April/May 2021

TIPPERARY
COOPERATIVE

NEWSLETTER

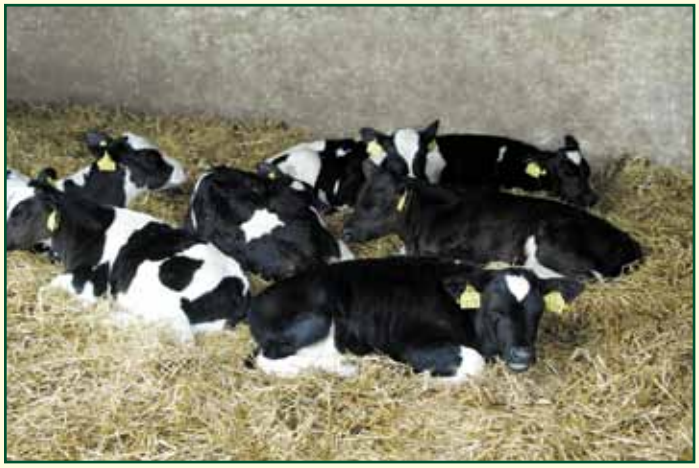
In this newsletter we will be covering the following topics:

ABOMASAL BLOAT IN CALVES

Compiled by Martin Kavanagh, MVB Cert DHH

The reported incidence of bloat resulting in dead calves on farm is increasing. There have been many theories and most often the milk replacer, the automatic feeder or both is blamed. In my experience of looking at these cases for the last 10 years, no single diet type or feeding method could be identified as the definite cause of bloat. What is common today is feeding more milk replacer, both in quantity and quality, to bigger groups of calves, where stress and competition between calves is a factor in disease outbreaks overall.

Acute bloat in the abomasum, the stomach where the milk is started to be digested, is a result of a rapid growth of bacteria, generally clostridia, that produce gas, and destroy the lining of the stomach. The calf has a sudden severe pain, will swell in hours, and in severe cases the majority die regardless of treatment. In mild cases, dosing with liquid paraffin and oral penicillin will often resolve the situation. Severe cases have a 'gut twist' or rupture their stomachs. On post-mortem, these calves will have an inflamed and bloody lining of the abomasum with clostridia or sarcinia bacteria present. The post-mortem will state the cause of death as 'abomasitis' or inflammation of the lining of the abomasum. However, it will not tell you anything about the possible causes.



The cause most referenced in the scientific literature is that the rate of emptying of the abomasum is slowed down and this allows bacteria to grow on the high-quality proteins and sugars in the feed resulting in a sudden bloat. Reported risk factors are milk replacers with a high osmolality i.e., a high concentration of particles and minerals in the liquid, improper or variance in the mixing of milk replacers, cold milk, large volumes fed in one go, lack of water access for calves in the pen, adding antibiotics or electrolytes to the milk replacer, and dirty feeders and teats. Remember that whole milk generally has less solids and has a lower osmolality than mixed milk replacers. So, the risk with any replacer mixed at high concentration and being fed to a calf drinking a high volume quickly or under stress, can be higher. ***However, there is no one definite cause.***

Solving the problem requires a review of the feeding system and the calf environment.

The following are key areas to check:

- Is the milk replacer being mixed properly and matching the concentration expected? The milk can be tested using a refractometer just before feeding to see if it is measuring correctly.
- Is there anything added to the replacer?
- Is the automatic machine water and powder supply calibrated correctly for every batch of replacer?
- Check the milk temperature: mixing at 40-45°C, feeding at 35-38°C.

Continued on page 2

- Are the teats used in good condition and not too free?
- Teats on an auto feeder should be sanitised daily; alternate a set of teats and leave a set in Milton or Peracetic acid every day.
- Is the auto feeder washing and sterilising properly every day?
- Check the meal size; on auto systems the maximum meal is between 2 and 2.5 litres per feed. Think of the stress the calf is under to feed quickly while other calves are queuing.
- Group size: limit the calf number per feed station to less than 20 and give the calves enough space; more than 2m2 per calf.
- Do not keep introducing new calves to the group – it creates competition for the feed station.
- If using a group feeder, feed at the same times everyday and reduce calf numbers per feeder: 10 teat feeder 8 calves, 12 teat 10 calves and so on. Again, reduce competitive stress.
- Check the water supply in the pen and check if they can access it. 1 drinker per 20 calves. Calves 3-4 weeks of age will drink 3 litres of water per day in addition to their milk intake.
- Check the water supply to the automatic feeder; the feeder needs water at constant pressure. On some farms, the micro filters in auto-feeders block if the water is too hard or has a high iron concentration. All water should be filtered before it reaches the feeder.

