Arrabawn NEWSLETTER

Together we grow

MAY 2022 - Issue 5

Arrabawn Co-Op AGM 2022

Our 22nd Annual General Meeting took place on 21st April. Following two years of Covid enforced virtual meetings, the AGM made a welcome return to the Abbey Court Hotel in Nenagh. Over 130 shareholders attended the meeting and all agenda items were covered.

We would like to congratulate the following award winners on the day:

- Eoin Toohey, Moneygall, Co. Offaly was winner of the Milk Supplier of the Year Award for 2021.
- Billy and Claire Downes, Toomevara, Co. Tipperary were SCC winners.
- Rory and Lucy Dunne, Borrisokane, Co. Tipperary were announced as TBC winners.

Arrabawn

WOMEN IN AGRICULTURE

Celebration Day

LOCATION: ARRABAWN TYONE MILLS NENAGH
DATE: SATURDAY 28TH MAY
TIME: 12PM - 4PM

Special guests attending:
Sophie Bell, Katie Shanahan, Alice Hodges, Miriam and Rachel Hastings. Louise Crowley, Hazell Mullins & Hannah Quinn Mulligan.

Arrabawn Co-Op Open Day

Efficient, Sustainable, Knowledgeable Farming

On the day:

- **Demonstrations on show**
- **Over 40 stands**
- **Guest Speakers with Q+A Session**
- **Light Refreshments**
- **Draw in aid of Red Cross Ukraine Appeal**
- **Free Entry**

All are welcome on the day.

Friday 24th June 2022

11am-2pm

Gurteen Agricultural College E53 TP93

NEWS

Animal Health Updates

Prescribing of Milking/Dry Cow Tubes:

- Previous prescription issued under the Arrabawn Mastitis Control Programme are no longer valid.
- Prescriptions must be got from your local vet.
- Antibiotic prescriptions are valid for 5 days only

The introduction for prescriptions to purchase worming products, lice/fly treatments has been **delayed until December 1st 2022**.

NO VALID PRESCRIPTION = NO SALE OF ANTIBIOTICS

COWS EATING STONES, DITCHES, PLASTIC AND BRIARS (PICA)

Background

PICA is most noticeable when the cows rummaging in the ditches, licking stones, chewing on black plastic or anything they can get at.

The cow herself is telling us something is wrong. In simple terms, this behaviour indicates a deficiency. We often hear about dogs eating grass and the old wife's tail "they must have worms when eating grass". Dogs might not always worms but may indicate has an underlying issue with the digestive system. Cows are doing the same thing, they are trying to correct whatever deficiency is occurring.

Just like every animal the gut is central to good production and health. Any animal displaying PICA must be addressed. Always look and start with the diet. Look at the cows and look at their dung.

The main reasons for PICA in the dairy herd?

Salt (Sodium)

Low sodium is certainly a factor for this behaviour. With high potassium (slurry, fertilizer) creating a risk also by locking up sodium. Low sodium can also be a factor where we see cows drinking urine or licking walls. Pasture in the early summer can have lower sodium so we need to have this high up our list of differentials. Salt (Sodium) is a very interesting mineral in the ruminant. They self-regulate and will only generally consume it if they need it. So, the first course of action would be to give them salt licks in a barrel to see what their reaction is.

Low fibre

We all know how important fibre is as it is the building block for good rumen health and function. As grass growth peaks in early summer, leafy grass is usually low in fibre. Other issues with this are butter fats dropping and cows getting very loose dungs. They will often appear bubbly in nature. The next logical step where this is suspected would give cows access to some fibre. Provide a ring feeder with straw/hay and watch the cows, they will only eat the straw if they feel deficient in fibre.

This can be enhanced by chopping the straw and maybe mixing some molasses through it to help palatability. A simple tool could also be a little bit of buffering after milking with silage in the morning. Another sign of low fibre in the diet is a dropping butter fat %. This can be easily monitored on text message reports from the Co-Op .

Low phosphorous

This is the last of the three underlying factors or potential causes with this condition. Blood tests are useful for this where the salt didn't make a difference or fibre wasn't thought to be an issue. P can be low in the grass on some farms at this time of year. It can be difficult to supplement but one word of warning is that it takes time to lift P in blood. Usually will take 10-14 days before you see a response to supplementation. If you're going to blood test, go after the animals you have seen displaying the symptoms for testing.

Why are we seeing more of this?

