INSIDE THIS ISSUE

- Dry Cow Minerals [PAGE 07]
- Understand The Nutrient Requirements Of Your Crop [PAGE 10]
- Don’t Let A Lack Of Potassium Hold Back Grass Growth [PAGE 18]
- Sustainable Diary Assurance Scheme (SDAS) [PAGE 28]
Welcome to the August edition of

MILK MATTERS

DAIRYGOLD’S DAIRY ADVISORY BULLETIN

Heifer rearing is one of the biggest costs on your farm. Are your heifers on target now, to be at the correct liveweight at housing and subsequently at breeding?

Follow the steps outlined by John Vallence on Page 5 to ensure your heifers meet their targets.

Milk supplied to Dairygold has held up really well this summer. Within, Nutrition Matters, we look at our extended milk plateau and examine the cost benefit ratio to feeding concentrates this autumn. Karl Skehan also looks at what makes a good dry cow mineral and examines what you should be looking for in a bag.

To keep grass in your cows diet for as long as possibly you need to start increasing rotation length and building covers from early August. In Grass Matters, John Maher examines the key management techniques necessary to successfully achieve this.

Catherine Hurley and William Burchill look into soil fertility, its status, its impacts and how we build a fertiliser plan to implement change.

Growth has been good this year, silage reserved have been built replenished in most years. This is offering a great opportunity to reseed poor performing paddocks. On pages 12 to 16 John Friel and Alan Coughlan, run through reseeding management and the best mixes available to meet your needs.

In Fertility and Breeding Matters, Doreen Corridan explains coughing cows, SCC in august, Johnes disease and mid-summer milk yield declines, while also exploring Johnes Diseases and Salmonella.

Yours Sincerely,

Liam Stack

Liam Stack M.Agr.Sc
Ruminant Technical Manager, Dairygold Agribusiness

To contact the editor of MILK MATTERS
email: lstack@dairygold.ie
Grass Growth

Milk production to week 29 (figures based on ICBF cow numbers):

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total annual Milk Yield per cow in Dairygold (kg)</td>
<td>3335</td>
<td>3259</td>
<td>3106</td>
<td>3347</td>
</tr>
<tr>
<td>Total annual Milk Solids per cow (kg)</td>
<td>246</td>
<td>241</td>
<td>229</td>
<td>249</td>
</tr>
<tr>
<td>YTD Average Protein %</td>
<td>3.38</td>
<td>3.40</td>
<td>3.34</td>
<td>3.45</td>
</tr>
<tr>
<td>YTD Average Fat %</td>
<td>4.00</td>
<td>3.98</td>
<td>4.02</td>
<td>4.00</td>
</tr>
<tr>
<td>YTD Average Lactose %</td>
<td>4.94</td>
<td>4.92</td>
<td>4.84</td>
<td>4.83</td>
</tr>
</tbody>
</table>

Milk Protein % (weeks 1-29)

Milk Butterfat % (weeks 1-29)

Milk Lactose % (weeks 1-29)
Milk volume should decrease from its peak at 2.5% per week or 10% per month. A decrease larger than this is an indication of poor energy nutrition.

How has your herd’s volume held up?

<table>
<thead>
<tr>
<th>Volume at Peak (a)</th>
<th>Current Yield (b)</th>
<th>No. of weeks since peak (c)</th>
<th>Total Decline % (d)</th>
<th>% Weekly decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>24</td>
<td>8</td>
<td>14%</td>
<td>1.75%</td>
</tr>
<tr>
<td>28</td>
<td>22</td>
<td>8</td>
<td>21%</td>
<td>2.6%</td>
</tr>
<tr>
<td>28</td>
<td>19</td>
<td>8</td>
<td>32%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Total decline = (Peak yield (a) - current yield (b))/Peak yield (a)
% Weekly decline = (Total decline % (d)/ No. of weeks since peak (c))

Your Herd

<table>
<thead>
<tr>
<th>Volume at Peak (a)</th>
<th>Current Yield (b)</th>
<th>No. of weeks since peak (c)</th>
<th>Total Decline % (d)</th>
<th>% Weekly decline</th>
</tr>
</thead>
</table>

Act now to extend your lactation and to profit from our current milk price:
If milk volume starts to decline in late lactation it is very hard to stop its fall. Lower yielding cows will have lower lactose levels and higher SCC forcing earlier drying off. If this happens you will be foregoing a large amount of highly profitable late lactation milk.

To maintain milk volume:
1. Continue to utilise the best grassland management techniques, see Grass Matters for more on this,
2. Feed concentrates where appropriate

Economics of concentrate feeding autumn 2017:
In late lactation 1kg of concentrates can generate 1kg of extra milk. With concentrates costing c.€300/T and milk valued at 35-38c/kg (including higher solids value), every 1kg or 30c spend on concentrates is going to return 35-38c worth of milk. This is a c. 20% return on investment.

A 90-cow herd feeding 1 kg of concentrates will return €135-216 per month after the concentrate cost. Feeding concentrates must be done responsibly and in a balanced approach to maintaining grass quantity and quality on your farm. If you are feeding concentrates to the detriment of your grass quality this value will not be realised.
The Irish Farm Film Producers Group (IFFPG), the national farm plastics recycling compliance scheme have upcoming recycling days at the following locations and dates:

- Belgooly GAA, 7th of August
- Charleville, Barretts Bros Storage, Cooline - 12th and 13th of August

Here in Dairygold, we are encouraging farmers to use these services to recycle their waste materials in an environmentally sound matter. Chemical drums, fertiliser bags, meal bags and small feed bags can be recycled between 9am-5pm on the collection days.

### ARE YOUR HEIFERS ON TARGET?

Latest figures indicate the cost of rearing a heifer to calve down at 24 months is €1550, with the cost doubling if she doesn’t calf until 36 months. The 24-month calving heifer won’t start to leave a profit until half way through her 2nd lactation.

**Heifers that fail to meet their target weights:**

- Are harder to get in calf
- Will produce less milk in their first lactation and struggle to go back in-calf.

By early August your weanling will be approaching the 6-month mark with your yearlings approaching the 18-month mark.

### Target weight for age for replacement heifers:

<table>
<thead>
<tr>
<th>Breed</th>
<th>6-month Weanling (kg)</th>
<th>18-month Yearlings (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% mature bodyweight</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Holstein Friesian</td>
<td>175</td>
<td>405</td>
</tr>
<tr>
<td>British Friesian</td>
<td>165</td>
<td>385</td>
</tr>
<tr>
<td>X breed</td>
<td>150</td>
<td>365</td>
</tr>
</tbody>
</table>

### To ensure that your heifers hit the target, take the following steps:

- Weigh heifers
- Separate underweight heifers from those at or above target weight.
- Give priority grazing and meals to the underweight group;
- Feed 1-2kg/head/day to the underweight heifers
- Re-weigh in six weeks - some heifers will be heavy enough to join the heavy group and some of the heavies may have to join the light group.
- At this stage feed all heifers may need 1-2kg/day to keep them growing prior to housing.
Dairygold’s Prime Elite Heifer Rearer is a high quality 19% protein feed specially formulated for feeding your replacement heifers up to two months before calving.

