



NEW Spring opening hours from Sunday February 12th



Monday 9am-6pm Tuesday 9am-6pm Wednesday 9am-6pm Thursday 9am-6pm Friday 9am-6pm Saturday 9am-5pm Sunday 11am-4pm

vide range of agricultural products including veterinary supplies, agri hardware and farm machinery ell as general DIY, hardware, household, pet care, clothing & footwear and gardening materials

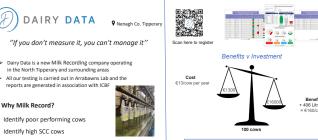








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Why Milk Record?

- Identify high SCC cows
- Inform management decisions on breeding & culling
- Improve herd genetics
- Increase the value of your herd



Managing SCC During the Calving Period

There are huge potential gains to be made by preventing mastitis infections around calving as the calving period can be critical in determining the infection status of the herd and individual cows throughout the rest of the lactation. Cows are very susceptible to infection around calving because their natural defence systems are low. Two weeks before and two weeks after calving are critical in managing mastitis and if >5% of your herd get mastitis in the first month after calving you should investigate and correct any problems. Around calving the udder is often filled with milk for long periods of time without being milked and bacteria may enter the end of the teat if udder pressure is high and the teat canal opens, they can then multiply and establish infections. There are two types of mastitis: contagious (e.g. Staph. aureus) and environmental (e.g. Strep. uberis and E. coli). Contagious mastitis causing bacteria usually reside in udder tissue and on teat skin and are most commonly spread during milking. Environmental mastitis causing bacteria survive in the cow's environment and while milking may facilitate their entry into the teat canal, the environment is the primary source of infection.

THE ENVIRONMENT

Calving boxes should be kept clean, with fresh dry bedding. If your knees are wet after kneeling it is not dry enough. Calving on slats and cubicles must be avoided. If calving outdoors the calving area should be sheltered, well drained and have minimal manure contamination. If there is water visible on the ground surface or in your wellie prints it is not dry enough for calving cows. Studies have shown that teat disinfection twice weekly in the 2-4 weeks before calving will reduce the challenge from environmental bacteria. Scrape passageways at least twice per day during this period and if automatic scrapers are present, they should run more frequently i.e. 6-8 times a day. Keep cubicles clean and dry by liming regularly. Keeping the housing dry is vital as it is more difficult for bacteria to survive and multiply under dry conditions.

IN THE PARLOUR

Do not leave cows dripping milk after calving, bring them into the dairy as soon as possible, check udders, machine milk and disinfect teats with a teat dip or spray. Freshly calved cow's teats are tight and tender, teat skin is often dry as it has been weeks since the last application of teat spray emollient and they are sometimes carrying dirt and manure. It is important for the first milking when the risk of new infection is highest to invest in teat preparation. Check all cows are milked out fully in all quarters and ensure cows are not over or under milked. Ensure milk let down is occurring particularly in heifers. Stressed or agitated cows may have disrupted oxytocin levels. Calving heifers separately is always good practice as heifers are more likely to be bullied causing stress and forced to calve in the less suitable area of the calving pad/pen.

IDENTIFYING CLINICAL MASTITIS CASES

Clinical mastitis cases are costly and if missed can markedly increase the bulk tank SCC. Early detection and treatment of clinical mastitis cases in the calving period reduces the risk of severe cases developing. It also reduces the risk of infection passing to other cos and developing chronic infections. Look for swollen quarters and check for heat and pain in all freshly calved cows. Check milk from all quarters of freshly calved cows every milking for the first 8 milking's (the colostrum and transition phase). Look for watery milk, clots, or flecks. With E. coli mastitis visible changes may not always be obvious. Check the healthy quarters first so infection is not transferred and disinfect gloves after examination. Consider taking samples for culture to identify the bacteria involved, these samples can be frozen for up to 4 months and if you become worried about the number of clinical cases you are having you can get them tested.

WARNING: When using test buckets (diversion buckets) for a prolonged period at or below the height of the cluster, there is a risk of damaging teats from overmilking. This is because the extra vacuum that usually lifts milk up into the milk line will be operating at the cluster. To avoid this issue only use test buckets for a short period of time (5-7 days) and avoid overmilking. Many farmers are using selective dry cow treatment programmes when drying off cows and must remember that residual teat sealer is still an issue after calving so cows' milk should be withheld from the bulk tank for 6-8 milking's post calving regardless of antibiotic usage to minimise the amount of residual product entering the milk tank. If milk contaminated with teat sealer is used in cheese manufacturing, it can lead to black spot blemishes in maturing cheese. It is vitally important to ensure all sealant is milked out. Colostrum also has a higher acidity level than milk and may cause your bulk tank acidity levels to be raised if included in the bulk tank.



