Arrabawn
Together we grow
AUGUST 2022 - Issue 8
NEWSLETTER

Easy Steps to Reduce Emissions on your Farm

We have all heard about the new targets set recently to reduce emissions on Irish farms. The aim is to reduce emissions as much as possible without reducing stock numbers drastically. The 12 steps can be implemented on every farm. These steps reduce the number of stock reductions.
These steps will save you animals, e.g. A 120-cow herd cutting back to 110 rather than 100. *(Example only, numbers depend on a variety of circumstances!)*

1. **Switch to Protected Urea** – This simple switch can make a big difference to the rate of emissions on your farm. Some fertilizers like CAN or Cut Sward have higher rates of emissions than Protected Urea. The same level of grass growth can be achieved with both.

2. **Apply Lime –** Testing soil to know the pH is another simple step which can be implemented on all farms**.** The ideal pH is 6.5, anything below this will need to lime applied. When fertilizer is applied to soils with incorrect pH levels to the N,P and K are not fully absorbed and used by the grass.

3. **Soil Fertility-** Testing soil for P and K levels should be done every 2-3 years. Ideally all soils be in Index 4, when this is achieved lower rates of fertilizer can be applied to these paddocks. In turn reducing over all fertilizer application and total emissions.

4. **LESS Slurry Spreading-** Using LESS methods of slurry spreading will drastically reduce emission levels. Ensure you or your contractor are using LESS methods. A simple move with big benefits.

5. **Reduce chemical N by 10kg/Ha –** Applying lime, introducing clover and testing slurry will help. When slurry is tested you know the exact amount of units being applied and how many additional units are needed from chemical N. Slurry is often higher in N than you think. It is a cheap way to apply N.

6. **Better Grassland Management-** Walk the farm regularly and ensure paddocks are being grazed at the correct covers – not too strong or too light. A good clean out is key to ensure good regrowth.

7. **Improve Animal Health** – The use of Vaccines and other preventative measures are key. Healthy animals produce more milk, fatten quicker, thrive better, go back in calf quicker. This reduces over all emissions.

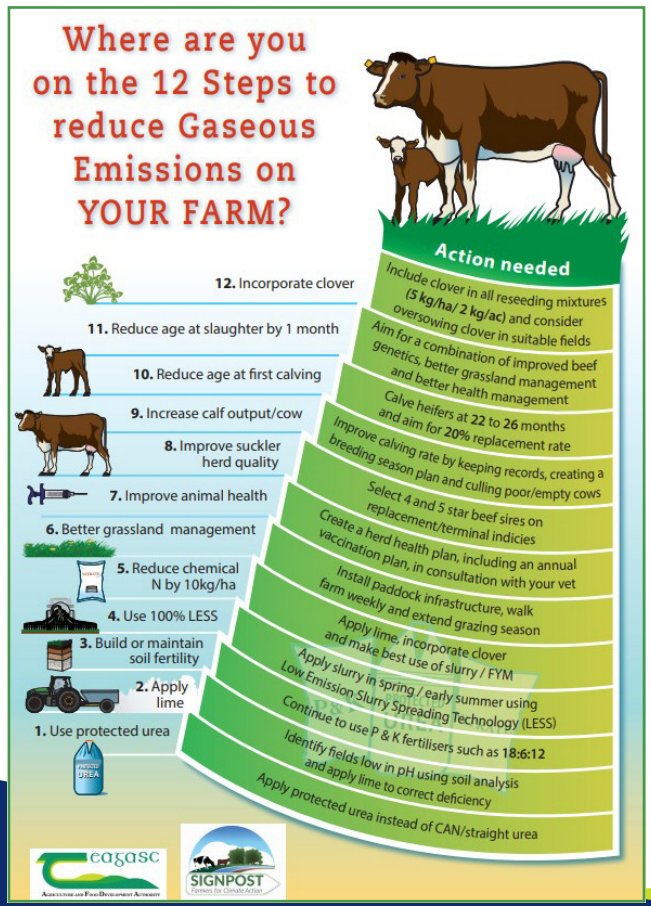
8. **Improve EBI –** Choose bulls which improve the need of your farm. Improving the EBI will improve outputs. You can maintain the same level of output from a slightly less number of cows.