Our Prime Elite Heifer Rearer Contains:

- High levels of energy and good quality proteins to promote lean muscle growth
- Biotin for Hoof Strength - Strong hooves and good feet help improve long-term productivity & increases longevity in the herd
- High levels of macro minerals to help grow the skeletal frame of replacement heifers

Call your local Dairygold Area Sales Manager, Inside Sales or Lombardstown Mill today on 022-47275
If you’re buying your dry cow minerals now be cautious that your minerals are going to meet the requirements of the cow.

Mineral Feeding Pre-Calving

The objectives of a Dry Cow Management Program are for the cow to calve:

1. In an optimum calcium status; This is a function of the silage mineral status and the level mineral of Magnesium and Vitamin D3 in the pre-calving mineral.
2. With reduced metabolic disorders; This is influenced by the mineral Magnesium, Iodine, Selenium and Vitamin E & A levels.
3. In an optimum immune status; This is influenced by the mineral Vitamins and trace elements (Selenium and Vitamins A & E).
4. Producing high quality colostrum; This is influenced by the mineral and vitamin supplementation.

Mineral must haves:
A mineral that is formulated to meet the must haves in the accompanying tables will result in (assuming BSC, energy and protein nutrition and calving management are correct):
- Reduction in sub-clinical milk fever
- Less retained placenta
- Reduced calf mortality
- Enhanced immunity and thrift
- Improved cow fertility

<table>
<thead>
<tr>
<th>Element</th>
<th>What It Effects</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mg</td>
<td>Milk Fever</td>
<td>A pre-calver mineral should contain 30+ grms per day</td>
</tr>
<tr>
<td>Cu (Copper)</td>
<td>Fertility, immune status, production</td>
<td>A pre-calver mineral should contain c.400mg/day. To limit losses and maximise cow availability c.25-30% of this Cu should be in the bioplex form</td>
</tr>
<tr>
<td>Zn (Zinc)</td>
<td>Lameness, SCC, Mastitis, Production</td>
<td>A pre-calver mineral should contain c.500mg/day. To limit losses and maximise cow availability c.25-30% of this Zn should be in the bioplex form</td>
</tr>
<tr>
<td>Se (Selenium)</td>
<td>Retained Cleansings, Colostrum Quality, Afterbirth, SCC, Mastitis</td>
<td>A pre-calver mineral should contain c.5mg/day. To limit losses and maximise cow availability c.25-30% of this Se should be Seipex</td>
</tr>
<tr>
<td>Iodine</td>
<td>Weak Calves, Embryonic Deaths</td>
<td>A pre-calver mineral should contain, but not exceed 60mg/day.</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>Retained Placenta</td>
<td>A pre-calver mineral should contain &gt;60,000 iu/day.</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Milk Fever</td>
<td>A pre-calver mineral should contain &gt;12,000 iu/day.</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>Retained Cleansings, Colostrum Quality, Afterbirth, SCC, Mastitis</td>
<td>A pre-calver mineral should contain &gt;500 iu/day.</td>
</tr>
</tbody>
</table>
WATER QUALITY & SILAGE EFFLUENT

By CIARA DONOVAN,
Farm Sustainability Advisor, Supply Chain Division

Silage effluent is a highly polluting substance if it gets into water. It is second only to milk when it comes to Biological Oxygen Demand (BOD). That is the amount of oxygen that bacteria would need to use to break it down. All plants and animals need oxygen to live so when pollutants with high BOD levels enter water, the oxygen in the water is used and the plants and animals in the vicinity can suffocate. Sometimes this can be a slow process when pollutant levels can gradually increase resulting in fish and other animals to slowly reduce in numbers over time or if the BOD level of the pollutant is high and the amount entering the water is significant, fish kills can occur.

<table>
<thead>
<tr>
<th>Biological Oxygen Demand (BOD level)</th>
<th>Milligrams of Oxygen/Litre of Pollutant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dirty Water (parlour washings, yard run-off)</td>
<td>1,000-2,000</td>
</tr>
<tr>
<td>Cattle slurry</td>
<td>10,000-20,000</td>
</tr>
<tr>
<td>Silage Effluent</td>
<td>30,000-80,000</td>
</tr>
<tr>
<td>Milk</td>
<td>140,000</td>
</tr>
</tbody>
</table>

The good news is that while historically fish kills in Ireland were frequent, (120 fish kills were reported in 1987 alone), they have been steadily declining and in 2017 there were 14 fish kill events reported. Not all of these were as a result of an agricultural pollutant, but unfortunately while they were not deliberate, many were. It is important to be reminded just how potent these agricultural products can be and ensure that all steps are taken to prevent the occurrence of any such future events.

How to control silage effluent?

Under REPs 4 the regulation stated that you could not store bales 3 high unless stored in a yard with collection. This is not the regulation today. Currently the GAEC regulations simply states that ‘silage effluent must be collected and controlled’. It also states that you ‘must not store silage bales outside of farmyards within 20 meters of water, or water abstraction point, where collection facilities are not in place. This applies all year round.’

Guidelines for storing Pit Silage

For pit silage this means that a concrete base with collection channels must be in place and in good condition. If the concrete base is cracked and seepage is occurring or if the channels are in place but overflowing, then the effluent is not being adequately controlled. A clean water diversion trap is recommended to be in place to separate clean water from dirty water off a silage pit but extreme care should be taken to ensure that run-off from the silage pit is only directed to the clean water drain when there is no chance of effluent being present i.e. when the pit is empty or covered completely and only run-off from the plastic cover is collected.

IF PITTING SILAGE

1. CONCRETE BASE NEEDED, NO CRACKS
2. CLEAN CHANNELS BEFORE USE AND AS NECESSARY
3. DIVERT ALL EFFLUENT TO TANK
4. DO NOT DIVERT TO CLEAN WATER DRAIN UNLESS COMPLETELY CLEAN
Guidelines for storing Round Bales

If baling silage, wilting is extremely important. Ideally all bales should be stored on a concrete base with collection off it, but this is not always practical or possible. Bales can be stored on a field, but only in locations more than 20 meters from a well, drain, river or lake and only if they don’t secrete effluent. Therefore, if you don’t have collection facilities available in your yard, you should wilt the silage properly and don’t stack them unless you are certain that they won’t compress and leach. Also, soil soaks up effluent more effectively than gravel or hard-core, therefore if there is any chance that your bales might leach effluent, it is better to store them on an area with deep top soil rather than on a hard-core or a gravel stand to protect against ground-water pollution.

(Note: Never allow spilled milk to enter water. Always dispose of any milk required to be dumped by mixing with slurry and land spreading, adhering to buffer distances from water-courses)

Dairygold supporting Clean Water & the Agricultural Sustainability Support and Advisory Programme (ASSAP)
UNDERSTAND THE NUTRIENT REQUIREMENTS OF YOUR CROP

By CATHERINE HURLEY,  B.Agr.Sc, Sales Support Advisor

Often, silage ground has the poorest level of soil fertility according to studies, with much of the nutrients taken out at cutting not being replaced at an appropriate rate. Our tendency to removed surplus paddocks as round bales has meant that we now are taking silage off a greater proportion of the farm than we would have been doing previously.

Units of N, P and K removed per acre depending on number of bales per acre.