CALF CARE EVENT

On the 18th January Arrabawn Co-Op along with AHI ran a CalfCare Event, just outside Eyrecourt, county Galway. Michael Burns opened up his farm to host over 70 people on day, Despite very difficult weather conditions on the day, it did not stop any of our suppliers coming along on the day. There was a great range of speakers on the day covering a wide range of topics from birth to weaning of calves. There was some great questions and debates had on the day. If you missed the event, below is a brief summary of the information given on the day.

BELOW ARE THE KEY TALKING POINTS FROM THE EVENT:

Know your numbers:

- Allow 2.0-2.5m² per calf in all pens over stocked sheds lead to increased risk of disease spreading
- Ensure fresh air is able to circulate efficiently in all sheds
- 8-12 calves per group max. easier to manage.
- Keep indoor temperatures at 17°C to ensure maximum thrive, with no drafts.
- Ensure plenty of straw for calves to "nest", allowing them to sleep in a warm, dry area.
- Calf Jackets are a great addition to add extra heat for sick or weak calves.
- A standard bay (15ft x22ft) can comfortably house 15 calves.
- A slope of 1:20 will ensure good drainage in pens.
- Feeding young calves:
- The first few weeks of life are crucial for ensuring that animals thrive and maximise outputs later in life. Calves have huge potential to convert feed to growing and thriving.
- Calves (40kg birthweight) should get 3L of colostrum within the first 2 hours of life. This volume should be adjusted based on the size of the calf.
 - E.g. A jersey type calf should get 2.5L and a larger Limousine calf get 4L
- Feed transition milk (milking 2-6) to calves aged 2-5 days old, then move to whole milk or transition milk.
- Although the antibody level in this milk is dropped, the milk dose have a higher nutritional value than whole milk.
- If reheating colostrum, do so by gently warming in a bucket of warm water. Boiling or heating too quickly will destroy the antibodies, leaving the calf with no immune system.
- 4L per day is RESTRICTIVE feeding and should be avoided.
- Calves need 6-8L of milk or milk replacer per day.
- More milk feed results in better thrive, better immune systems, better rumen development, lower rates of disease and lower mortality.
- When feeding milk replacer look for the below values at a minimum.
 - Protein 23-26%
 - Fat 16-20%
 - Ash 7-8%
 - Fibre Max 0.1%
- Some powders on the market are slightly cheaper with protein values of 18-20%, these are not sufficient and benefit the calf in the long run.
- When mixing powders do not use boiling water, water above 40°C will destroy the proteins in the powder and are useless to the calf.
- When introducing concentrates to calves give a handful daily. Avoid waste by only giving a handful at a time, increase amounts as their appetites increase.

Management at weaning:

- Avoid abrupt weaning. Slowly decrease milk over the course of 10-14 days, to allow the calf to adjust.
- Ensure calves are eating 1kgs of concentrates per day.
- Allow 5L of water per 1kg of concentrates eaten. Water and concentrates are essential for good rumen development.
- Pellets or coarse rations are both good to be feed to calves.

Summer Scour:

Summer Scour is typically seen in dairy calves shortly after been let out to grass. Signs include extreme scour, no thrive, pot belly, weight

- loss and in severe cases ulcers in mouth.
- The exact cause is not known, but it typically occurs in calves let out to lush green after grass or leafy green grass.
- Some things to help reduce incidences:
- Put calves in paddocks with strong/stemmy grass, Calves need the stemmy grass to ruminate and further development stomachs.
- Give calves hay/straw at grass for extra fibres.
- Do not put calves into paddocks which have been recently cut for
- Back fence paddocks to ensure calves continue to eat stemmy grass not regrowth.
- Calve will prefer the sweeter, fresh grass to stemmy grass but it will not benefit their rumen development.