It is a condition we see in lush grass that is low in fibre. On some farms, this grass can be lower in P and also sodium. Where we have higher levels of K (potassium) we also will get sodium locked up. So in very simple terms it can be a grazing issue very much seen during peak growth periods on some farms.

The solutions

1. Supplement with salt lick blocks
2. Provide extra fibre, straw bales or silage.
3. Blood animals for mineral profiles- only way to identity low Phosphorus.
4. Send grass samples from grazing paddock, mineral analysis will show if any minerals are deficient or possibly tied up by another.

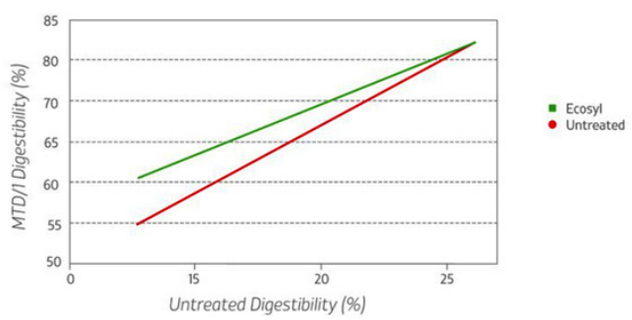
These behaviours are not normal and must be investigated! When the correct materials (salt/straw/minerals) are provided the cow will tell you fairly quickly.

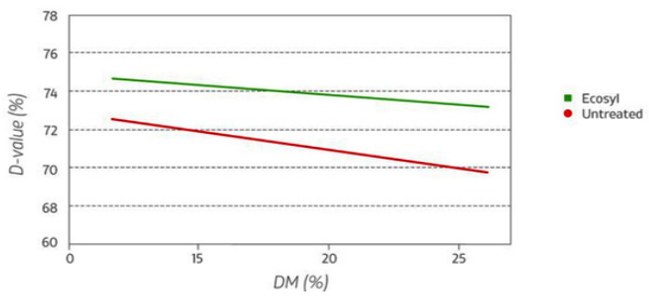
Better quality silage

A lot of factors will influence animal performance with silage quality being an important one as it represents such a large proportion of the ration. In order to capture as much of the nutritional value of the original forage it is important the fermentation is fast and efficient and 200 trials over a wide range of crops and ensiling conditions have shown that using Ecosyl will improve both of these parameters

But while very important, silage fermentation is not a good indicator of animal performance, at least not based on a standard analysis that only reports a few fermentation parameters. It is well known that some inoculants, including Ecosyl, will produce animal performance benefits when there is no apparent difference in the fermentation. The inoculant treatment is obviously influencing other silage parameters. The only way to determine how a silage will perform is to feed it to animals, ie carry out a proper independent feeding trial.

Trials with Ecosyl have sometimes shown improved DM intake, other times increased digestibility, sometimes both. Also, a higher silage ME due to the better fermentation.





Feeding trials with Ecosyl treated silage have shown significant increases in all these parameters. Silage DM intake was increased by an average 5%, while organic matter digestibility (OMD) was increased by an average of 3 'D' units over the untreated silage.

Table 1. Intake, digestibility and ME improvements from Ecosyl treatment

	Untreated	Ecosyl	No. of Trials
Silage DM intake (kg/day)	8.20	8.62*	34
OM dig (%DM)	71.3	74.0*	26
ME (MJ/kgDM)	10.6	11.2*	11

*statistically significant difference

In 11 of these studies, ME values for the silages were also determined and Ecosyl treatment was found to increase ME by 0.4 MJ/kgDM on average.

These effects of Ecosyl on intake, digestibility and ME, go some way towards explaining the magnitude of the production responses seen with Ecosyl.

Arrabawn Co-Op

SPECIAL OFFERS

HOOFSURE ENDURANCE 5 LITRE

Group submersible pump 1100w

All Fitt Nts Hosing

Flexothane Dairy Sleeves

Automatic Batch latches

Prima Tech dosing Range

LIMITED TIME OFFERS

www.arrabawnhomevalue.ie

NEWS

ECOSYL™ For consistently better silage

Features, benefits and unique selling points

Features

- Ecosyl 100 is available for a liquid or dry application
- One bottle/bag treats 100t of forage
- Versatile liquid application:
  - Any applicator – standard to ULV
  - Apply from 20 ml/t to 2 l/t
- Tank mix life: 48 hours. The ULV tank mix can also be stored for up to 10 days in a fridge
- Dry application at 200 g/t
- Shelf life (unopened): 24 months in a cool, dry place.
- GMO free and suitable for organic use