<table>
<thead>
<tr>
<th>Bales/acre</th>
<th>N</th>
<th>P</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bales/acre</td>
<td>units/acre</td>
<td>units/acre</td>
<td>units/acre</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>4.8</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
<td>6.4</td>
<td>40</td>
</tr>
<tr>
<td>5</td>
<td>50</td>
<td>8</td>
<td>50</td>
</tr>
</tbody>
</table>

As a rule of thumb 3-4 bales per acre requires 1,000 gallons of thick slurry or 2,000 gal of watery slurry to replace the P and K removed. However, we should not be working of general rules of thumb. To ensure the best nutrient use efficiency we should be formalising a farm specific fertiliser plan based on soil test results. Your local dairygold Area Sales Manager and our Inside Sales team are available to assist you on this if necessary.

Although it costs money to increase fertility levels on low fertility soils, the returns in terms of grass production can be considerable. According to Teagasc, every extra tonne of grass grown increases profits by €173 per hectare.

Recent soil samples taken from farms and analysed by Dairygold show that although optimal soil fertility level have climbed year on year, less than half of soils tested in 2018/19 are in the optimum range in terms of pH, phosphorus (P) and potassium (K), which is Index 3 for P and K and a pH of >6.2.

Lime should be your 1st consideration:
Only half of drystock farms in the country have applied lime in the last 10 years according to Teagasc figures. Quoting local contractors, lime costs c.€25/tn spread. Spreading one tonne of lime per acre raises the pH by 0.25 of an increment.
Benefits of correct soil pH with lime application:
Teagasc research has found:
• Increased grass growth (extra 1 dry matter/ha).
• Extra N released from the soil (the equivalent of 2.5 bags of CAN/acre/year).
• Extra P and K unlocked from the soil increasing your indexes.
• Better grass growth response to recently applied N, P and K.

How much P and K do I need to spread?
Our goal is for all our fields to be index 3 for P and K. Index 4 soils are too high and are an increase the risk to water quality. Index 1 and 2 soils are too low and hold back production. The sward has a maintenance and a build-up requirement. The maintenance requirement holds the index where it is and a build up requirement which builds swards soil indexes.

Phosphorus should be spread in earlier spring to achieve the best results, with a target to get between 50-75% of the annual P requirement applied in the first two rounds of fertiliser. The remaining P should then be spread little and often throughout the summer months.

Applying K in spring is not as critical as applying P according to studies. Although they usually go hand in hand when spreading, try to avoid spreading excess K in spring as it can have a negative effect on the uptake of magnesium and resulting in the risk of grass tetany.

At this stage a lot of our P should be applied, but a lot of the K is still to go out.

P and K requirements for grassland:

<table>
<thead>
<tr>
<th>Index</th>
<th>Maintenance P (Units/Acre)</th>
<th>Build up P (Units/Acre)</th>
<th>Maintenance K (Units/Acre)</th>
<th>Build up K (Units/Acre)</th>
<th>Annual Fertiliser Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index 1</td>
<td>20</td>
<td>16</td>
<td>40</td>
<td>50</td>
<td>KaN + 6 bag 18-6-12 + 0.5 bags of Muriate of K</td>
</tr>
<tr>
<td>Index 2</td>
<td>20</td>
<td>8</td>
<td>40</td>
<td>25</td>
<td>KaN + 5 bag 18-6-12</td>
</tr>
<tr>
<td>Index 3</td>
<td>20</td>
<td>0</td>
<td>40</td>
<td>0</td>
<td>KaN + 3 bag 18-6-12</td>
</tr>
</tbody>
</table>

The impact of cutting rather than grazing
Consider growing silage like a crop, understand it has a higher nutrient demand compared to grazing and needs to be nourished adequately to achieve its full potential.

The P:K ratio on a grazed field is approximately 1:2, which reflects common NPK products. However, for silage ground it is closer to 1:7 and the requirement for and P and K is a lot higher, being 48kg/ha of P and 360kg/ha of K.

For more information on how to formulate a fertiliser plan for your farm contact your local area sales manager or our inside sales team on 022 31644
WHY SHOULD I RESEED?

By JOHN FRIEL, B.Agr.Sc.,
Area Sales Manager Mobile: 086 246 1648

Reseeding costs c. € 750/Ha. Reseeded swards should last 8-10+ years on your farm if correctly managed. High perennial rye grass swards cover the cost of reseeding within 18 months.

1. Low perennial rye grass swards grow less grass, especially in the spring when grass is of most economic value to your enterprise. Spring grass growth accounts for c.15% of the PPI value of a variety.

Dry Matter Production of 15% and 100% Perennial Ryegrass Swards

Each extra tonne of grass dry matter can increase farm profit by €181/ha for Dairy farmers.

2. Low perennial rye grass swards are of lower quality (DMD) and support lower levels of production compared to new reseeds. Correct grassland management also plays a massive role in pasture quality. A combination of both will lead to increased grass DMD across the main grazing season.

An increase of 1% in grass digestibility will:
- increase dry matter intake by 0.3-0.4kg DM
- increase milk yield by 0.5-0.6 kg

High PRG swards allow 8% higher milk output per hectare compared to old permanent pasture.

3. New reseeds are 25% more responsive to Nitrogen

KEY POINT: Swards with a low content of Perennial Ryegrass (PRG) are reducing your profit by €300/ha (€120/acre) due to reduced dry matter (DM) production alone.

9 POINT GUIDE TO ACHIEVING OPTIMAL RESULTS WHEN RESEEDING

1. Identify fields most in need of reseeding. Fields not reseeded in over 10 years should take priority.

2. Take a soil sample of the field for Lime, P & K levels. Contact your Area Sales Manager or local Dairygold store for soil sampling rates and advice.

Lime:
Lime at sowing is essential. As the old sward decays, it releases acids which lower the pH and create a difficult environment for the new seed trying to germinate.
Using either ground lime or bagged lime will help counteract this acidity and is essential even if your soil pH is already good.

**Phosphorus and Potassium:**
As the new seed germinates it requires Phosphorous (P) and Potassium (K), which are essential for root and tiller development as the new plants emerge.

<table>
<thead>
<tr>
<th>Soil Index</th>
<th>P (units per acre)</th>
<th>K (units per acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>60</td>
<td>110</td>
</tr>
<tr>
<td>2</td>
<td>40</td>
<td>75</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>30</td>
</tr>
</tbody>
</table>

On index 3 soils 3 bags of 10-10-20 will provide: 30 units of P and 60 units of K.

3. Spray off the field with a glyphosate product. Graze or cut for silage within 7-10 days. For min-till operations, leave 16-20 days from spraying to cultivation. Carry out land drainage if needed.

4. Choose the most suitable seed mixture for your needs. Choose seed varieties on the Irish Recommended List. Your Area Sales Manager is available to offer advice on seed mixtures.

**When choosing a mix:**
- Ensure the mixture only contains varieties off the DAFM Irish Recommended List or PPI – these varieties have proven performance in our growing conditions.
- Have the right balance of diploids and tetraploids – generally the advice is 40-50% tetraploid and 50-60% diploid; this will help ensure a high-quality, palatable sward with good persistency and sward density.
- Ensure a narrow range in heading date.

**Why is heading date important?**
Heading date is important as it refers to the date when a grass plant turns reproductive and the seed head emerges from the plant.

A range of less than seven days is advised for your silage swards and 10 days for your grazing sward. The longer the range in heading date, the more difficult it is to manage the sward and maintain sward quality during the mid-season period.

5. Ensure there is no thrash in the field. You should have a firm and fine seedbed whether you are ploughing or using a minimum cultivation technique.

**Cloddy seedbed**
A cloddy seedbed occurs as a result of cultivating too soon after spraying the old sward.

Allowing adequate time for the herbicide to kill the roots is essential to ensure the roots are destroyed – and will avoid clods in the seedbed.