Identify common problems Respiratory

Signs of good health and vigour

Look for

signs of disease

early























Respiratory

















Signs of Calf Health

Late

signs of

disease

- Remove Removing the scouring calf from the group this helps prevent the spread of infection and gives the calf a better chance of recovery. Calves should be isolated in a well bedded pen well away from other healthy calves.
- Rehydrate The most important part of treating scour is fluids. Give two extra feeds (2 litres at each extra feed) per day of a good quality oral rehydration solution when the calf starts scouring and while scouring persists, even if the calf is bright and alert. These should be given separately from the milk feeds (for example, at lunchtime and again late in the evening). It is safe to give these fluids by stomach tube, assuming you are competent and confident with the technique.
- Feed Milk Continue to offer scouring calves normal amounts of milk or milk replacer as long as they want to drink. Do not feed diluted milk to calves. It does not cause, worsen or prolong scour. Milk should not be stomach tubes, only electrolytes can be tubed.
- Type Depending on the cause of scour there are other treatments specific to the type of scour. It is very useful to know the diagnosis as there are some treatments that can be used as preventatives also, which may help in the outbreak type scenario.
 - Do I need to give antibiotics? Antibiotics do not work against parasites and viruses that most often are responsible for scour. They should not be routinely used in the management of mildest cases of calf diarrhoea. However, they should be used (by injection form only), if the calf is very sick, if it has blood in the scour or if it has a temperature >39.50C.
- In the case of an outbreak always contact your vet for the best advice.









FEBRUARY SPECIALS

























NEWS

Reduce bulk tank SCC

Add value to animals Improve Yeild and solids

Breeding decisionsbreed best Accurate EBI's Identify best and cows to cu

Benefits of Milk Recording

Milk Recording is a tool which is vital on every farm to make data-based decisions! So why not start this year?

- Reducing bulk tank SCC will be easily seen as cows contributing to the high value can be easily removed. 2 or 3 cows in a 100-cow herd can drive up the overall value very easily.
- 2. Earn more for surplus heifers or cows being sold from by having the data to back up their EBI's and potential milk supply.
- By knowing the amount of milk solids being produced you can feed more
 accurately according to their production values and removing cows with high
 SCC will stop the spread of disease in the herd ensure udders are healthy
 and in turn raise solids.
- Breed from the best cows only, use the best bulls on your best cows to produce great calves. Don't breed from poor performers! This can only be known from milk recording regularly.
- 5. EBI values are great but don't always give the full pictures. Two cows with the same EBI's can vary hugely in milk volumes produced. One cow may have higher milk solids values while another cow with the same EBI could be made up from fertility values.
- 6. Identify cows to culls follows on from breeding decisions. The bottom few cows in the herd should be ideally removed each year to allow for younger cows with better genetics to enter the herd. Cows with millionaire values for SCC have no place being in the herd and be shipped out!

Early Cow Nutrition- 100 days post Calving.

Early lactation is most stressful time of the year for cows. They calf down, reach peak yield and prepare to cycle again all in 2-3 months. All these events require a lot of energy which must be supplemented through the diet. It is natural that cows will lose some weight but it can be controlled with good diet management.

Cows require 17-18% Crude Protein at this time. Ensure to choose a
good quality dairy nut with the sufficient protein content. This protein
will support milk peak yield, maintain body condition and general health
(immune function). Cows may need up to 8-10Kgs of concentrates in
early lactation, ideally spilt into morning and evening feed.

Silage Protein + Ration Protein ÷ 2 = ideally 17-18%

- E.g » 13%Silage + 22% Ration = 17.5% CP in diet
- The grass protein levels in spring can range between 22-24% protein.
 If cows are out on grass during the day, a 16% ration would be plenty sufficient in their diets.
- Energy and carbohydrates are also critical to balance. Ketosis and NEB-Negative Energy Balance are a result of low energy intake, which will have a knock-on effect on feed intake, loss of BCS, lower yield, longer to cycle again.
- A cow could lose 0.7kg/day if not feed its daily energy requirements.
 A high genetic merit cow will mobilise body fat at a higher rate than a lower genetic merit cow.
- Cows should be encouraged to up their feed intake as every additional kg of Dry Matter consumed can support 2-2.4kg more milk. Feed intake can be encouraged by;
 - Good forage quality- DM and DMD.
 - Increased feeding frequency- little and often. Consistent feeding times.
 - Feed Infront of cattle 20hrs of the day.
 - Forage length of at least 2.6cm to encourage chewing and rumination.
 - Avoid major changes in diet
 - Cows tend to eat straight after milking, ensure sufficient feed is available directly after milking.
 - High producing cows will tend to eat 12 times a day for roughly 23 minute.





To Maximise milk output from cows feed

Milk-MaX

- Contains high Levels of cereals and digestible fibres suitable for grass based feeding
- High Performance product containing quality protein sources and rumen enhancers

Get the best return from your cows right to the season end



NEWS I

biocel.

BIOCEL LAUNCH **NEW** COLDWASH CLEANING PRODUCTS FOR THE 2023 DAIRY SEASON.

