

## Management Hints for August 2020

By Matt Ryan

### Messages:

- ❖ My main message: Lime all your farm this autumn.
- ❖ Get all your autumn –winter analyses done now.
- ❖ Plan your last Nitrogen application.
- ❖ Only feed meals when it makes economic sense!
- ❖ Achieve grass targets to extend autumn grazing.
- ❖ Maintenance work for August.
- ❖ 2020 breeding over; 2021 starts season starts now.
- ❖ “Work stress” is a serious issue for farmers.

### LIME: 1<sup>ST</sup> STEP TO NUTRIENT AVAILABILITY!

- ❖ Why apply lime?
  - Essential elements, nitrogen, phosphorous, potassium, sulphur, calcium and magnesium, show reduced levels of availability under acid conditions.
  - Lime corrects soil acidity. This facilitates micro-organisms to thrive so that they can break down plant and animal residues which does result in more plant growth.
  - There are no restrictions in place for lime use. One trial showed that applying lime to a very low phosphorous (P), acid soil increased the availability of P from 0.8ppm to 5.7 ppm.
  - Increases earthworm activity which improves soil structure.
  - Assists the survival of clover fixing bacteria, thus increasing clover nitrogen fixation.
  - Perennial ryegrasses and clover survive the competition from poorer grasses.
  - It improves grass palatability, and hence animal performance.
  - It helps to extend the grazing season at both ends; hence we grow more grass.

- ❖ As intensive dairying removes nearly 1 ton lime per year, get your farm soil tested immediately and apply lime early this autumn. We are wasting a lot of N and P by farming acid soils.
- ❖ Increase the soil pH to at least 6.3 (6.0 in high molybdenum areas, but get a test to confirm).

### **AUTUMN ANALYSIS/TESTS!**

- ❖ Silage should now be analysed for feeding value and for minerals.
  - With a feed analysis you can estimate the quantity of feed you have available in dry matter and feeding value.
  - You will know whether to buy straw for over-fat cows; how much meal to feed to thin cows and, more importantly, you will know which silage to keep for feeding to milking cows in spring.
  - The mineral analysis will indicate to you what you need in a pre-calving mineral mix and what minerals may be deficient in cows next breeding season.
- ❖ Soil testing should be done now. There is only one way out of low milk price and that is to feed over 90% of home grown grass to producer her milk.
  - Lime and fertiliser grows more grass, giving an 152% return on the investment.
- ❖ Get a faecal egg count (FEC) done to determine if there are worm eggs or larvae in animal dung samples. This information will be useful for:
  - Avoiding unnecessary treatments (we must avoid the over-use of drugs and dosing at all cost) and assisting in the timing of treatments.
  - As an indicator of pasture contamination.
  - Will help to identify/forewarn of clinical ill animals.
  - Will identify the presence of adult worm producing eggs.
  - Will confirm if the dosing programmes practiced are working.
  - Take 10-15 animal samples under Vet supervision.
- ❖ Johne's control – join up now! It is subsidised.
  - The losses, apart from future market demand, accrue from, reduced milk yield, reduced feed efficiency, increased culling, increased replacement rates, reduced fertility, increased mortality and lower cull cow values. All these could add up to, in extreme cases, to €285/cow/year.

- Talk to your Vet.
- ❖ Use milk health test results to identify animal health issues and act.

### **LAST APPLICATIONS OF NITROGEN!**

- ❖ Now is the time to take stock of how much Nitrogen you have used so far this year relative to what you are allowed to use.
  - Overuse will result in penalties.

**Table 1: Recommended Rates of N for Different Stocking Rates**

Stocking Rate/Year		August	September	Total for Year	
Kg/ha Organic N	Cows/ha	(units/Acr)	(Units/Acr)	Kg/ha	Units/Acr
155 – 170	1.82 – 2.0	14		164	133
170 - 180	2.00 – 2.12	20		192	155
180 – 190	2.12 – 2.24	28		216	175
190 – 200	2.24 – 2.35	26	20	250	202
200 – 210	2.35 – 2.47	28	28	275	223
211 – 250	2.47 – 2.94	25	18	242	196

- ❖ Study **Table 1** and decide what level of Nitrogen you can use for your own farm.
- ❖ Farmers stocked at less than 2.24 cows/ha should only put on Nitrogen **once**, late August, over the next two months.
  - All other farmers should apply **28 units/acre** in August (Urea OK if wet).
  - Response is much better in August.
- ❖ This Nitrogen should all be **blanket** spread as there is no reduction in grass yield for August – September with blanket spread applications.

- ❖ The August Nitrogen should be applied early in the month as you will grow 10-15% more grass because growth rates are higher early in the month than late August.