**Soft Seedbed**
A soft, loose or ‘fluffy’ seedbed can occur if the soil is overworked and is often seen when too many passes of the disc harrow or power harrow occur.

Avoiding this is essential, as the seed will get buried too deep and **poor establishment will occur.**

An old rule is you should be able to cycle a bike across the seed bed before the seed is sown, so roll prior to sowing if necessary to firm it up.

**Inadequate rolling – plant pulling and moisture loss**
Rolling is essential to create good soil-to-seed contact and it also helps maintain moisture within the seedbed.

Often plants emerge quickest where the tractor wheel marks are; this is a sure sign the field was inadequately rolled and a common issue seen with new reseeds.

6. Sow the field and lime once a suitable seedbed
is established. Apply fertiliser as per your soil sample recommendations.

7. Observe the field regularly after sowing to examine for pest damage (slugs, fruit fly etc.)

8. Graze the sward at a low cover for the first grazing. This supports tillering of the plant in order to promote establishment.

9. Use a suitable spray after establishment to control common grassland weeds.

Establishing a white clover sward:

1. High fertile soils
   a. Index 3 & 4 for p and k
   b. Soil pH 6.3
2. Small and medium leaved clover cultivars
3. Sowing Date: Spring / early summer
4. Reseeding
   a. Fine firm seedbed
   b. Sowing depth of 10-12 mm
   c. 1.2 – 3.7 kg/ha (0.5-1.5 kg/ac)
   d. Soil contact – roll post sowing
5. Over-sowing
   a. Ensure existing sward has a high perennial ryegrass content
   b. Sow immediately after grazing or surplus silage (<4cm)
   c. 3.7 – 5 kg/ha (1.5-2 kg/ac)
   d. Ensure soil to seed contact post sowing – roll
   e. Graze at < 1100 kg DM/ha for the following 3 rotations
6. Post emergence spray
   a. Ensure spray is clover safe
   b. Ensure correct timing of spray application – 3 leaf stage

Grazing Management to maintain a sward clover content of 25%
- Pre-grazing herbage mass – 1300-1600kg DM/ha
- Post grazing sward height 4cm (light needed to promote the stolon growth)
- Grazing rotation 18-21 days mid-season
- Early grazing in spring to stimulate plant growth

Nitrogen Fertiliser Application

<table>
<thead>
<tr>
<th>Rotation/Date</th>
<th>Grass only 250 kg N/ha</th>
<th>Grass-Clover 150 kg N/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid-late January</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Mid-March</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>April (2nd rotation)</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>May (3rd Rotation)</td>
<td>30</td>
<td>9</td>
</tr>
<tr>
<td>May (4th Rotation)</td>
<td>30</td>
<td>9</td>
</tr>
<tr>
<td>June (5th Rotation)</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>July (6th Rotation)</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>July (7th Rotation)</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>August (8th Rotation)</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>Mid-September</td>
<td>33</td>
<td>12</td>
</tr>
</tbody>
</table>

Consult your local Area Sales Manager, Branch Agri Lead or our inside sales team on 022 31644 for more information on reseeding.
DAIRYGOLD MIXES 2019

By ALAN COUGHLAN, B.Ag.Sc.,
Area Sales Manager, Mob: 087 1027124

Mixture No. 1+: High Clover Grazing (Also available without clover)

High inclusion of astonenergy and meiduno make this mix 52% tetraploids. Higher levels of T are being encouraged by Teagasc due to their palatability and performance on farm. Astonenergy has continually proven its quality and superior graze out potential within the Teagasc on-farm variety trials. New within the mixture this year are Oakpark (a Teagasc bred variety) and Astonking. Over all this mixture offers good seasonal growth, quality and palatability.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Heading Date</th>
<th>Pliody</th>
<th>PPI</th>
<th>RL Ground Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astonenergy</td>
<td>02-Jun</td>
<td>LT</td>
<td>€132</td>
<td>5.4</td>
</tr>
<tr>
<td>Meiduno</td>
<td>03-Jun</td>
<td>LT</td>
<td>€167</td>
<td>5.2</td>
</tr>
<tr>
<td>Astonking</td>
<td>05-Jun</td>
<td>LD</td>
<td>€116</td>
<td>5.8</td>
</tr>
<tr>
<td>Oakpark</td>
<td>02-Jun</td>
<td>LD</td>
<td>€118</td>
<td>6.8</td>
</tr>
<tr>
<td>Clover</td>
<td></td>
<td></td>
<td></td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% T</th>
<th>Total PPI</th>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
<th>Quality</th>
<th>Silage</th>
<th>Persistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>52%</td>
<td>€133.3</td>
<td>€31.6</td>
<td>€33.3</td>
<td>€12.3</td>
<td>€19.1</td>
<td>-€1.2</td>
<td></td>
</tr>
</tbody>
</table>

Mixture No. 2: Two Cut Silage (Also available with clover)

A mixture designed specifically for silage (two or more cuts) with exceptional spring growth for high first cut yields, no clover (questionable role in an intensive cutting system) and durable varieties to ensure a long lasting sward.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Heading Date</th>
<th>Pliody</th>
<th>PPI</th>
<th>RL Ground Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astonconqueror</td>
<td>25-May</td>
<td>ID</td>
<td>€165</td>
<td>6.4</td>
</tr>
<tr>
<td>Rosetta</td>
<td>23-May</td>
<td>ID</td>
<td>€156</td>
<td>6.3</td>
</tr>
<tr>
<td>Fintona</td>
<td>22-May</td>
<td>IT</td>
<td>€191</td>
<td>5.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% T</th>
<th>Total PPI</th>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
<th>Quality</th>
<th>Silage</th>
<th>Persistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>€172.6</td>
<td>€78.6</td>
<td>€25.1</td>
<td>€39.4</td>
<td>-€1.3</td>
<td>€30.9</td>
<td>€0</td>
</tr>
</tbody>
</table>
Mixture No. 3: Dairygold Extend Gold (Also available with clover)

Excellent spring and autumn growth combined with exceptional quality for a palatable sward. This mixture is for intensive grazing situations where extending grazing, is a priority. The level of abergain has been increased within the mixture this year to increase the %T. Also suitable for one cut silage systems.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Heading Date</th>
<th>Pliody</th>
<th>PPI</th>
<th>RL</th>
<th>GS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abergain</td>
<td>04-Jun</td>
<td>LT</td>
<td>€214</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>Aberchoice</td>
<td>09-Jun</td>
<td>LD</td>
<td>€189</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>Drumbo</td>
<td>07-Jun</td>
<td>LD</td>
<td>€117</td>
<td>6.4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% T</th>
<th>Total PPI</th>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
<th>Quality</th>
<th>Silage</th>
<th>Persistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>46%</td>
<td>€183.2</td>
<td>€33.6</td>
<td>€38.4</td>
<td>€43.6</td>
<td>€45.2</td>
<td>€22.4</td>
<td>€0</td>
</tr>
</tbody>
</table>

Mixture No. 4: Heavy Soils/Extensive Grazing Mix (Also available without clover)