CirCool

- Unique Cold Wash Technology
- Delivers Effective Milk Plant Cleaning With Cold
 Water
- Cuts Down On Water Heating Costs
- Reduces CO2 Emissions









Peter Hynes - Cork – "CirCool worked excellently for me overcoming issues with target temperature when I moved to Chlorine free cleaning"

Jerry Ryan – Tipperary - "I was surprised how well CirCool worked for me using Cold Washing, delivering a clean plant and excellent TBC/ Thermoduric results"

Biocel Ltd offer a full support package for all our Dairy Hygiene & Teat Care products and our Technical Team are available for Telephone & On Farm support by contacting info@biocel.ie or

For more information on CirCool contact: Donal Sheahan – Area Manager South West Tel: 086-2560335 James Taylor – Area Manager Manager South East & North Tel:086-1304839

The advantages for young calves are:

- Prevention of nutritional scouring
- Enhances microbial development in young calf changing from milk to concentrates
- Improves coat condition and bone development
- Improved concentrate intake and better thrive in calves





Greenvale Coarse Calf Range

Give Your Calves the Best Start in Life



GREENVALE COARSE CALF MUESLI (18%) is designed to ensure your calves get the best possible start in life. It is made from a unique blend of cooked ingredients and other quality ingredients (toasted barley, maize, full fat soya,) to guarantee a high performing starter feed for calves. It is intended for feeding from birth to ten months. Coarse calf muesli also contains yeast improve rumen function.

GREENVALE COARSE CALF REARER (17%)

is a ration of highly digestible ingredients, including cooked barley and flaked maize. Specific palatability agents are used in conjunction with the finest ingredients to make this ration extremely appetising to young stock. It is specifically formulated for feeding to calves as a follow on to Coarse Calf Muesli 18%.



Contact your local Arrabawn / Greenvale/Dan O'Connor Feeds Rep
– or call to any Arrabawn branch



biocel.



Biocel Launch NEW Coldwash Cleaning Products for the 2023 Dairy Season.

Jerry Ryan is a Dairy farmer from Cashel Co Tipperary supplying Centenary Coop milking with a 12-unit DairyMaster parlour with Milk Meters and Auto washer.

I contacted Biocel with a TBC problem. James from Biocel called out to the farm and advised a problem with the tank wash. This was corrected but he outlined the cloudy meters and protein in the claw bowl and was this the start of a storm brewing? James outlined that this was down to low temperature at the end of the wash and suggested I go on the new CirCool L wash programme. This is a 16 wash per week programme with a cold wash with CirCool L after every milking and Hot Circo-Acid 3 wash twice a week. This is a very simple routine to follow, I was sceptical at first as I have never had a cold washing routine suggested to me for Chlorine Free cleaning. James outlined the reasons in a straight forward and easy to understand manner. We set up the programme and the results have been impressive. The parlour has never looked cleaner and there is no cloudiness in the meters. The programme is straight forward and simple to follow and I can't speak highly enough of the support Biocel have given me on the move to this programme. I will be using it from now on to keep the plant clean, ensuring good TBC and Thermodurics, with the extra benefit of the saving in energy costs due to a big reduction in hot water usage.



Biocel Ltd offer a full support package for all our Dairy Hygiene & Teat Care products and our Technical Team are available for Telephone & On Farm support by contacting info@biocel.ie or 021 4353516



Three reasons to use Protected Urea in 2023

Use protected urea, it's cheaper than CAN or standard urea and delivers 13% higher yield than straight urea.

Reason 1. Protected urea is cheaper than CAN and straight urea.

Protected urea is cheaper than CAN on a cost per kg of nitrogen basis, and, while it may appear slightly dearer than ordinary urea, it will give the same "effective N" as urea, at a 12.5% lower spreading rate.

Table 1 summarises the N lost from the three N fertiliser products as ammonia and nitrous oxide nitrogen gases. The EPA estimates that ammonia loss from urea is 15.5% on average. Both protected urea and CAN having lower rates of N loss (79% reduction for protected urea = 3.3% loss; 85% reduction for CAN = 2.3% loss). Published research has quantified direct N loss as nitrous oxide from urea (0.25%), protected urea (0.4%) and CAN (1.49%). In summary, protected urea curtails N losses by reducing (1) ammonia N emissions compared with straight urea, and (2) nitrous oxide N emissions compared to CAN. This would make protected urea more cost effective than both urea and CAN as spread.

N loss pathway	Urea	Protected Urea	CAN	
	% N lost	% N lost	% N lost	
Ammonia	15.5	3.30	2.30	
Nitrous oxide	0.25	0.40	1.49	

While the cost per kg of nitrogen is cheapest for straight urea (Table 2), when the extra losses associated with straight urea are accounted for, protected urea is cheaper. See example 1 below.