### **ONLY FEED MEAL WHEN ECONOMIC:**

- ❖ Recently, I have been very surprised that there is so much talk about kgs MS/cow/day and farmers jump in with meals if there is a small reduction. No talk of sticking with the plan!
  - The plan being to produce 500kgs MS with 500 kgs meal.
  - Research says that for every €1 spent on meal the actual cost is €1.60 as fed.
- ❖ Out of habit farmers are meal feeding, but feeding meals depends on:
  - Availability of grass – farmers have fed an enormous amount of meal this year and now should capitalise on the availability of grass for grazing,
  - Your stocking rate (none required at less than 2.2 cows/ha,
  - The type of cow you have (some cows respond poorly to meals),
  - The cost of meal,
  - The milk price,
  - And combining all - the economic response.
- ❖ Look up your EBI report – the Predicted Difference (PD) page.
  - It tells you the genetic ability of your herd to produce milk,
  - This is given in the form of PD for milk in kgs. (A great figure to know),
  - Get your Adviser to help you with this,
  - If you haven't this information, then, chances are you will make a bad decision and lose money.
- ❖ **Table 2** shows you how to lose money or make money – it all depends on cow genetics!

**Table 2: The Response (kgs milk/kg meal) in August by cows of different genetics to produce milk with plenty of grass available.**

<b>PD for Milk</b>	<b>+ 10 Kgs</b>	<b>-50 Kgs</b>	<b>-120 Kgs</b>
Milk yield/kg meal/day	1.07 kg	1.04kg	0.56kg
Value of extra milk/day (milk price = 30c/l)	32cents	31 cents	17 cents
Cost of 1 kg. meal (€260/ton)	26 cents	26 cents	26 cents
Economic Gain by Feeding 1kg Meal	+6 cents	+5 cents	9cents loss

- ❖ This means that for a farmer with a herd with a PD for milk of +10 kgs, for every 1kg of meal fed (costing 26 cent) he will get 1.07 kgs milk (worth 32 cents) in August.
  - Therefore, he has a margin of 6 cent/kg meal fed, but there will be grass wastage.
  - However, Teagasc and other researchers say that the actual cost of meal, as fed, is 60% higher than the actual price.
- ❖ However, if the PD for milk in your herd is -120 kgs or less then the response is only 0.56 kg milk (worth 17 cents) per kg of meal (costing 26 cents):
  - Therefore, you are losing 9 cents per kg meal fed,
  - These cows are more likely to be New Zealand, British Friesian, stock bull cows or Jersey crosses.
  - You are losing money!
- ❖ The production response to feeding more than 2-3 kgs of meals is likely to be less than those outlined in Table 2
- ❖ Citrus Pulp as the sole concentrate should not be fed at rates above 2-3 kg.

### **TARGETS TO EXTEND AUTUMN GRAZING:**

- ❖ Farmers must rely solely on grass to feed cows, which is a big challenge in autumn as grass growth decreases relative to demand.
- ❖ Table 3 outlines target covers (kgs DM) per cow to drive autumn grass.

**Table 3: Target Grass Covers per Livestock Unit for the autumn**

<b>Date</b>	<b>Stocking Rate</b>	<b>Stocking Rate</b>	<b>Stocking Rate</b>	<b>Rotation</b>
	<b>2.5 LU/Ha</b>	<b>3.0 LU/Ha</b>	<b>3.5 LU/Ha</b>	<b>Length</b>

1 <sup>st</sup> August	180	180	190-200	20 Days
Mid-August	200	250	220	25 Days
1 <sup>st</sup> September	300	330	280	30 Days
Mid-September	400-450	370	340	35 Days
1 <sup>st</sup> October	400	380	335	40 Days

- ❖ Grass build up starts in August:
  - In the South on 10<sup>th</sup> August
  - In the North on 15<sup>th</sup> August.
- ❖ Rotation length must increase from 20 to 30 days in late August.
- ❖ The following possible ways of building up grass, or a combination, should be applied:
  - **Reduce stocking rates** on milking platform by taking away calves or cattle, selling cull cows, drying off very poor yielders. Stock cows at 2.9 cows/ha for grazing – a little higher this year!
  - **Reduce 2<sup>nd</sup> cut silage** plan, particularly if you have enough pit silage.
  - **Introduce meals** (expensive option), but will be necessary at high stocking rates. A grass budget will tell you when to start but early rather than too late. An alternative to meal is to feed high quality round bales and this is the preferred option.
  - **Apply more nitrogen**, but stay within your limits, in August as you get a better response than in September.
  - **Graze out** pastures well (3.5-4.0 cms) as there is a temptation to leave too much after each grazing in August.
  - Set up a **'3<sup>rd</sup> cut-graze'** bank of grass.
  - Protect **regrowth's** by not having cattle or cull cows grazing after cows or spending more than 24 hours in each paddock.
- ❖ It's a very good idea to set up this; '3<sup>rd</sup>-cut-graze' because:
  - It brings into the grazing rotation a bank of high quality grass for grazing in September.