This is an excellent mixture for heavy soils or for extensive farmers that struggle to keep rotation lengths at the 18-20days during the summer. It has a higher levels of diploids to provide a good dense base to the sward with high ground scoring varieties which will ensure a persistent sward in challenging soils. This mixture delivers good seasonal growth and high grass quality.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Heading Date</th>
<th>Pliody</th>
<th>PPI</th>
<th>RL Ground Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drumbo</td>
<td>07-Jun</td>
<td>LD</td>
<td>€117</td>
<td>6.4</td>
</tr>
<tr>
<td>Clanrye</td>
<td>06-Jun</td>
<td>LD</td>
<td>€68</td>
<td>6.8</td>
</tr>
<tr>
<td>Ballintoy</td>
<td>02-Jun</td>
<td>LT</td>
<td>€150</td>
<td>5.6</td>
</tr>
<tr>
<td>Clover</td>
<td>YES</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% T</th>
<th>Total PPI</th>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
<th>Quality</th>
<th>Silage</th>
<th>Persistency</th>
<th>RL GS</th>
</tr>
</thead>
<tbody>
<tr>
<td>27%</td>
<td>€117.1</td>
<td>€29.2</td>
<td>€29.6</td>
<td>€31</td>
<td>€13.5</td>
<td>€13.8</td>
<td>€0</td>
<td>6.3</td>
</tr>
</tbody>
</table>
MICHEAL SAVED €3,500 ON HIS FARM INSURANCE.

"I switched my farm insurance to Zurich and saved €3,500 with better building and animal cover too. That’s extra money in my back pocket."

Special Offer

Switch to Zurich and like Michael, you too, can avail of our exclusive farm insurance deal and preferential pricing for Dairygold members.

TO SEE HOW MUCH YOU COULD SAVE, CALL JP AHERNE ON 086 411 37 97 OR CALL OUR FARM TEAM ON 053 915 76 77.

Zurich Insurance plc is regulated by the Central Bank of Ireland.
Featured customer received a gratuity for his time. Savings based on a like for like cover comparison for private dwelling house, general farm property, farm outbuildings, livestock, employers, public and products liability, agricultural vehicles and trailers and personal accident cover.
DON’T LET A LACK OF POTASSIUM HOLD BACK GRASS GROWTH.

By WILLIAM BURCHILL, Teagasc/Dairygold Joint Programme

The importance of soil Potassium (K) is something that has been overlooked on many dairy farms. Teagasc soil analysis indicate that up to half (48%) of fields on dairy farms across the country are deficient in soil K i.e. in index 1 or 2 for K. This is particularly the case on silage ground, which has a large demand for K. For example, fields cut for 1st and 2nd cut silage require up to 160 units K/acre/year. Recycling slurry to silage ground is the best option to apply this K (1,000 gal cattle slurry = 32 units K). However, in some cases it in not possible to get slurry to silage ground that is very far away from the milking platform so this K must be applied as chemical fertiliser. Lack of K on silage ground has been shown to significantly reduce silage yields. From now until the end of the year is the best time to correct fields that are low in K on your farm.

4 step approach to correcting soil K?

1. Use your most recent soil sample reports or derogation report to Identify fields that are index 1 or 2 for K. Contact your advisor if you need help doing this. 50 units of K per acre on average is needed to jump soils by 1 index (This amount may vary across different soils types)

2. Target slurry, which is the cheapest source of K on farms, to the fields that are low in K and to silage ground. Using a trailing shoe or dribble bar can be used to avoid grass contamination when doing this.

3. Use muriate of Potash (0:0:50) on low K fields. One bag per acre of muriate of potash will supply enough K to potentially jump your K index by 1. Unlike nitrogen and phosphorus, there is no restriction on the amount of K you can spread. Now and into the Autumn period is the best time of the year to spread K. Spreading more than 70 units K/acre at one time in the spring has been linked to grass tetany in cows. Muriate of potash can be ordered with your final round of N

4. Monitor your progress by re-soil sampling.

Is the investment is K worth it?

Work carried out by Teagasc has shown that applying enough K and correcting soil K levels can increase grass growth by at least 1 tonne grass dry matter/hectare/year (2 round bales silage/ac). This additional tonne of grass is worth between €160-170/tonne on dairy farms. Applying one 50 kg bag per acre of Muriate of Potash costs €50/ hectare (€20/acre), when Muriate of Potash costs €400/tonne. So for the €50/hectare you spend on Muriate of Potash you have the potential to get back €160-170/hectare worth of grass. Where slurry is used to build up the low K index fields the €50/hectare cost is significantly less.
Sean Barry farms with his father Pat just outside Pallasgreen Limerick.

Sean is the heavy soils/fragmented focus farmer in the Teagasc / Dairygold joint program. Sean is farming a total of 55 hectares with a milking platform of 23 hectares. The milking block is split into four grazing blocks split by the main Tipperary Limerick road and also by two secondary roads.

This year there are 63 pedigree Holstein Frisians milking with an EBI of €131 euro. Last year the herd supplied 437 kg milk solids/cow to Dairygold. The spring of 2018 was very difficult to manage on this heavy soils farm and the drought did impact also for a few weeks of the summer.

A lot of investment has been carried out on the farm to grow and utilize more grass. The majority of the milking block has been reseeded in the last 5 years and there has been big investment put into roadways and water infrastructure. To get high returns from reseeding and improving soil fertility a good network of roadways and paddock access points is critical to utilize grass on this heavy soils farm.

By mid July this year the 7th rotation has just started and 6.8 tonnes/ha of grass has been grown on the milking block. 80 tonnes of lime has been spread on the total farm so far. Sean has been able to put the infrastructure and grass grown in place first and now intends to increase the cow numbers so as to utilize more grass on the milking block.

By mid July just over 0.7 tonnes/ha of surplus grass was grown on the milking block. At this stage cows were milking 1.93 kg milk solids (24.5 litres 4.06 fat and 3.60 protein) on no meal with pregrazing covers of 1400 kgs.

### Current average performance of monitor farmers: 12th July 2019

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stocking rate on milking platform:</td>
<td>3.39</td>
</tr>
<tr>
<td>Average Farm Cover kgDM/ha</td>
<td>631</td>
</tr>
<tr>
<td>Grass cover/cow kgDM/cow</td>
<td>156</td>
</tr>
<tr>
<td>Grass Demand kgDM/ha</td>
<td>56</td>
</tr>
<tr>
<td>Grass Growth Rate kgDM/ha</td>
<td>63</td>
</tr>
<tr>
<td>Milk litres/cow</td>
<td>23.8</td>
</tr>
<tr>
<td>Fat %</td>
<td>4.10</td>
</tr>
<tr>
<td>Protein %</td>
<td>3.67</td>
</tr>
<tr>
<td>Milk solids/cow/day</td>
<td>1.90</td>
</tr>
<tr>
<td>Meal kg/cow</td>
<td>2</td>
</tr>
</tbody>
</table>
It is not uncommon for many dairy farmers to end up with a lower supply of grass than they would like entering into the autumn. PastureBase Ireland data demonstrates this fairly clearly over the last few years. About 50% of farmers miss the targets for autumn build up of grass. August is a crucial month to build grass supply for autumn.

So it is important that a rotation length of 28-30 days is reached by September 1st. On many farms, silage area comes back into grazing in August and thereby lengthening the rotation. However, if things are not going to plan during August in terms of building grass supply, action needs to be taken. This can involve removing other stock from the milking platform or introducing additional feed to help slow down the rotation. This can be baled silage or meal or a mixture of both. Whatever the choice, it is better that additional feed goes into the cow during August to allow grass supply pick up rapidly rather than later on when grass growth is much slower.