The first instinct is to blame the replacer itself. The main differences with milk replacers are the amount fed, the 'mixability', the level of plant protein and fibre, and the ash contents. It can be extremely hard to distinguish the differences from the label

itself. Seek independent advice on replacers and especially on feeding rates. High protein replacers i.e., above 24% are useful for feeding high performing dairy stock as they achieve good frame growth, but only if fed at more than 800 grams per day. Underfeeding replacers will severely curtail calf growth and leave them open to more disease problems. Whole milk will have ~10% more energy than replacer for the same volume.

Automatic feeders are an excellent labour-saving device. Like all technologies on farm, they must be managed correctly to get the best out of them. How they are installed and positioned, group sizes, pen management, servicing, and calibration, will affect their success.

If there are issues with calf nutrition, seek independent advice. What works for a neighbour may not work for your system and vice versa. It is important to match the feeding regime with your goals and your farm's unique circumstances.

GETTING BACK ON TRACK WITH GRAZING IN APRIL

Compiled by John Maher Teagasc, Moorepark

The 2nd rotation should begin when the sward is almost right for grazing i.e. 1100 – 1200kg DM/ha. It is important to walk the farm and keep an eye on the first 3-4 paddocks that were grazed early this spring. By watching what is happening in terms of growth on these paddocks will determine whether you will speed up or slow down grazing of the paddocks at the end of the first round in April. Some padlocks graze early this spring may need to be grazed before the first rotation finishes. Reseeded paddocks are a perfect example of this scenario.

April is also the clean-out month. Grass will start turning reproductive from late April/early May. Getting the sward cleaned before this process starts is important. Many paddocks were under-grazed this spring due to poor grazing conditions so April is the opportunity to correct this. This task is made easier by entering the right cover of grass and by starting the second rotation on time. There is also the temptation to focus on maximising cow performance and not to ask the herd to graze swards out well. This approach will result in poorer quality swards in the mid-season. There will be a very small benefit in milk yield achieved in April but doing this will result in much poorer cow performance in the mid-season.

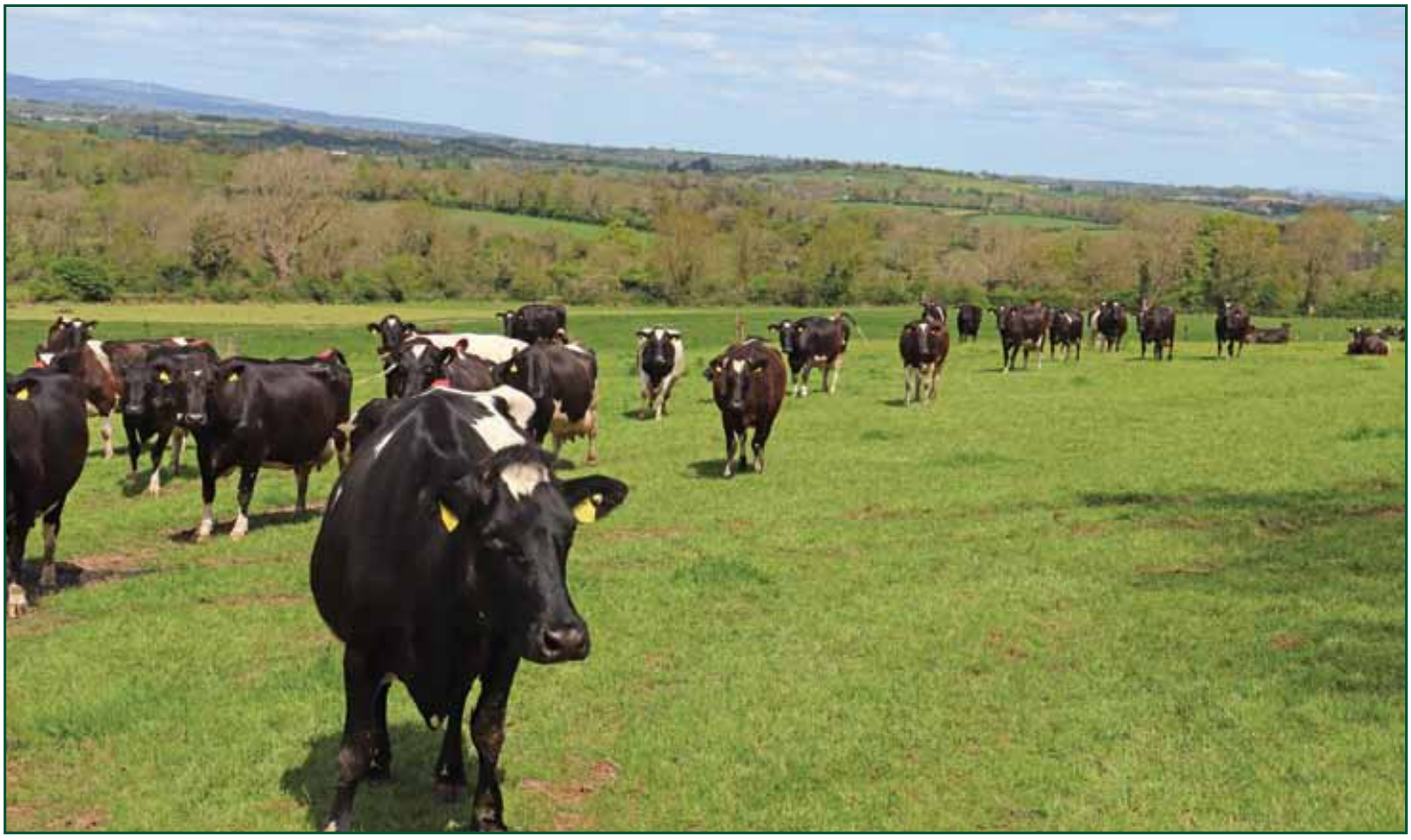
It is critical that cows have access to enough grass and eat top quality grass (1.05-1.1 UFL) every day in April to ensure that a high level of herd performance is reached. This means that the cows must enter covers of about 1300-1400 kg DM/ha every day during the second rotation.