Benefits

- Rapid pH fall
- More efficient fermentation
- Less protein breakdown
- Reduced fermentation losses
- Increased dry matter retention
- Higher retained nutritive value
- Proven increases in digestibility
- Improved palatability and intake
- Improves animal performance

Unique selling points

- MTD/1 Worlds most proven additive
- 15 Independent Dairy trials
  Average of 1.2l extra milk per cow per day
- 19 Beef trials
  15% improved DLWG for growing cattle and 9% for finishing cattle
- 26 "D" (DMD) value trials
- 1 million Ecosyl MTD/1 bacteria
- Manufactured by continuous culture – ensures rapid activity after application
- Start fermenting immediately (pH of 6.5)

For further information:
Email | info@ecosyl.com Visit | www.ecosyl.com
Ecosyl and MTD/1 are Registered Trade Marks of Volac International Limited.

volac

ECOSYL™ Ecocool

Features, Advantages & Benefits of Ecocool

Feature	Advantage	Benefit
Contains Two Strains of Bacteria	Double Action	Improves Fermentation and Reduces Heating
Action 1 Contains **MTD/1** (Ecosyl)	Rapid pH fall: Poor inefficient bacteria have less effect on the fermentation	Reduced Dry Matter Losses so; More nutrient retained for animal production
Action 2 Contains the unique Buchneri strain **PJB1** - Only found in Ecosyl Products	Creates Acetic Acid to inhibit Yeasts & Moulds	Keeps Silage Cool Preventing heating by many days. Also keeps working – So benefits increased with time
Improves digestibility of silage	Animals get more energy out of MTD1 treated silage	Improved animal performance
MTD1 – is produced (Grown) in presence of oxygen	Can start to work in the trailer, on the way back to the silage pit	More rapid pH fall - resulting in more nutrient & DM being retained for animal production
Improves Protein retention	Greater levels of "True Protein" rather than Nitrogen available for production	Reduced reliance on expensive bought in protein Improved animal performance
Not Crop Specific	Can be used on any forage crop (Consider Ecosyl 100 for wet, and crops more difficult to ferment)	**One product suits all systems**
Can be liquid applied via a Traditional Stem Pump, Onboard Tank or via Ultra Low Volume (20ml/t)	Greater flexibility of Application so it doesn't matter what applicator the contractor has	
GM Free and Suitable for Organic Farms	Can be used on all farming systems	

For further information:
Email | info@ecosyl.com Visit | www.ecosyl.com
Ecosyl and MTD/1 are Registered Trade Marks of Volac International Limited.

volac

Controlling Nettles – Grazon Pro

Patches of common nettle are starting to grow, so between now and June is a good time to spot treat them. Grazon® Pro is the market leading weed control solution for use via knapsack on unwanted perennial weeds found in grassland such as nettles. It translocates well into the plant's roots meaning it gives lasting control and lessens the need for repeat spraying. It comes in a 1 litre pack which means 16 fills of a 10 litre knapsack. Grazon Pro is very safe to grass and has a short stock withdrawal period of just 7 days.

Controlling Buttercups – Keep your fields green with Envy

Livestock farmers may want to control buttercups for animal health reasons as they can cause contact dermatitis and stomach irritation. Often the trigger for spraying a field of buttercups is once the farmer has noticed that the field has turned yellow as the buttercups flower.

Best control of buttercups is achieved if they are sprayed before flowering. However, replicated Corteva Agriscience trials showed that good levels of control of creeping buttercup can still be obtained during flowering and after flowering. Whilst control can be around 10% less than a pre-flowering application, this is still likely to be in excess of 80%. Although our grassland herbicides are not harmful to insects, if spraying during flowering, follow good agricultural practice by timing sprays for early morning or late evening when pollinators are less likely to be active. For best overall control, pre- or post-flowering applications of Envy® at 2.0 L/ha is preferred.

Five ideas to help boost silage in 2022

1. Recognise the value of your silage

It's not enough to grow quality grass. You need to minimise losses in its nutrients when turning it into silage.

Typically, dry matter (DM) losses in grass silage are about 10%, but they can be 25% or higher. So follow best practice silage production and fermentation methods. Cutting grass younger improves digestibility and protein content, while conserving with a proven additive can halve DM losses and preserve more energy and protein.

If unsure how well your silage normally ferments, check previous silage analyses. You want a ratio of lactic acid to undesirable volatile fatty acids (VFAs) of at least 3:1.

2. Adapt to the weather

Last year's unexpectedly cold April and wet May, which delayed grass growth and then harvest, underlined the importance of being flexible with silage cutting dates.