BUILDING GRASS
The growth of grass during the next six weeks is extremely important as the rate of grass growth (supply) will be less than what is eaten (demand) by mid-September. However, grass growth can increase rapidly especially after a drought period as soil temperatures are well above normal (about 1.5 to 2°C higher). Average growth for August is about 60-65 kgDM/ha/day but growth can be 20-25% higher.

How do we ensure we will have enough grass??
1. The rotation length must be around 28-30 days by Sept. 1st. So if we have 100 acres of grazing ground, by the end of the month we need to be grazing about 3.5 acres/day (28 day rotation). So we must gain about 2-3 days in rotation every week during August. However the autumn grazing targets for September 1st are outlined in the Table. Farm cover targets are 300+ kgDM/cow by Sept 1st for most dairy farms.

2. This gain in rotation length will not happen without the application of fertiliser. For those who are stocked at around 1 cow/ac (2.5 cows/ha), farmers will be normally applying around 20-30 units N/ac at the start of the month. However a blanket approach (spreading most the farm on 1 day) of spreading 40 units N/ac on most of the farm in the latter half of August needs to be carried out to ensure a build-up in grass supply. The response to Nitrogen fertiliser diminishes rapidly during September in a normal year.

If some farmers end up with too much grass entering into the autumn (Rotation lengths well over 30 days entering September) this should be made into winter feed. So if the rotation length is gaining too quickly during August, the worst quality paddocks should be removed for baled silage. The earlier this surplus grass is removed, the easier it is to rectify the problem.
# Autumn Grazing Targets

<table>
<thead>
<tr>
<th>Date</th>
<th>Cover/Cow (Kg DM)</th>
<th>Average Farm Cover (Kg DM/Ha)</th>
<th>Rotation Length</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STOCKING RATE OF 2.5 LU/HA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st August</td>
<td>180</td>
<td>450</td>
<td>20 Days</td>
</tr>
<tr>
<td>Mid - August</td>
<td>200</td>
<td>500</td>
<td>25 Days</td>
</tr>
<tr>
<td>1st September</td>
<td>300</td>
<td>750</td>
<td>30 Days</td>
</tr>
<tr>
<td><strong>STOCKING RATE OF 3.0 LU/HA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st August</td>
<td>180</td>
<td>550</td>
<td>20 Days</td>
</tr>
<tr>
<td>Mid - August</td>
<td>250</td>
<td>750</td>
<td>25 Days</td>
</tr>
<tr>
<td>1st September</td>
<td>330</td>
<td>990</td>
<td>30 Days</td>
</tr>
<tr>
<td><strong>STOCKING RATE OF 3.5 LU/HA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st August</td>
<td>190</td>
<td>665</td>
<td>20 Days</td>
</tr>
<tr>
<td>Mid - August</td>
<td>220</td>
<td>770</td>
<td>25 Days</td>
</tr>
<tr>
<td>1st September</td>
<td>280</td>
<td>980</td>
<td>30 Days</td>
</tr>
</tbody>
</table>
Grass production for the 1st half of the grazing season on the farms in the Heavy Soils Programme has been excellent. The average level of grass production was about 6.5 tons DM/ha to July 1st. The range in grass production between the farms was 5 to 8 tons DM/ha. Depending on how the autumn comes in terms of weather conditions, 13 to 14 tons of grass DM/ha could be produced. This would place these farms in the top grass performing farms in the country. This is superb grass production on heavy land but not as we know it!

This journey in grass production probably started last summer when even some farms with heavy land got reduced grass growth due to drought conditions. However the land got a chance to dry out after the wet spring. The soil cracked and this helped improved the drainage capacity of the land. The autumn and winter conditions were not overly wet either. So these farms also had a very favourable spring in 2019 as land was not as wet as previous springs.

One of the top priorities for the farms in the Heavy Soils Programme is to make enough silage for next winter and try to put a silage reserve in place also. This is going very much to plan as the year has been so favourable in terms of grass production and favourable ground conditions. There has been a lot of surplus grass converted into baled silage up to now and August is also looking favourable for more bales to be made.

August Grazing Plan:
August is a crucial month to build grass supply for autumn. The target rotation length should be about 25-26 days by the end of August (grazing 4 acres/day on a 100acre platform). If the rotation length is longer than this or appears to be getting any way slower, the heaviest paddocks should be removed rapidly as baled silage. If some farmers end up with too much grass entering into the autumn (Rotation lengths well over 30 days entering September) this should be made into winter feed. So if the rotation length is gaining too quickly during August, the worst quality paddocks should be removed for baled silage. The earlier this surplus grass is removed, the easier it is to rectify the problem. The growth of grass during the next six weeks is extremely important as the rate of grass growth (supply) will be less than what is eaten (demand) by mid-September generally.

P fertiliser
After August, there is only 2 weeks left to spread nitrogen (N) and Phosphorus (P) fertiliser. Phosphorus levels rise slowly in most soils but especially in heavy soils after application of P fertiliser or slurry. That is why it is necessary to apply P fertiliser now to improve soil fertility for the spring when the grass needs P the most. Most dairy farmers will need to consider spreading compound fertilisers like 18:6:12, 14:7:14 or 10:10:20 on their grassland during August. A blanket approach (spreading most the farm on 1 day) of spreading 30-40 units N/ac with P & K (2 bags 18:6:12 per acre) on most of the farm in August needs to be carried out to ensure a build-up in grass supply.
COUGHING COWS
If you have coughing cows that have not responded to treatment for lungworm organise an appointment with your vet and get a lung wash done. This is extremely useful in diagnosing the cause of the coughing.

Herdowners are reporting cases of cows coughing at grass. At this time of year the most likely cause is lungworm however there are other causes that may or may not be present on their own or in conjunction with lungworm. Equally lungworm can trigger the other causes.

In addition to lungworm the other causes are viruses IBR, RSV, PI3 and bacteria Mannheimia Pasteurella, Mycoplasma, Histophilis somni.

This wash will allow your vet to check for lungworm and the other bacteria and viruses. If lungworm is the cause of coughing the dung samples will test negative in cows for lungworm eggs as it is the immatures in the lungs that are causing the coughing.

Adult cattle after two grazing seasons generally usually have built up immunity to Lungworm and therefore reinfection should not be a major problem. It is important to build up immunity in your 2019 calves and incalf heifers. Talk to you vet about a dosing plan for both.

With calves and in-calf heifers take dung samples before dosing for worms, however with lungworm in calves you need to dose immediately once you hear the coughing from lungworm.

SCC IN AUGUST
Controlling SCC in late lactation is important to achieving an overall acceptable score. The majority of mastitis cases now are strep uberis-environmental.

1. Clip cows tails immediately, they are becoming bushy now again. Tails of cows in after grass can get very dirty and act as paint brushes dirtying and wetting the udder. This will keep the udders much cleaner.

2. At this time of year, flies can become an issue for cows and cause mastitis either by a vector for transmitting mastitis from one cow to another or by damaging the teat skin. Also dung heaps and silage effluent attract flies and they then become an issue if located close to the roadway to the parlour.

Pour ons with zero milk withdrawal are a useful control mechanism in conjunction with a teat repellent in the
teat spray. The pourons will stop the cows getting irritated as well as controlling the flies, the repellent in the teat spray is key to get the flies off the teats.