For those framers who measure grass, try to target a cover of about 150-160kgDM/cow on the farm at the start of the 2nd round of grazing. The farm cover cannot fall below 550-600kg DM/ha.

Fertiliser Plan for April

The second application of urea fertiliser should have been spread in late March. Fertiliser N should be applied this week if the part of the farm is behind on fertiliser application so that there is a total of 60-70 units per acre spread. Paddocks that received no slurry this year should get 1.5 bags/acre of 18:612+S in April and fertiliser N plus Sulphur (25 units N/acre) applied to the other part of the grazing platform.

An application of fertiliser P & K will may also be applied to help damaged pasture recover. Phosphorus (P) in particular is very important for growth of grass and grass root repair in spring.



The target is to have 80-90 units of N/acre through a combination of slurry N and fertiliser N applied to the grazing platform by early May.

Fertilising Grass for 1st Cut Silage:

Silage crops require about 90-100 units of N/acre, 16-20 units of P/acre and about 100 units of K/acre. An application of 3,000 gals of slurry/acre this spring will meet most of the P & K requirements for the silage crop. Ideally this should have happened in March. Otherwise fertiliser products like 0:7:30 + S should be applied to meet the P & K and sulphur requirement of the crop. Although, this should be reduced to about 2 bags/acre if being applied from now on in April to avoid excessive K in silage. Grass silage crops have a requirement of 10-15 units of Sulphur per acre. The application of Sulphur to will improve grass DM yields, quality and protein content. Every 1000 gals/acre of slurry applied will supply about 2-3 units of Sulphur. If slurry was applied in January, some of this sulphur may have been lost in February with high rainfall.

Docks in Silage Swards - DoxstarPro

Where docks are a problem in fields closed for first-cut silage, there are big advantages in getting rid of them before the silage is cut. And when it comes to product selection, there is nothing to beat DoxstarPro, the specialist translocated herbicide for docks.

Even a moderate infestation of docks will cut dry matter yield by at least a tonne/acre and significantly impair quality of pit and baled silage.

As well as boosting yield and quality, a pre-harvesting application of DoxstarPro will also ensure a clean, productive sward for a second cut of silage or grazing.

Containing two powerful chemicals, triclopyr and fluroxypyr, DoxstarPro ensures the most effective kill of the dock root system which can be up to a metre deep. It is also highly effective on dandelions and chickweed.

Timing

The next couple of weeks offer an ideal opportunity to apply DoxstarPro to many dock-infested silage swards. The ideal time to spray is two to four weeks after nitrogen is applied and docks are at the perfect stage for an effective kill.