9. **Increase Solids –** Milk Recording plays a major factor in this. Poor performing cows should be culled and best cows used to breed replacements. Grassland management plays a role here to ensure the best quality grass is given to cows to ensure good output.

10. **Reduce age of first calving –** All heifers should calf between 22-24 months old. Ensure all maiden heifers are reaching weight targets, turned out early to ensure target weights achieved before breeding.

11. **Finish Cattle earlier-** Use good beef bulls or beef straws to ensure cattle are finished as early as possible. Less time on the farm = less feed, less emissions from the animal and less inputs into the animal.

12. **Incorporate Clover –** There has been a big focus on clover this year. You must look after clover when incorporated into grass when reseeding. Clover is a great way to improve protein in the diet naturally. Animals will adjust to a high clover sward when introduced slowly into the diet.



Sample - Analyse - Interpret - Plan

As we enter the last quarter of the year it's time to take stock of the ingredients that will influence how your farm will perform next year. While milk prices have improved it's still important to pay attention to detail and to measure what you have and maximise the return by making decisions based on solid facts.
Soil - The single biggest element of your farm is the top 4 inches of soil growing your grass. How often do you check it out for the major elements, Lime, Phosphate and Potash. By taking a soil sample now you will have time plan your fertiliser programme for next year. You can check out the wide range of fertilisers available and select the most suitable fertiliser for your farm. Using the wrong fertiliser could be costing you a lot of money.
Silage Feed Analysis - on most farms, silage is the mainstay of the winter-feeding programme, yet its true feed value is taken for granted. Often protein values are less than ideal for cows in the dry period not to mention the effect of low protein on freshly called cows. Low dietary protein in the dry period can lead to smaller calves and poor-quality colostrum at calving. Low protein in the diet of the milking cow can lead to depressed appetite and lower milk yield.
Silage Mineral Analysis – wouldn't it be useful if you knew there was a problem - such as milk fever, retained afterbirth or even a dead calf due to slow calving - coming down the line in a few months' time. You could make plans to deal with the problem! A silage mineral analysis can establish the mineral status of your silage and indicate any deficiencies which may cause problems at calving.
Slurry – what's it worth? The slurry from the dry cow pen will be different from the slurry from the cattle or milking cow pen! If you get a sample tested you can make a better job of balancing with bought in chemical fertiliser.
Milk – a simple milk sample can give a lot of useful information. Sensitivity testing can show which bacteria might be the cause of mastitis in the herd. It might also indicate if dairy hygiene could be better. A milk test can also indicate the presence of Liver fluke and worms in your herd.
Talk to your Arrabawn / Dan O'Connors Feed Rep or contact your local branch of Arrabawn Co-op to arrange the sampling of your farm or silage.

NEWS

Top 5 Tips for TBC and Thermoduric control this August

- **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 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.

Build Grass Covers: Concentrates key as your best value of DM to compliment late lactation Yield & Milk Solids

Currently grass DM is very low along and with grass growth slowly decreasing. On top of this day length will begin to shorten. While all this is happening the aim is to sustain good milk performance from the cow while maintaining BCS in what has been a challenging past month in certain catchments of the Arrabawn catchment. Firstly buffer feeding whether its zero grazing or silage are aids in this, but the most efficient is concentrates as it is the driest most efficient input. Dry matter & fibre content is quite low so cows are flying through grass covers currently on farms and if things get tight on grass extend rotation is needed but 1kg of conc. will substitute for 5-6 kg fresh grass so there it can buy you time.

Arrabawn have a number of products such as **Energymax & Supreme Dairy 16** specifically formulated for late lactation as with different ranges of CP % & additives they work in a variety of diets.

Regards ingredients the makeup of both Supreme Dairy 16% & Milkifeed 16% contain high levels of maize and wheat giving high levels of energy to meet requirements of Milk & Maintenance. Backed up with high levels of starch is MEGALAC as highlighted before in many of DOC cubes, is raw energy high in oil again giving every chance for the cow to keep a steady milk yield towards the back end of lactation combined with good milk solids. This time of year, again with low DM grass and lots of moisture, its hugely important to monitor the rumen in the line of pH through consistency in dung so both Beet Pulp & Yeast are included in cubes which indirectly avoid SARA, NEB & Ketosis. DOC have a number of different feeding rates for each which is quite important at this stage of the year so for more info on this, and other nutritional matters, consult your local Dan O'Connor Feeds Representative or any branch of Arrabawn Co-op.