3. Have you changed your liners after 2,500 milking’s? 120 cows milked in a 12 unit parlour will result in each liner milking 10 cows in the morning and 10 in the evening. 20 in total each day. Each liner will have milked 2500 milking’s in 125 days. Old liners are difficult to clean and house bacteria in their worn crevices. Secondly they do not release as quickly and completely as they should resulting in teat damage, therefore cows are more prone to developing mastitis.

4. Fence off the cubicles if cows need to walk through the shed at milking. These cubicles are a major source of infection as they are not been cleaned and limed. I see this issue regularly in herds zero grazing.

Try and keep yards and roadways clean, as the teat canal is partially open for the 1st 20 minutes after milking, which is often when she is walking through the yard or roadway. Stand the cows for 20 minutes in a clean yard after milking for the teat canal to close. Keep the scrapers going if they are walking through the cubicles.

5. Avoid the practice of stopping teat spray during the summer. Ensure there is a fly repellent in it.

6. Watch incalf heifers now for summer mastitis. Avoid grazing them in sheltered fields, use pour on, on them to control flies or use the ear tags with insect repellent in them. Some herdowners apply Stockholm tar regularly as a preventative.

MILK DROP IN COWS

Some herds experience milk drop more than the natural decrease as lactation progresses. Apart from the issue of reduced quality of dry matter intakes at this time of year. The bulk milk screening tests is very useful in ascertaining what is going on.

Issues I am seeing
1. Poor Liver Fluke kill in some farms last spring and herds now showing a marked drop in yield.
2. High IBR levels on the farm and no vaccination being practised.
3. High levels of stomach worms and some cases of lungworm.

Reduced yield may also in cases be attributed to
4. Poor genetics in the cows with low index for fat and protein KG.
5. High % of 1st calvers in herds.

Cleaning of Calving Areas and Calf Houses - Cryptosporidia

- Cryptosporidia incidence is increasing in dairy herds causing scour and poor thrive. There is no vaccine available.
- Difficult to Cure
- Significant calf rearing stress with extra care and feeding required
- Poor subsequent whole of life performance for affected animals

KEY POINT: August is the month to clean your calving and calf rearing pens to help ensure an uneventful calf-rearing season in 2020
Recommended procedure for control and prevention of cryptosporidia in 2020

1. All dried faeces and other dirt should be removed from the walls, floors and gates of the pens. C. parvum oocysts are protected somewhat from dehydration in dried faeces, so any faeces remaining from the previous year’s calves need to be removed.

2. All surfaces steam cleaned or power hosed in conjunction with an effective disinfectant. Dairygold are sourcing products that will be effective against cryptosporidia. Always follow user guides for personal safety and product efficacy.

3. All surfaces should be washed with one an anti/protozoan disinfectants taking care to remove all dirt from within cracks and crevices on the walls and floors allowing at least one hour of contact time with the disinfectant.

4. A final rinse with water and left to dry.

5. Once dry the houses and pens should be left empty of livestock for at least 3-4 months

This last point is critical to the control and prevention of cryptosporidia as desiccation or drying is important in inactivating the C. parvum oocysts. Opening the doors and taking out the gates and exposing them to air and sunlight is key to drying out the house.
2019 JOHNE’S HERD TESTING IS FREE THROUGH MILK RECORDING

Get your herd tested this free of charge this year for Johnes if you are milk recording.

What is the first step in establishing my herd’s Johne’s status?
Testing all the animals over 2 years of age which is all the milking herd is a very good starting place. You can do through the individual sample that is taken at the time of milk recording.

If I have never seen any signs of Johne’s in my herd, why should I test?
By the time you will see actual signs of Johne’s it is more difficult to deal with it.

If I have it, I need to work to stop it spreading.
Protect the 2020 replacements from dung, milk and colostrum from positive cows. We need to be able to identify these positive cows to protect the replacements.

Doing nothing is not an option as Johne’s will continue to spread in the herd. It is much better to deal with Johne’s and to protect the 2020 replacements onwards.

Salmonella Control
In this dairying area control of salmonella is very important. The two vaccines that I would recommend to all dairy herdowners to do are leptospirosis and salmonella. Both are zoonosis and the entry of salmonella into a naïve herd results in multiple abortions in late pregnancy.

Vaccination is the main method of control for salmonella. Other methods in conjunction with vaccination are biosecurity, management and maintaining a closed herd to avoid the purchase of a carrier animal.

For spring calving herds the most opportune time to vaccinate is late August or the first week of September. All the cows and incalf heifers need to be vaccinated at this time.

It is also advisable to begin the vaccination for the 2019 born calves this autumn, by giving them their primary and booster. Then next September 2020 you only need to boost them with one dose of the vaccine. The advantage of vaccinating the 2019 calves this autumn is that it will reduce the carrier state in the heifers, next September 2020 they will only need one dose and they are covered by vaccination till September 2021.

Each year I am coming across abortions in incalf heifers due to them not being vaccinated in time, as they may be in outside places etc. Your incalf heifers are now at this point not covered until two weeks after they have received their second vaccine, unless they were vaccinated last Autumn as weanlings and just need a booster now.
Recent work between the veterinary college and Moorpark demonstrated that in endemic infected unvaccinated herds that have not experienced an outbreak, profits per cow were reduced by €77/cow on average. Profits in vaccinated herds were €68/cow greater than in unvaccinated exposed herds.

Bovivac S is the only licensed Salmonella vaccine licensed for use.

**Dosage**

Two 5ml doses under the skin twice 3 weeks apart. Boosted within 12 months. It is crucial to only allow 3 weeks or 21 days between the two vaccines. Avoid any other vaccine within 2 weeks of it.

**Dung Sampling**

**Pooled dung samples:**

Dung sample before treating for worms to ensure treatment is justified unless calves are coughing. Calves require to be tested once a month as they are at higher risk of acquiring a significant parasite burden while once every second month is adequate for heifers and cows.

**Assessing Treatment success:**

When you treat a group of animals, take a repeat sample of that group 14 days after treatment and send sample for testing (levamisole products 7 days later). A faecal egg count reduction test will be performed on these samples to assess if the dose given had the desired effect. This is hugely valuable information going forward for your farm as it will give you information on dosing product resistance.

**How to collect a dung sample in the Collecting yard:**

1. Ensure collecting yard is completely clean before arrival of animal group.
2. Leave animals in the yard until 10 – 15 dungs are on the ground. This should not take more than one hour.
3. Need a screw capped jar, teaspoon and a marker. Take a teaspoon size sample (about 5g) from each of the 10 – 15 dungs all into the same container provided. Mark container to indicate if sample is from calves, heifers or cows.

**Collection from the field:**

1. Calves or heifers need to be confined in a clean area using a temporary fence.
2. If feeding calves, troughs should be moved to a clean area prior to feeding. Use a temporary fence to contain the group in this area for about 1 hour.
3. Wait for 10-15 fresh dungs on the ground before releasing the group.
4. Collect equal sized samples (about 5 g or a teaspoon size sample) from each of the 10 -15 dungs all into the container provided. Mark container to indicate if sample is from calves, heifers or cows.
5. It is critical when collecting in the field to avoid any contamination from any other material.
6. It is also important to collect fresh dung samples - if the sample is from dung that you actually observed being passed.
SDAS Overview

Over the next three months we will be running articles with the aim of reminding milk suppliers of the critical areas being examined in the SDAS audit. Many of the key areas being reviewed in the scheme have remained consistent since the scheme was launched in 2014 however there are some areas that are increasingly coming under the spotlight.