Best results are achieved when docks are actively growing, are 15-25cm high or across and before a seed head appears. When the plant starts to produce seeds, more nutrients are translocated up the plant. Therefore, less chemical is taken down to the roots, leading to a reduction in long term control. The key requirement is to wait a minimum of three weeks after DoxstarPro is applied before cutting the silage. This ensures that the chemicals get fully translocated down to the root system, a vital factor in achieving long-term control.

Safety to grass

Unlike dicamba-based products, DoxstarPro does not cause any check to grass growth.

In contrast, treatment with dicamba-based products resulted in less than 50% of dock control one year after treatment.

DOXSTARPRO – FORMULA FOR SUCCESS

1. **Apply DoxstarPro to silage swards a minimum of three weeks before cutting.**
2. **Apply at a rate of two litres/ha as a single application or two applications of one litre/ha six to 12 months apart.**
3. **Use a minimum of 300 litres water/ha (30gals/acre). Increase to 400 litres/ha to overcome shading by dense grass or dense dock populations.**
4. **Where silage swards are too advanced for a pre-cut application, wait until silage is cut and apply DoxstarPro after three to four weeks' regrowth.**

Sire Advice

Sire advice is an application that is available to all dairy HerdPlus users. This application allows you to select the bulls you wish to use for the breeding season and match these bulls to the most suitablevv cows. The application allows users to do this in one of two ways:

1. Sire Advice Plus – Narrow your selection of bulls by entering ranges for particular traits of importance for your herd e.g. you may only want bulls above a certain % on protein, or bulls from a certain AI organisation etc.
2. Manually Enter Bulls – If you have already selected your team of bulls you can simply enter these bulls and run the application.

Use Bull Teams

It is recommended to use a team of bulls across your cows and heifers. The recommended team size varies depending on herd size (see table). It is recommended that the bull teams are used evenly across the herd (max 15% per bull).

Refer to your **EBI scorecard** recently posted to you from ICBF to identify your own herd strengths and weaknesses before selecting your bull team.

Herd Size (Incl. Heifers)	Recommended minimum number of Bulls
0-50	7
50-100	7
100-150	8
150-200	10
200-250	11
250-300	12
300-350	13
350-400	14

- Target high EBI females (typically maiden heifers, first and second calvers) to breed your next generation of dairy herd replacements.
- Lower EBI cows should be bred to beef AI from the start of the breeding season. .Use the Dairy Beef Index (**DBI**) to select suitable beef AI sires for your dairy herd.
- Again, a team of bulls should be used with a focus on the various ages/requirements of your herd i.e., maiden heifers, young cows and mature cows. Use bulls that are classified as "LOW Risk of Dairy Heifer Calving Difficulty" on heifers. Bulls with higher beef merit figures should then be selected for older animals.

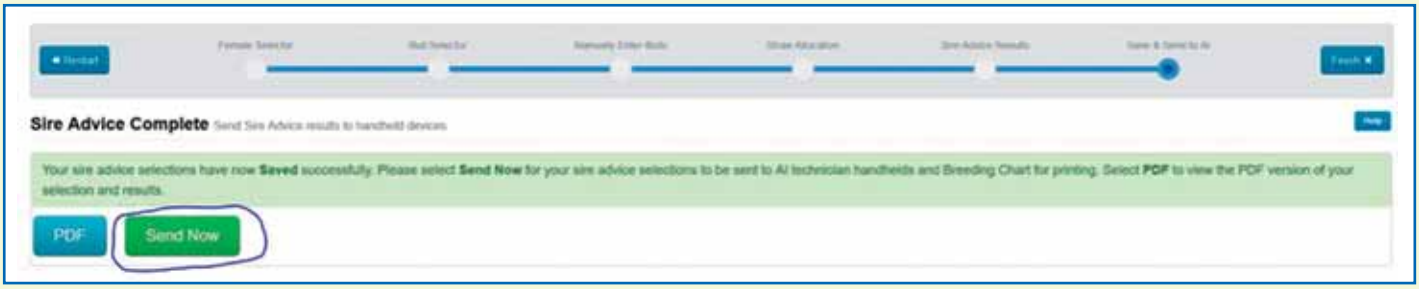
The HerdPlus Sire Advice application helps to accelerate genetic gain by matching the selected bulls with the most suitable cows. The Sire Advice mating program generates the best mating's to maximize the **genetic gain** in your herd in terms of EBI including milk and fertility sub-indexes. Sire Advice will then minimize differences between Milk & Fert. sub index's and minimize variation on milk kgs. This will help to breed a **more balanced** next generation dairy female replacement.