Table 2: Relative Cost per kg N for Different Fertiliser Types

	CAN	NBPT Protected urea	Urea
kg N / tonne	270 kg N	460 kg N	460 kg N
€/tonne	€750	€1,000	€950
€/køN	€2.78	€2.17	€2.06

Example 1

Assuming a rate of 50 kg of N spread as protected urea or 50 kg of N spread as CAN in March 2023. The equivalent quantity of N as straight urea that would need to be spread is 57kg, allowing for the extra losses with straight urea. If we assume costs of urea = \$950/t, protected urea = \$1,000/t, CAN = \$750/t, Table 2 highlights the difference in cost with protected urea being the cheapest option.

Table 3: Relative Cost per kg N for Different Fertiliser Types

	CAN	NBPT Protected urea	Urea
kg N spread	50kg	50kg	57kg
€/tonne	€750	€1,000	€950
Cost of the application	£139	£109	£118

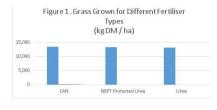
At these prices, the farmer will get better value for money by using protected urea (as opposed to urea). The example above, using current fertiliser prices, shows that the extra cost of the urease inhibitor more than covers its cost, if it saves 7 kg of N. The value of retaining N that had previously been lost as ammonia has increased dramatically in line with the increased fertiliser cost. Also, in a situation where N application rate is limited, it makes sense to use less of a more effective product.

Reason 2: The quantity of grass grown by using CAN, protected urea and urea will be similar across all fertiliser types.

In a long-term trial at Johnstown Castle, the grass grown by the protected urea was 13% ahead of urea on average over 6 years (drought year excluded).

Reason 3

By switching to 100% protected urea on dairy farms, total farm emissions have the potential to be reduced by 7-8% at a spreading rate of between 200 to 250 kg N / ha. The equivalent savings on total emissions on suckler farms is 1-2%, at a spreading rate of 60 to 80 kg N



/ ha. Straight P and K fertilisers or blends such as 07-30 or 010-20 may need to be used with protected urea to balance nutrient requirements.



Table 4: Benefits of using different fertiliser types.

	Protected Urea	CAN	Urea
Grassgrown	V	V	٧
Lowest ammonia emissions	V		
Lowest GHG emissions	√		V
Lowest GHG and ammonia emissions	V		
Lowest cost € / kg of nitrogen			V
Lowest cost € / kg of effective N	V		

GET YOUR SLURRY ANALYSED FOR NUTRIENT CONTENT.

Knowing the quality of your slurry can help make decisions on application, ensuring its use is optimised and not wasted. Use a hydrometer to estimate the nutrient content of your slurry. Check out this video which explains the process Measuring slurry with an Hydrometer. Alternatively, send a sample to a laboratory for analysis.

SPREADING SLURRY

Spread slurry close to when grass growth is taking off using LESS equipment. Save good quality slurry for silage ground which has the biggest demand.

CONTINUE TO SPREAD LIME.

Continue to spread lime through February to save up to 80 kg N/ha.

GRAZING ANIMALS FEED THEMSELVES AND SPREAD THEIR SLURRY.

Feeding your animals, avoiding poaching, and grazing out paddocks are three golden rules for spring grazing and should be considered in that order. Every day at grass is worth €2.70 per dairy cow and €2/LU for drystock farms. Not to mention saving on the amount of fodder required to make for next winter.

Here are some tips to ensure you earn more money this spring through early grazing. **THE GRASS**:

Let stock out to graze on the right grass covers. This means lighter covers first, not the heavier ones. Ideally let animals graze covers 600-800 Kg DM/ha (7cm) for the first few weeks (between 1 and 2 fists high of grass as guide if not familiar with measurements).

When deciding which paddocks to graze first, choose ones closer to the yard, drier (walk to check conditions underfoot), sheltered, and square in shape. Avoid soft paddocks (unless good ground conditions).

THE INFRASTRUCTURE:

Ensure the paddocks you choose to begin grazing have multiple access points ideally from a hard-surfaced roadway. Be prepared to strip-graze and back-fence to avoid poaching and utilise grass. Be mindful of access to water also.

THE ANIMAL

Early grazing usually means ground conditions are tender in places. To reduce the risk of damaging soil and swards let out younger/lighter animals to graze first. They can adapt to grazing quickly and graze through area at a much lower risk. On-off grazing may be a good option for farms carrying heavier livestock.

THE FARMER:

Most important influence on getting out grazing early is the farmer and their mind-set. Being flexible is the name of the game here. Cattle can go in and out and to achieve early grazing this is likely to happen at some point. Being open to this and ready for it is key!

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 O87 9482791 Email: farmsupport@arrabawn.ie • Check out our Website: www.arrabawn.ie