Cutting early not only allows a silage cut to be 'banked', it also encourages fresh regrowth.

3. Mitigate slurry risks

Applying extra slurry to replace some bagged N, or cutting silage at shorter intervals, increases the risk of poorer fermentation and DM losses due to enterobacteria in the silage, making it important to manage this risk.

Apply slurry as soon as possible after harvesting to allow it more time to dissipate. Also, consider dilution to encourage it to wash into soil quicker, and apply by trailing shoe or injection to keep it off leaves. To improve fermentation, rapid wilting becomes more important. As too does wilting to at least 30% DM and using an additive: enterobacteria numbers in silage made using Ecosyl have been 100,000 times lower than in untreated."

4. Wilt efficiently

Rapid wilting to the correct 30%DM is important to reduce the breakdown of sugars and proteins and improve fermentation.

Also, using an additive, such as Ecosyl 100 can greatly aide fermentation: enterobacteria numbers in silage made using Ecosyl have been 100,000 times lower than in untreated.

5. Keep contractors informed

Cutting grass before heading is vital for top silage quality, so keep your contractor informed in advance of when you will need them, and especially if planning to cut earlier or more often this year.

For further information visit www.cuttoclamp.com / www.uk.ecosyl.com

NEWS

Cling-Seal- Saving silage waste

Typically, forage consists of anything between 40% and 80% of the diet in most dairy and beef production. Feed as a whole represents the largest single cost this type of farming, reducing losses and maximising quality is the priority. This is why farmers and industry experts use Clingseal, a flexible vacuum sheet that is used directly beneath traditional, heavier silage sheets. It is thinner and therefore more flexible, allowing it to cling more closely to the contours of the clamp surface and tuck-in more at the sides. This helps eliminate air pockets and provides a close fitting barrier to significantly reduce top and shoulder losses from aerobic spoilage. Additionally, because it provides a better air seal, Clingseal also facilitates a faster, more efficient fermentation process- delivering enhanced clamp silage quality. Clingseal is also easy to apply and robust (can be walked on) and is suitable for a variety of ensiled crops (grass, maize, wholecrop and other moist feeds).

The average amount of waste on a poorly sealed clamp is 8cm on the top and sides, with more than this on the shoulders. This means waste could cost up to €4.80m2. On a 16m x 50m clamp, this could add up to €3,840 in losses. In comparison, the cost of Visqueen Clingseal to cover the same size of clamp is €215.00, which is €0.27/m2
Find out more at: https://www.rhino-products.ie/cling-seal

SilaSave • Reduce Silage Waste • Improve Silage Quality • Maximise Silage Yield • Save Money

MAKE EVERY TONNE COUNT!

SilaSave is the only cost-effective solution to reduce surface waste and moulds on silage pits. Surface waste presents a problem from several perspectives.

- loss of valuable fodder,
- labour cost required to remove the waste and dispose of it in the spring
- reduction of silage quality

The moulds present on the surface of the silage pit can produce a variety of mycotoxins. These moulds can sometimes be visible or invisible. They grow best on the surface of the silage pit where pH is higher and growing conditions better than lower in the pit. There is a simple cost-effective solution available from Inform Nutrition Ireland called **SilaSave**! Use **SilaSave** to dramatically reduce moulds mycotoxins and surface waste on silage pits. Now on the market for well over 20 years **SilaSave** is a well proven solution. **SilaSave** is a blend of carefully chosen acid salts + triple action mould inhibitor. It is spread on the surface and/or sides of the pit before it is covered. **SilaSave** inhibits the growth of moulds, and fungi in the top layer and sides of the pit.

	Typical Silage Loss				Using SilaSave	
Silage Pit Dimensions (Ft)	Typical Surface Waste		Cost of Waste Silage		Silasave Buckets Required	Silasave Cost /Tonne Treated
	4”	6”	4”	6”		(Average pit height = 8 Ft)
36*75	53 Tonne	80 Tonnes	€2,100	€3,200	8	€0.87/Tonne
60*30	36 Tonne	54 Tonnes	€1,400	€2,100	5	€0.87/Tonne
60*120	142 Tonnes	215 Tonnes	€5,700	€8,600	20	€0.87/Tonne

Note - Typically 18 inches of ensiled Silage = 6 inches of waste unfeedable Silage.

Consider using SilaSave to;

- €€€ To save money - **SilaSave** is a cost-effective way of reducing surface waste on silage.
- **SilaSave** is a proven product, on the market now for over 20 years.
- Reduce labour at feeding time
- Reduce moulds and mycotoxins in your silage to improve herd performance

For further information please contact your local stockist.