Once saved, the suggested matings are made available to AI technicians via handhelds and are also made available to farmers via HerdPlus Breeding Charts.

Please note: Sire Advice will not save to Breeding Chart and AI handheld unless you tell it to. You have to click 'Send Now' for mating's to save to breeding chart and AI handheld

The deadline for the submission of HerdPlus Dairy Sire Advice for inclusion in the HerdPlus Breeding Chart is **Monday 5th April**. Please reply with the word **"Chart"** to text message from ICBF if you wish to receive a breeding chart. Herd-owners will have until this date to run the dairy sire advice for their herd so that the chosen mating's can be included in the Breeding charts before they are printed.

Any queries or feedback on Sire Advice, please call the HerddPlus team: 023-8820452 or email: query@icbf.com.



RESEEDING

Why reseed?

Productive grassland farms must have perennial ryegrass dominated swards. Recent Moorepark research shows that old permanent pastures produce, on average 3 tonne DM/ha/yr less than perennial ryegrass dominated swards. Old permanent pasture is up to 25% less responsive to available nutrients such as nitrogen than perennial ryegrass dominated swards. Reseeding is a highly cost effective investment. With regular reseeding the grass growth capacity of the farm can be increased substantially and the annual return on investment is large. Please see below the top tips to a successful reseeded sward:

Tips to Ensure a successful reseeded sward

- Spray off the old sward. If there are perennial weeds such as docks and ragwort present use a glyphosate spray.
- Begin cultivation
- Ensure a low level of thrash in the pre-cultivation sward, particularly for minimum cultivation techniques (graze tight or top or mow tightly). Trash will be buried if ploughing.
- Target a short turnaround time - <60 days.
- Use 14kgs/acre of selected grass seed at sowing.
- Always use the DAFM Recommended List, the AFBI Recommended List (Northern Ireland) and the Pasture Profit Index to identify suitable cultivars. The recommended list evaluates cultivars across years and sites and is the only evidence available of the potential performance of grass cultivars in Ireland.
- Use a post emergence spray early (5-6 weeks post sowing/at the seedling stage of weeds).
- Ensure a firm seed bed, irrespective of reseeding method used.
- Roll to ensure seed to soil contact, even if rolling isn't possible at sowing, roll before first grazing – otherwise loose plants will get pulled at grazing.
- Monitor for pest attack, (slugs, leatherjackets, frit fly and rabbits are the main threats).
- The target soil pH is 6.3 for mineral soils and pH 5.5 for peat soils *(Do not apply more than 7.5 t lime/ha (3 t/ac) in a single application).*
- P and K must be brought up to soil Index 3.
- N is essential for good grass establishment and growth *(Apply 40 kg N/ha (30 units N/ac) when reseeding, 3 Bags/ Acre of 10:10:20 is a popular choice to help establish a grass sward).*
- After ploughing permanent pasture for reseeding, paddocks should be soil tested again the following year to ensure that the fertility of the soil brought to the surface by ploughing is correct for grass growth.

The key traits in a seasonal grass based production system are:

- High seasonal production (spring and autumn)
- High mid-season quality
- Good ground cover or persistency score

When the decision to reseed is made, the next major decision is selecting the most appropriate grass cultivar or cultivars. The first thing to consider is the primary target use of the field:

Is it predominantly grazing or is it generally used as a silage paddock?

How much tetraploid should be used? A balance between quality, dry matter productivity and sward density is generally what must be achieved.

Combining diploids and tetraploids in a mixture will create a dense, high quality sward – ensure you select cultivars which express high performance in the key traits. Increasing the proportion of diploids on heavier soils is recommended to create better ground cover.

Management of New Reseeds

0 - 8 Weeks

- Spray weed before grazing.
- Graze when grass is at the 2 leaf stage.
- Ensure you have correct levels of N,P&K spread in this time.
- Apply slug pellets if needed.

Second Grazing Onwards

- Try to graze at 1000-1400 kgs Dm/ha (6-7cm)
- Re spray weeds if necessary

Autumn

- Keep grazing at 1000-1400 kg DM/ha
- Apply light application of slurry if possible
- Graze off well before first winter (>4cm)

Second Year

- Ensure adequate nitrogen is spread.
- Monitor P & K status

FARM DEVELOPMENT PROGRAMME

Please see the current data on the focus farms in the Tipperary Co-op/Teagasc Farm Development programme.