Arrabawn Co-Op

SPECIAL OFFERS

Flexothane Dairy Apron

Stainless steel drinking bowl

Kerba test products for Mastitis

Chloros 25litre

Ambic products

All Filter socks

www.arrabawnhomevalue.ie

NEWS

Reseeding – don't leave it too late

Increasing grassland productivity has never been more important. In order to maximise animal performance from pasture we must first ensure we are optimising the production of grass at farm level. The average level of grass produced nationally is 9.1 t DM/ha, with the top farms producing over 15 t DM/ha. There is huge scope to increase the total grass grown and hence increase grass in the diet, while reducing feed costs in livestock production systems. Soil fertility is critical to maximising the performance and longevity of swards at farm level. With Teagasc recently highlighting that 90% of all soils are sub-optimal in terms of pH, phosphorus (P) or potassium (K). Without doubt, this is costing farms throughout the country significantly in terms of under-performing grass swards and the necessity to bring in more expensive supplements to overcome grass deficits in the system. Completing regular soil fertility tests on your farm (every 3 to 5 years) and using the results to develop a fertiliser program is critical to ensure you can get the most from your swards.

Reseeding is important as a mechanism to increase the perennial ryegrass content in swards. There are several benefits to reseeding and maintain perennial ryegrass dominant pastures:

- Provide more grass at the shoulders of the season (early spring and late autumn)
- 25% more responsive to fertiliser N compared to old permanent pasture o Increased feeding quality
- Faster re-growth o Greater total production and so can increase the carrying capacity of the farm

<u>Reseeding Checklist</u>

1. Soil test
2. Spray off old sward
3. Lime
4. Cultivate to achieve a fine, firm seed bed
5. Sow the top varieties from the Recommended List/ Pasture Profit Index at 14 kg/acre
6. Roll
7. Apply N, P, K as per soil test
8. Monitor for pest attack
9. Post emergence spray
10. Graze once plants withstand pull test

<u>Timing of reseeding</u>

As we approach August it is important to remember that the sooner seed is sown the better. Aim to have grass sown by the 1st week of September. Late sowing can result in poorer results if weather breaks as lower temperatures will reduce germination, while poor ground conditions will make grazing, spraying and management more difficult. The table below presents results from a study which compared the effect of September and October sowing. Note the lower tiller number and yield in the October sown sward the following March.

Table 1. Effect of sowing date on sward establishment (Culleton et al. 1992)

	Sowing Date	
	September 3rd	October 4th
Seeds sown/m²	1030	1030
Seedlings 6 weeks later/m²	760	570
Tillers /m² March	7190	3110
Kg DM/ha in March	913	478

Time to start thinking ahead.....

Drying off may seem like a long time away yet, but the autumn months won't be long creeping in. Heading into the back end of the year SCC bulk tank values start to creep upwards. In previous years the security of Blanket Dry Cow Treatments (BDCT) was available, however with new antibiotic laws being enforced in 2022 the attitude to antibiotics will need to change.

SCC during the summer months is low and we need to maintain this coming into the drying off period. Ideally we want SCC to remain the same and avoid the traditional peak.

A lot of hard work and endless hours are put into producing a litre of milk so its important to avoid penalties for SCC, TBC, Thermoduric's etc. One simple step which can be added into your milking routine is Pre- and Post-dipping of cow's teats.

FAIL TO PREPARE, PREPARE TO FAIL

Pre- Dipping	Post- Dipping
Removes dust and dirt from teats which can impact TBC and Thermoduric results	Provides a protective seal at the teat end to prevent entry of bacteria while teat seals itself post milking
Kills harmful bacteria on teat surface which may cause mastitis	Discourages Flies in the parlour and out in the fields
Clusters are not contaminated with bacteria during milking, preventing the spread of bacteria from one cow to the next	Skin friendly, acts as a protective moisturising layer on the teat
No taint on the milk	Prevent build up of bacteria picked up from the environment with long last anti-bacterial properties

The lower you SCC is at drying off the lower our SCC will be when calving down the following spring! Don't follow the trend this Autumn and control your SCC by Pre and Post dipping your cows teats

NEWS

There is no quick fix when it comes to Mastitis!