Chlorine Free Cleaning

Chlorine is partially compensated by:

1. **Higher Caustic Concentrations**
   - 0.7% in hot water or 1% in cold water
2. **Hot water – 75/80 °C**
   - 7 hot washes per week recommended
   - 9L/unit is vital
   - Circulation time 8-10 mins
   - Finishing temperature of hot wash cycle 50°C
   - Less hot water is needed for powder-based products as they are typically 76% caustic vs. liquid products which are typically 20% caustic.
     - ➢ Liquid products should not be recycled.
3. **Increased use of acid-based products**
   - Depends on water hardness and presence of a water softener
   - Minimum of 3 descales per week or alternatively a ‘one for all’ acid-based product can be used 7 times per week.
4. **Peracetic acid**
   - Include peracetic acid in an additional final rinse as a disinfectant.
   - This is particularly useful in the final rinse when there is an issue with microbial quality of water supply or where there is a thermoduric bacteria issue in the plant.

- It has been proven more effective if carried out 1 hour before milking, however this may not be feasible in some situations.

❖ **How much detergent should I be using?**
This should be based on the recommended rate on the drum of detergent and the quantity of water in your wash trough. It is recommended 14L/unit for rinse cycles and 9L/unit for the main cycle (hot or cold).
Teagasc have a dairy wash trough calculator on their website at: https://www.teagasc.ie/rural-economy/farm-management/farm-machinery/machinery-calibration/dairy-wash-trough-calculator/

❖ **How can I maintain the detergent hot was cycle temperature?**
A warm post milking rinse can be used – 20/30°C
Send the first 10/20L of hot wash cycle to dump – this can be programmed on many auto washers.

Shorten circulation times to 8-10 mins.
Fast fill wash trough
Insulate wash trough/lid

If you have any queries do not hesitate to contact your milk quality advisor.

NEWS

Minimising Nitrate losses to Waters

In Ireland, all water policy and management are led by the Water Framework Directive. Under this directive Ireland has been set a target of achieving 'good status' for all waters in Ireland by 2027. However, despite a lot of good work over the last 20-30 years we are falling short in achieving this target and water quality has declined in recent years.

One of the areas of concern highlighted by the EPA is the elevated levels of nitrate in waters with estuaries, coastal waters and groundwater drinking supplies. The south and east of the country is particularly at risk. Agriculture provides 85% of the nitrate load in rural catchments.

There are a number of factors that influence the quantity of nitrate lost to waters and include:

- Type of land - free draining/poorly draining soil,
- The management of the land - intensive/extensive farming and enterprise type
- Weather - soil temperature, rainfall and drought.

Typically, in Ireland the catchments where elevated levels of nitrate occur is in the freer draining and more intensively farmed catchments in the south and east of the country. It is in these catchments that the EPA have indicated that reductions in overall tonnes of nitrogen lost to waters is required.

Minimising diffuse nitrate losses to waters

There are a number of practices and technologies that farmers can utilise to minimise diffuse nitrate losses to waters. The Agricultural Sustainability Support and Advisory Programme (ASSAP) offers farmers in 190 Priority Areas for Action (PAA's) a free and confidential advisory service. ASSAP provides advice on how to reduce the levels of nutrients, (including nitrate), lost to the environment. Some of the key components on how to achieve reductions in nitrate losses are outlined here:

- Improving your farms nitrogen use efficiency (NUE) by implementing the advice provided below. Grassland based systems of production are "leaky" by nature in terms of N loss. Current National Farm Survey Sustainability reports put Irish dairy farms at 25% NUE in terms of their ability to recover N from their N imports (feed, fertiliser etc.) via milk sales, cattle sales and grass/crop yield.
- Taking soil samples and implementation of a nutrient management plan. This will address deficiencies in phosphorus, potassium and lime that can impact on utilisation of nitrogen.
- For early season nitrogen applications, only spread if fields are suitable for tractor work, when water is drained sufficiently and where heavy rainfall is not forecast. Apply fertiliser N when soil temperature is greater than 6°C and rising. Typically, this occurs around the end of February however, this will vary across the country and from year to year.
- Target fields for early N that are most likely to respond to an early N application: fields at optimum soil fertility (pH, P and K), perennial ryegrass swards, recently reseeded or with a grass cover of greater than 400 kg DM/ha or 5 cm grass.
- Match chemical N applied to grass growth rates as this varies across the country. Apply up to 30kg N/ha (24 units N/ha) maximum in 1st split and avoid fields that have received an application of cattle slurry.
- LESS (Low Emission Slurry Spreading) increases the amount of N recovered for slurry and allows for a reduction in applied fertiliser N.
- Applying slurry in spring - 25 m^3/ha (2,500 gals/ac) by low emission application will supply ~25 kg/ha (~20 units/ac) of available N. It is important to reduce your chemical N application rates accordingly.
- It is important to reduce or cease nitrogen applications during the year depending on the severity of soil moisture deficits or drought conditions. Nitrogen fertiliser will not be taken up by the plant when applied to soils where growth rates are well below normal due to drought and will lead to fertiliser being potentially leached when rainfall returns.
- To ensure efficient and accurate application of fertiliser, calibrate fertiliser spreaders and use GPS equipment where available.
- Ensure heavy or prolonged rain is not forecast when spreading fertiliser/slurry.
- Use of grass-clover systems. Research in Moorepark has shown that white clover in the sward can replace 40% of chemical nitrogen (100 kg N/ha) and not affect herbage production, compared to a grass-only sward receiving 250 kg N/ha. This saving of 80 units N/acre is worth about €4,000 for a 100-acre farm.
- Use protected urea for early chemical N applications as this will help reduce the risk of nitrate leaching as well as reducing ammonia emissions.
- In tillage areas, grow cover or catch crops in autumn as these will capture nitrate in the soil that is available to be leached. Establish these crops as early as is possible in the autumn to maximise the nitrate taken up by the crop.

Checklist of Measures to Reduce GHG Emissions

Climate change is perhaps the greatest challenge facing the world right now. Farmers can be a part of the solution. What are you doing on your farm to reduce greenhouse gas (GHG) emissions? Have you thought about the climate actions that you can take in the future to reduce emissions? Take a few moments to read the following statements and tick those that you agree with. Only tick 'Yes' if you can answer with 100% honesty and certainty.

Animal Productivity Measures	Yes
1. My Herd EBI is increasing by €10 per year	☐
2. I make breeding/ culling decisions based on milk recording results	☐
3. I used 10% sexed semen (1 in 10 of total AI straws) in my herd in this year's breeding season	☐
4. I have a herd health plan & use bulk milk screening to monitor my herd for infectious diseases	☐
5. My herd average SCC is less than 100,000 cells/ml	☐
6. My herd average lactation number is > 4.0 (cows in herd)	☐
7. My herd replacement rate is less than 20%	☐
Fertiliser Measures	**Yes**
8. All of my fertiliser N spread this year has been spread as protected urea	☐
9. All of my soil samples are at optimum pH levels (> 6.2 for mineral soils, peat soils 5.5 – 5.8)	☐
10. All of my soil samples are at optimum P & K levels	☐
11. All of my grazing swards have clover incorporated	☐
12. I follow a Fertiliser Plan/ Nutrient Management Plan for all of my fertiliser decisions	☐
13. I have reduced my fertiliser N application rates in the last three years	☐
Grassland Management Measures	**Yes**
14. All of the milking platform area is well serviced with both roadways and water infrastructure	☐
15. I use the Spring and Autumn Rotation Planners to maximise length of the grazing season	☐
16. I record grass covers weekly on PastureBase (> 25 covers recorded per year)	☐
17. I make grassland management decisions based on PastureBase reports	☐
18. My pre-grazing cover during the main grazing season is 1,400 – 1,500 kgDM/Ha	☐
Slurry Measures	**Yes**
19. I have enough slurry storage to hold all slurries until 1st February	☐
20. 75% of all slurry is spread before 1st May	☐
21. Slurry is applied using LESS equipment (dribble bar, trailing shoe or injection system)	☐
22. I have reduced my fertiliser N application rates following slurry application	☐
General	**Yes**
23. I have a picture of what my farm will look like in five years time	☐
24. I know the carbon footprint for my farm	☐
25. I know what the total greenhouse gas (GHG) emissions are for my farm	☐

How do you score? Count the ticks /25

Stay connected with us!! Check out our website for weekly farming updates. Find us at www.arrabawn.ie Connect with us on social media on Twitter @arrabawncoop and @milk4profit for regular farming updates and promotional offers. We are also on Facebook at Arrabawn Co Op. For further information or advice on any subjects or products mentioned in this newsletter Please ring 087 6697010 Email: farmsupport@arrabawn.ie • Check out our Website: www.arrabawn.ie