Week Ending 2nd April 2021	John, Charlotte and John G Crowe	Peter Hughes and Paul Maguire	Glen Tour Farms	Seamus, James and Janice Farrell	T.J. Ryan	Solohead Research Farm
Milk Yield (Litres)	28	30	27	30.5	30.2	26
Butterfat %	4.52	4.58	4.48	4.88	4.64	4.58
Protein %	3.36	3.30	3.52	3.54	3.28	3.49
Milk Solids Per Day (kgs/Days)	2.27	2.43	2.22	2.64	2.46	2.16
SCC ('000)	33	67	44	159	207	102
Concentrate Fed (kgs/Days)	4	4	4	5.5	5	2
Calving Start Date	24th Jan	1st Feb	4th Feb	29th Jan	28th Jan	26th Jan
% of the Herd Calved	99	95	95	85	89	90
Average Farm Cover (kgs DM/Ha)	774	897	655	750	947	1180
% of the Farm Grazed	90	85	92	80	70	65
Planned Start Date of 2nd Rotation	1st Apr	12th Apr	10th Apr	12th Apr	17th Apr	15th Apr
Fertiliser Spread to Date (Units/Acre)	65	72	64	60	30	52

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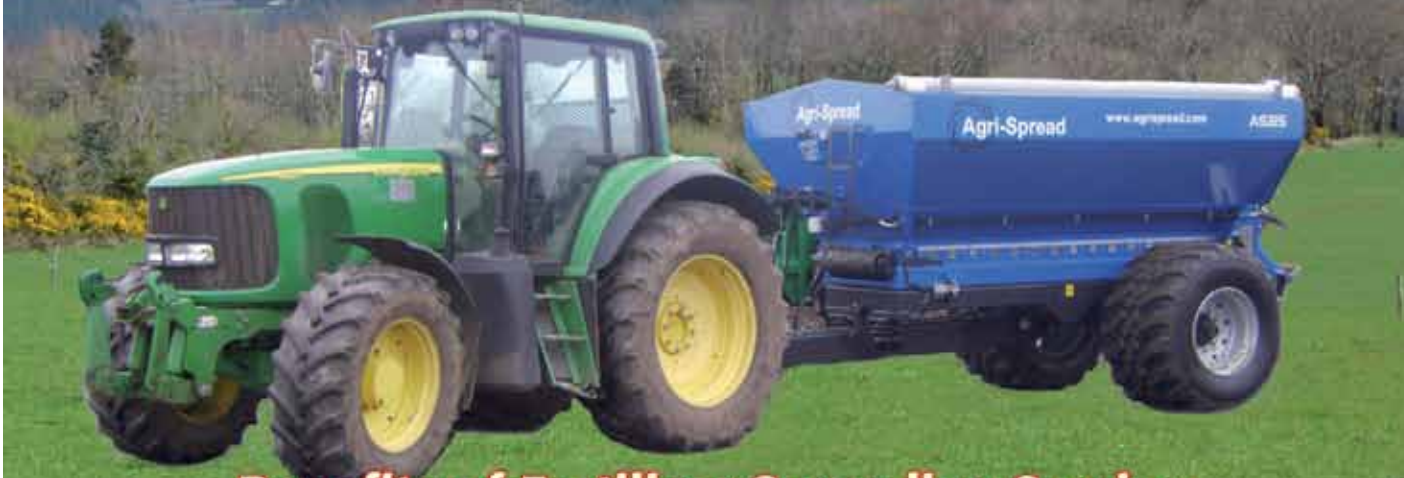
www.tipperary-coop.ie

Fertiliser Spreading Service

Tipperary Co-op now provide a top class Fertiliser spreading service for grassland.
This service is available throughout the 2021 season.
We employ the most modern spreading technologies including GPS to ensure maximum accuracy and spreading efficiency.
Our spreader operators are all highly experienced in fertiliser spreading.



Benefits of Fertiliser Spreading Service

- GPS Guided application
- Even and Accurate Spreading improving response.
- Low Ground Compaction.
- Application with 5 tonne spreader capacity

CONTACT YOUR LOCAL REPRESENTATIVE OF TIPPERARY CO-OP TODAY FOR FULL DETAILS AND PRICING

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