In the past when a cow was showing signs of mastitis you would give her a few lactating cow tubes and more often than not she would get better. However nowadays there is so much more that needs to be considered. Mastitis can be caused or brought on by so many different factors!

With the knowledge we have today, mastitis is a disease we should be trying to PREVENT not TREAT. Here are some useful tips to help prevent mastitis through good management systems.

Milk Machine servicing | Teat Hygiene | Milk Recording

Culture and Sensitivty Testing | Cluster dippping | Reducing Stress

- **Regular milk machine servicing**
  - Vacuums, pressure, cluster condition can all affect the health of the teat. The skin is very sensitive and can be easily damaged allowing bacteria to easily enter and start an infection.
- **Good teat hygiene**
  - Cows in the summer may have no visible dirt on their teats but even the cleanest of cow is carrying tiny particles of dust and dirt.
  - Pre-cleaning/dipping of the teats is still key in summer months to remove harmful bacteria prior to milking. (Bacteria can enter easily when teat spchniters are open)
- **Milk Recording**
  - IT'S NEVER TOO LATE to start.
  - Recording offers many valuable pieces of information such as the most profitable cows in the herd, cows who aren't pulling their weight, help reduce SCC, breeding and culling decisions, TB compensation and improve profitability in the herd.
  - Munster Bovine are running a Milk Recording workshop on Thursday the 26th at 8pm via Zoom to discuss their new Lifetime Reports. (More details to follow).
- **Culture and Sensitivity testing**
  - This test allows you to identify the culprit bacteria in the herd causing issues. You need to know the type of bacteria present in order to act accordingly. For example:
  - Staph Aureus is a contagious bacteria, cluster dipping, hand hygiene and isolation from other cows is key in prevent the spread.
  - Strep Uberis is an environmental bacteria is picked up from the soil and dung. Clean holding pens, roadways, gloves all play big factors here.
- **Cluster Dipping**
  - Cluster dipping is very simple yet effective management tool to practice in the parlour. It sterilises the clusters in between cows to prevent any harmful bacteria being passed from one cow to another.
  - Gold standard would be cluster dipping after every cow in the parlour. Cows with high SCC and clinical cases of mastitis should always have their clusters dipped afterwards to prevent spread within the herd.
  - For example - Biocel Clus-sterXX, mix 1.5ml in 1L water (30ml in 20L water), dip the clusters in a few times, shake off the excess and continue to the next cow. Change solution after 20 cows.
- **Reduce stress in the herd**
  - Some sources of stress cannot be avoided like heat stress or other weather extremes but many we can avoid. Stress lowers the cows immune system and may potentially allow bacteria to take over in this time, which normally would not happen.
  - Some times we can avoid stress: not rushing cows on walk into parlour, walking at their pace, shouting/loud noise in parlour, nutritional stress- supplementing with extra ration/ silage bales etc, using the crush- slow and steady don't rush cows into places they are unsure of.

Inconclusion, there is no silver bullet or no one person who can fix all mastitis cases. It is complex and multi-factorial disease. However with the correct support from Co-Op Advisors, Vets, Milk Machine Technicians and other agricultural advisors Mastitis can be greatly reduced on Irish herds.

Remember PREVENTION is always better than cure!

Arrabawn Stand at the North Tipperary Agricultural Show 2022

NEWS

Have you prepared your sheds for Winter housing?

As the workload eases at this time of year, it is a good opportunity to review your housing for the winter period and to carry out any necessary repairs and maybe plan for longer term solutions. Housing your cows and heifers in a clean and comfortable environment will ensure high quality, clean milk free from mastitis. Any reduction in teat end contamination improves mastitis control during the dry or lactation periods.

Two major factors that lead to an increase in mastitis and bacterial contamination of milk are:

1. Increases of cow-to-cow contact and increased faecal contamination.
2. Humidity where damp conditions promote the movement of faeces onto udders and increases the level of environmental bacteria.

The Winter Housing Checklist available on the AHI website is a very useful reference to look at cow hygiene as well as housing and management practices on your farm. Cow hygiene scoring is your starting point to look at shed maintenance for the winter.

The key questions on shed maintenance are:

Are your sheds clean before housing?