- Allows you use 2-3000 gallons (16-24 units N) of slurry per acre on it at closing,
  - Allows you put on 55-65 units of Nitrogen (discount the slurry N) to cover the 6-week closed-up period and the extra Nitrogen will grow extra grass which will feed 10-12 cows for one extra day for every acre closed up.
  - The way you do it is to set aside 10-15% of the farm for this purpose by stocking the cows at 2.9 – 3 cows/ha for grazing.
  - These fields should be topped or very well grazed out (skinned) leaving no butt, apply the slurry plus 25-35 units of N per acre and leave for 6 weeks and it should result in extending the grazing rotation by 10-12 days in mid-September.
  - An interval of 3-5 days should be allowed between spreading slurry and applying nitrogen, so as to avoid losses of N by denitrification.
  - If grazing grass is tight during this period, some of this area can be grazed.
- ❖ However, at low stocking rates (2.2 cows/ha or less) because the demand will be low, 40-45 kg DM/day, it will not be necessary to do any of the above to build up grass. It will happen naturally.

### **BREEDING OVER FOR 2020: 2021 STARTS NOW**

- ❖ I think there is a great need to scan all cows and heifers in August (32 days after AI finished or removal of bulls) to confirm pregnancy now:
  - The value of this is that cull cows can be identified. Due to a shortage of grazed grass and winter feed they can be dried off and sold shortly,
  - It also gives you the information to Review the success of your breeding season just ended. This is a vital knowledge so that you have a better year next year.
- ❖ If cows are getting thin put them on OAD milking.
- ❖ The “InCalf” project in Australia/New Zealand, due to the seasonal nature of calving, divides the year up into four key stages of lactation; i.e. mid-lactation, dry period, calving and mating.

- With this programme they write down a “plan” for each season and when that period is over they “review” the plan and achievements for the period.
  - This programme can be implemented by the farmer on his own or with the help of advisers/vets/discussion group; all of whom are well informed of fertility management.
- ❖ Mid-lactation fertility action plan (Now):
- During the next few months identify thin cows, because we want a drying off Condition Score (BCS) of 3.0 – take action if BCS of 2.75 or less.
  - BCS all cows visually in the field, giving the first calvers particular attention,
  - If more than 20% of your herd are thin (BCS<2.5), then your overall feeding/management must be suspect.
  - If the whole herd is marginal you must increase the availability of energy in the diet.
  - If some young cows and others are particularly thin and suffering, ask yourself do you need to go on once-a-day milking.
  - Fat cows that are not in-calf could be used to clean up paddocks to the grazing height required so as not to force young cows to do that chore.
  - If you have low BCS cows, ask yourself are all health issues, such as fluke, worms and IBR, an issue?
- ❖ Replacement weight targets should alert you to action (check with the contract rearer):
- Calves (R1’s) should now be 30% of their mature weight (at 6months). That means 150, 165 or 180kgs for animals whose mature weights of dam are 500,550 or 600kgs respectively.
  - For the same mature weights, incalf heifers (R2’s) should be 350, 385 and 420kgs at 18 months old (now, 1<sup>st</sup> August) or 70% of mature weight.
  - Any R1’s or R2’s under these weights now must be separated out for special attention. That is, preferential grass or some meal in the diet.
    - For R1’s, the response is 4 to 1, which is the best response of the year.
  - To establish the mature weight of your herd, cows should be weighed in June/July but do it now to get a rough idea. On the ICBF, EBI page you will see the maintenance figure for your herd and that will give you a pretty accurate mature weight for your herd as follows:



<b>EBI Maintenance Figure</b>	<b>Estimated Cow Wt. (kgs)</b>
1.	640
10	592
20	544
25	519
30	495

- ❖ Breeding heifers should get their first treatment for Leptospirosis at end of August and the second one in mid-September with all the cows,
- ❖ They should get their first injection for Salmonella at end of August and again the second one with all the cows in mid-Sept. I consider the Lepto and Salmonella vaccinations essential for every dairy herd.
- ❖ Try to keep the R2's in a fly free area to avoid mastitis infection.
  - Where the risk is high, use pour-on's, impregnated fly tags, Stockholm tar or teat spray.
- ❖ Farmers who have calves with a contract rearer should make absolutely certain that they are on target weights. The only way to do this is to have them weighed independently or be there yourself. Any contract rearer not providing regular heifer weights is not serious about the job.

