urea, it's cheaper than CAN

Time to Lime

Reduce nitrogen on grass clover swards

Use LESS to apply slurry

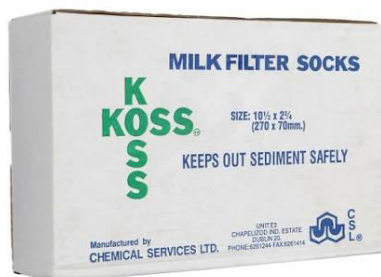
Plan your cover crops

Weigh calves and weanlings



JULY SPECIALS

SAVE
10%



All milk filter socks
save 10%

SAVE
€15



All No risk boots
save €15

10%
OFF



10% off
All philmac fitting's

15%
OFF



15% off
All deLaval liners

15%
OFF



15% off
Hydro piping heavy gauge

10%
OFF



10% off
All cheetah fencing products

Top 5 Tips for TBC and Thermoduric control this July

TBCs and Thermoduric are assessed twice per month and show as TBC and THD in your test message. If you are having issues with TBC or THD please contact our milk advisor as soon as possible.

- **Bulk tank** – The bulk tank should be cooling milk to under 4°C to minimize bacteria growth within 2 hours of milking. Are compressors working correctly? Have you enough gas in the system? Is water flow to your plate cooler adequate? This will lower your energy costs. Put a clean filter sock in before washing to keep the plate cooler free from debris and in turn bacteria.
- **Detergents**- A good strength caustic needs to be used while rotating in your acid washes often enough. If you are in a hard water area a water softener may be required or your detergents will not be effective. We recommend writing a weekly routine on a chart containing all the necessary hot and cold washes along with which ones are caustic and which are acid. Finally keep an eye on your detergents that they are still

fresh and in date.

- **Hot water**- One of the most common problems found at farm level is hot water is not hot enough. Use a thermometer to check that it is reaching 75-80°C. This will ensure you have enough hot water going through the system at the start to be dumping at 55°C after 8-10 mins.
- **Vacuum line**- There should be no milk residue in the vacuum line. This is a key area for thermoduric bacteria control. This is one of the key areas for thermoduric bacteria control.
- **Clusters** – liners should be changed every 2000 milking's and checked that the rubber is not rough. Claw piece should be checked by feeling around on the metal and plastic to ensure no biofilm build up is present.
- **Auto washers**- check that pipes are not kinked or that detergent has not crystallized inside them particularly if you are changing over detergents as the new and old products can react and form crystals. Ensure the correct amount of product is being taken up.

How to address a build-up of Thermoduric Bacteria in your milking parlour and bulk tank.

When a build-up in a bulk tank or plant has been identified, it is important to get it removed as soon as possible. Some build-ups may have been there for a long time, and will have multiple layers of minerals, fat, protein which may be difficult to remove. Acid descaler works well on mineral deposits, and caustic detergents work well on fat and protein residues. For effective treatment it is important to:

- Carry out multiple washes on the one day – follow an acid wash immediately with a detergent wash and your final rinse.
- Increase the hot water temperature and volume where inadequate.
- Increase the dose of the liquid products or preferably use a powder product as it has a much higher concentration of caustic.
- Peracetic acid should also be used in the final rinse as a steriliser.

Approaching mid lactation- time to take stock of your problem cows.

As we approach mid lactation, and hopefully you have a little more time available following the busy calving and breeding seasons, it is a good opportunity to review how your herd is performing. If you notice your bulk tank somatic cell count (SCC) starting to creep up slightly during the summer months do not ignore it, as it is likely to be because the number of infected quarters in your herd is increasing a little. This in turn can lead to more infected quarters and so on. Do not assume it will 'settle down.' Act now and set your herd up well for late lactation, with minimal mastitis infections and maximum milk production.

What is a problem cow?

A cow that has had 3 or more clinical cases of mastitis during her lactation, or that has had an average SCC of 200,000 cells/mL or higher in two consecutive lactations despite antibiotic treatment during the dry period, is a problem cow. Cure rates for mastitis vary and it is worth remembering that some of these problem cows cannot be cured.

How can milk recording help?

Milk recording your cows regularly allows you to easily see what is happening within your herd. It is the best tool you have to establish which



cows are the most profitable in your herd while also identifying cows with a high SCC, indicating subclinical mastitis. After teat disinfection, milk recording is the next most valuable tool in dealing with high SCC and mastitis. These problem cows are not only costing you money, which is sometimes not apparent, but they can also be a source of infection for the healthy cows. Milk recording is also the most reliable way of collecting individual cow information required to identify the cows that will need a dry cow antibiotic.

Herds that milk record get a Cell Check summary report, along with an individual cow information report after each milk recording. To achieve the full benefit of milk recording it is important to look at these reports carefully. They give an overview of the key areas of mastitis control, highlighting the areas of good mastitis control and the areas that could be improved. If you are not used to interpreting the reports, do not be afraid to ask your milk recording organization, vet, farm, or co-op advisor to help you navigate

them.

The reports show how your herd is performing in relation to the recommended targets. One target is to have less than 15% of the herd with an SCC above 200,000 cells/mL. The report also shows the spread of infection during lactation by comparing SCC levels in consecutive recordings in each cow. This identifies those cows that have been recently infected, if their SCC is above 200,000 cells/mL in the most recent recording or that are persistently infected, if they have had two consecutive recordings with an SCC above 200,000 cells/mL.

If you have not done so already, book a milk recording and use the records to identify cows with a high SCC and make a plan around the best approach to dealing with them. For example, drying off problem quarters may be a sensible option. Alternatively, some cows may need to be culled when milk yield allows, so make the decision easier and do not breed them now. With the recent drop in milk prices and the potential shortage of grass following the unusual weather conditions, it may make more sense economically, to cull these cows sooner rather than later.

For more information see the In-lactation section of the Farm Guidelines <https://animalhealthireland.ie/programmes/cellcheck/farm-guidelines/lactation/>

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