The most important task is cleaning and disinfecting of the sheds to reduce environmental contamination from the previous winter. The use of approved disinfectants from DAFM Approved Disinfectant List is encouraged. Ensure that all organic matter (dried out manure, discharges, soil etc) is removed by scraping or power washing before applying disinfectant. Allow maximum contact time to ensure that the disinfectant works.

If you are using an automatic yard scraper, book a service to ensure that it is working correctly and scraping up to 8 times a day.

Pay particular attention to your calving pens. One pen per 25 cows calving that can be easily cleaned and disinfected between calvings is ideal. As recently calved cows are most vulnerable to infection. Calved cows consume large quantities of water, therefore access to a supply of clean water after calving is key. Ensure that all are fit for purpose with no leakage.

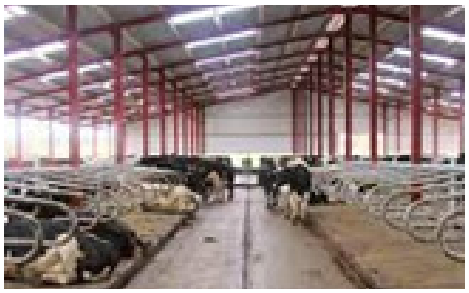
Avoid a build-up of heat and moisture as damp, humid and hot conditions predispose to mastitis and heat stress leading to excessive standing. If you see condensation drips on your cows or if you cannot see at the far end of a shed, ventilation may be inadequate. This can be fixed by adding a 9-12" opening along the roof apex.

A cow should be able to lie up to 12-14 hours of the day. The main points of contact for a cow using cubicles are her knees and hocks. During milking cows look at the cows legs to note cleanness. Repair faulty or loose cubicle stands.

- Replace worn or jarred stands.
- Eliminate cubicle base pitting.
- Replace worn or damaged floor matting.
- Remove any obstacles or protrusions to allow free cow flow in the sheds.
- Avoid rigid divisions between cubicles if possible.

Appropriate levels of stocking density contribute to good cow comfort. There should be 110 cubicles for every 100 cows and cubicle design is important when training of in-calf heifers to accept cubicles. Cubicle size should be 7.5 -8' long and 4' wide depending on the size of cow and allow a 4' forward lunging space for easy standing and neck extension to ruminate. No pressure should be put on the rumen in the lying position so that the cantilever height should be 22" from ground level.

In conclusion, refer to Management Note L to also examine the impact of housing on mastitis and SCC at Management Note L CellCheck Farm Guidelines on Animal Health Ireland website.



As farmers you are being asked to do more to look after the environment on your farm. This worksheet sets out to identify areas of your farming system where action could be taken to improve sustainability and reduce greenhouse gas (GHG) emissions.

Steps to action

Step 1: Complete the checklist below to help you identify actions that you might take on your farm to reduce GHG emissions

Actions to reduce GHG emissions

	Yes/no
I am using protected urea	
I am applying lime to low pH soils	
I am building and maintaining soil fertility (P&K)	
I am maximising the use of my slurry and using low emissions slurry spreading equipment (LESS)	
I am reducing chemical nitrogen (N) by 20kg/ha	
I am incorporating clover into my grassland swards	
I am using grass measuring to optimise use of grazed grass	
I am improving the beef genetics of the beef calves produced in my herd by using the Dairy Beef Index (DBI)	
I am increasing milk solids/cow by milk recording, culling poor performing cows and milking cows for a 305 day lactation	
I am using high EBI bulls to increase herd EBI by greater than €10/year and I use sexed semen to accelerate genetic gain	
I am calving heifers at 22-26 months and aiming for a 20% replacement rate	
I have a herd health plan	

Actions to improve biodiversity

Retain a thorn sapling (or bunch of thorns) in all topped hedges
Do not top escaped hedges
Don't sow – let it grow. Cherish what is growing wild.

Actions to improve water quality

Use pollution impact potential (PIP) maps to identify if your farm is at risk from diffuse phosphorus (P)/sediment or N losses to waters
For P and sediment losses, 'break the pathway' with a riparian margin, earthen mound or settlement pond
For nitrate losses, improve N-use efficiency by applying N at the right time, right rate, and right locations, and using the right product

Step 2: Identify three actions that you can take in the next 12 months:

Action 1

Action 2

Action 3

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