### **MAINTENANCE WORK IN AUGUST!**

- ❖ This month and next are probably the only periods of slackness from routine work where farmers can devote time to maintenance work. However, too many farmers are doing huge amounts of capital development work, because (1) they like doing it and (2) they are trying to save money. People need to cut back on this mainly because many dairy farmers are “stressed out” from work and need a break.
- ❖ What action?
  - Repair eave chutes and down pipes, transferring rainwater direct to streams/waterways (reduces slurry handling and soiled water)
  - Repair broken cubicles, feed barrier, etc (reduces physical damage to animals).
  - Repair/replace broken slats (reduces foot problems)
  - Repair damaged concrete on floors, passages, yards and cubicle beds (reduces lameness)

- Improve ventilation, both inlet and outlet area (this is a major issue on most farms),
- ❖ Poor ventilation results in lameness, mastitis and viruses that in the past seemed to affect only calves but now affect all animals.
  - Cows need 2 sq. ft both inlet and outlet area, while a lower proportion should be provided for other stock.
- ❖ Paint roofs, doors, gates, etc.
- ❖ To ensure all maintenance work is done in an organised fashion:
  - Make a “to do” list,
  - List out “jobs” that need two men,
  - Decide if you have time to do all this extra work yourself,
  - A local handy man may do it in half the time with some help
  - Make your shopping list so that you don’t have to make several trips to town (men never make lists) for bits and pieces.
- ❖ Take all the necessary safety precautions:
  - An accident is the last thing your family needs,
  - Don’t expect too much from your children with this type of work.

#### **A FOOTHBATH THAT WORKS:**

- ❖ The following is working well on a number of farms (suggested by Neil Chesterton, NZ):
  - It must be part of the exit race and not a diversion area.
  - 1.5 metres wide – the full width of the exit race.
  - It should be 2-3 metres long – if it is greater than 3 m more contamination takes place.
  - The floor level must be the same level as the entrance and the exit.
  - It should be approximately 20cm deep, with solution depth 8-10 cms.
  - The top of the blocks must be flat with no sharp edges but slightly rounded.
  - There should be one litre/cow of solution in the bath and as only 3-4 cows per 100 defecate per milking, the solution should do for 2 milkings.
  - To drain it, there must be a 10-20cm drain hole at the lowest corner for collection in the soiled water tank.

- ❖ If you have high levels of sole bruising, foul of the foot, white line disease or sole damage you can be pretty certain it is due to stone damage while walking. A very important section for this problem is the concrete yard leading to the milking parlour. A stone trap is needed in this area:
  - Before the start of the concrete place 40-100 metres of lime fines, coarse pine bark, wood chips or sawdust.
  - Astro-turf or other matting can also be effective on the first section of the concrete,
  - Kerbing in concrete or railway sleeper (6-9 inches high) can also act as an effective stone trap. When the cows' lifts their feet off the ground the stones and pebbles drop off. Two kerbs will make the cows' lift their feet twice and stones are dropped between the kerbs,
  - Some farmers use a water bath as described above.
  - The concrete area must be swept at least every 2<sup>nd</sup> day as well as the stone trap area.

#### **“WORK STRESS” OR “BURN OUT”!**

- ❖ “Work stress” arises when man or woman is:
  - Fed up of the problems of life,
  - Working on his/her own,
  - Mentally tired,
  - Fed up of what he/she are doing,
  - The person never or rarely gets outside the farm gate,
  - Unable to get a ‘break.’
  
- ❖ “Work stress” results in the farmer:
  - Not being able to cope,
  - Being irritable,
  - Being constantly tired,
  - Being stale,
  - Doing things badly.
  
- ❖ Avoid “work stress” by:
  - Working a reasonable day length,
  - Getting involved in community activities,
  - Meeting ‘positive’ people often,
  - Taking a holiday.
  
- ❖ A reasonable work day is within all farmers reach:

- Milk cows at 8am and again at 4pm, because research says there is no loss of milk if cows are milked at 16 to 8 hour milking intervals.
- 13 times per week milking does not reduce milk yield, therefore, don't milk the cows on Sunday evenings.
- Get the Farm Relief Service to milk them one other evening per week.
- Get contractors/farm relief service to do some general work if you are overworked
- You should not be working more than 10 hours per day and if so ask yourself how you can organise yourself.

❖ Take a holiday.

- Insist on a family holiday so that they can enjoy their children.
- On holidays leave the mobile on the 'off' button so that you remove yourself from farm life to a relaxed frame of mind.
- Two books I recommend for you; "The Choice" by Edith Edger and "Fascism – A Warning" by Madeleine Albright.