The following are core aspects of the SDAS audit. This month we will take a closer look at the preparation of farm records for the audit.

Farm Records

One of the main challenges that milk suppliers experience with the SDAS audit is keeping accurate records.

REMEMBER: All Milk Suppliers are required to be SDAS Certified. All milk suppliers will need to be mindful of their certification expiry date and plan their preparation for their next audit on that basis.

REMEMBER: Retain all prescriptions and invoices from your vet. These will meet the requirements as a Veterinary Medicine Purchases Record. Alternatively request a statement from your vet covering the time since your last audit.
Case Study 1: Veterinary Medicine Usages Records

Milk Suppliers are required to record all animal treatments on the farm including mastitis tubes, dry cow tubes, vaccines, individual treatments and group dosing. The Bord Bia auditor will cross check both the contents of the medicine cabinet and the veterinary purchases records against the remedy usages records to check if all treatments have been recorded.

The following is an example of accurate entries for veterinary usages records across a range of treatment types.

**Tip 1** Put in the quantity administered per animal

**Tip 2** Withdrawal date must be in date format and include dates meat and milk where cows have been treated

**Tip 3** Clearly identify group or individual treatments providing as much info as possible

**Tip 4** The Professional User (PU) number of either a contractor or the trained user must be entered here.

---

Case Study 2: Pesticides Application Records

The recording of spraying application records is an area that has come under increasing focus during the SDAS audit. By law any person applying pesticides must be registered with the Department of Agriculture as a Professional User (PU). The PU number must be included with the recording of spraying records.

The following is an example of pesticide application records maintained in the Bord Bia Farm Book under the required headings.

---

Herd Register

The following herd details are required on the day of the audit:

- Full herd profile showing all the animals present in the herd on the day of the audit.
- All inward and outward movements details from the herd since the last audit.
- All calves must be registered following birth.
- Retain any knackery certs of dead animals removed from the farm.

**Updated Dairygold SDAS Checklist**

A revised Dairygold checklist to assist with audit preparation just been completed.

To request a checklist, contact the Dairygold Milk Advisory Helpdesk on 1890 20 08 40 or alternatively contact your local Milk Advisor.

**REMEMBER:** The herd register can be maintained in the Blue Book OR online by registering with Agfood.ie. Contact the Department of Agriculture on 076 1064424 to obtain missing Agfood.ie registration details.

---

**Need Assistance with SDAS?**

For any queries in relation to the SDAS Contact the Dairygold Milk Advisory Helpdesk on 1890 20 08 40 or alternatively contact your local Milk Advisor.

We can also recommend a number of third-party agents who are providing professional help with preparation of bookwork for the SDAS Audit.
This year’s IHFA national open day took place on June 27th at the O’Keeffe family, Radney Holstein herd in Freemount. Members from both the Cork Holstein Friesian club and Cork YMA club, helped out in the lead up and on the day itself. The event was hugely successful and very enjoyable for all. Well done to the O’Keeffe family and all those involved for organising a great day. Well done also to Cork club members who received prizes in both the stock judging competitions and national herds competitions.

Thank you and well done to club president, Seamus Crowley for organising the tour.

YMA Calf Show
The YMA held their annual calf show on Monday July 1st in Kilbrittain. There was a large number of entries for the evening, with winners in each section going through to the finals in Co. Kilkenny. Well done to all that took part and congratulations to the winners. Well done also to the yma on organising a very well run event.

Club BBQ
The judging of the ‘Dairygold Post Calver Gold’ herds competition is now complete. The results of which, will be announced at the annual club BBQ on August 15th in the Vienna Woods hotel. Everyone is welcome to what promises to be a great night. Tickets available from any club officer.
DON’T IGNORE A SUMMER SCC RISE!!

Is your bulk tank somatic cell count (SCC) starting to creep up slightly? If so, don’t ignore it! It is likely to be because the number of infected quarters in your herd is starting to increase a little, which in turn can lead to more infected quarters, and so on. High herd SCC in late lactation is generally because of spread of infection during the summer, not ‘just late lactation’. Don’t assume that small bulk tank SCC increases during the summer will ‘settle down’ - act now, and set your herd up for late lactation, with minimal mastitis infections and maximum milk production.

Despite an annual improvement in the average SCC of herds over the last few years, we still consistently see herd SCCs starting to rise from early summer. It then usually continues to creep up for the rest of the year. The financial impact of a ‘creeping’ SCC should not be underestimated. For example, at a milk price of 30c/L, if the average bulk tank SCC of a 100-cow herd increases from 150,000 cells/mL to 250,000 cells/mL, it reduces the overall farm profit by approx. €8,200. An additional €4,000 of extra profit is lost if the bulk tank SCC increases from 250,000 cells/mL to 350,000 cells/mL.

What to do?

Milk record the whole herd now, and identify any high SCC cows i.e. SCC>200,000 cells/mL

1. These high SCC cows should be marked and milked last to minimise disease spread.

2. Discuss a treatment plan with your vet - while treatment may appear to be the most logical option, remember that cure rates can range from 20-80% depending on various factors, such as the bacteria involved, the duration of infection and the cow’s lactation number.

3. Remove the source of infection - Dry off individual quarters i.e. simply stop milking it, do NOT use a dry cow tube. Consider culling if the cow is a repeat offender i.e. high SCC in two consecutive lactations.

For full details on dealing with high SCC cows, see Management Note M in the CellCheck Farm Guidelines for Mastitis Control.
DAIRYGOLD TEAGASC JOINT PROGRAMME LEANFARM OPEN DAY
A Leanfarm Open day was recently held at Sean and Terasa Moher’s farm in Ballybiglin outside Mitchelstown on Wednesday 12TH June. Over 80 milk suppliers came to see the progress made by one of the original Leanfarm pilot members who has been a strong advocate of the programme since it was launched by Dairygold.

Recent Improvements on display
- Improved calf paddocks and new water troughs in out farm.
- Holding pen to train calves to going out to grass.
- Planned calf dosing around holidays.
- Air gate installed at the back of the parlour which is controlled from the pit.

The Moher Leanfarm Vision
“To achieve 1750 KG milk solids/ha on a milking platform with 1 labour unit and a sustainable work life balance”

Sean’s effective use of all of the Leanfarm Principles is evident to see in all aspects of his farm. One particular feature is his use of Standardisation.

Standardisation clearly maps out the processes and methods associated with key farm tasks. Sean maintains a laminated folder in his dairy which has pictures with numbers corresponding to the steps involved with the milking process. The folder is available for anyone who comes in to milk the cows so that they are clear on the key steps.

SEAN MOHER LEANFARM EXPERIENCE
“After completing the lean farm training I quickly realized that large parts of the working day were spent on small tasks and if I wanted to shorten my day it was easier find a large number of tasks that took 1 to 5 minutes tasks to eliminate rather than finding an hour.

The training taught me to have my eyes always open to wastes but most importantly to do something to eliminate these. It could be as simple as sorting the tool box on the tractor, putting a hook on a gate, putting in an air gate in the parlour, upgrading paddock infrastructure or more emphasis on fertility in the breeding strategy In summary every change counts and continuous improvement is the name of the game.”

LEANFARM COMPETITION
Thanks to all who entered our Leanfarm competition which is now closed.

Ideas are being judged and the winner will be announced in the August edition of Milk Matters.