

Labour Efficiency and Spring Workload

Spring Management Series 2021

Edition 3



As we enter March there has been a lot of work completed, with more to do. On most farms, 50-70% of the spring calving herd will have calved at this stage. Pressure on accommodation and people is evident.

Selling surplus calves early has been shown to have a positive effect on reducing workload. This edition will look at how calf rearing can be simplified by once-a-day (OAD) feeding. We look at how improving communication on your farm boosts productivity. We also examine how cost efficient and effective contractors can be for your farming operation.

Once-A-Day milk feeding

OAD feeding is a practice that can greatly reduce the labour required during the rearing period. Many Lakeland Dairies suppliers have practiced OAD milk feeding to reduce labour in the busy spring period. Research conducted by Teagasc has shown no difference in the level of performance achieved by calves on OAD or TAD (twice-a-day) feeding.

In addition, studies have pointed to a 25-36% reduction in the labour input required for OAD compared to TAD feeding systems. Early rumen development is enhanced due to the increased consumption of concentrates/straw. It's also evident that calves achieve higher dry matter intakes at an earlier age, possibly leading to two week earlier weaning.

The effect of feeding system on calf weight at 77 days and total calf care time

	Automatic Feeder	Once daily with teats	Twice daily with teats	Twice daily with trough
Total calf time, including vet time (seconds/calf/day)	38	23	36	27
Calf weight at 77 days (kg)	95.0	94.8	93.2	90.5

Source Teagasc

Best practice for once-a-day milk feeding

For calves transitioning to OAD feeding, they must be provided with ad-lib access to concentrates, long fibre, and always have access to fresh clean water.

- ▶ Like TAD feeding, ensure all calves drink their daily allowance of milk.
- ▶ If OAD feeding is implemented, it's best practice to feed calves at the same time with milk replacer each day.
- ▶ It's preferable to feed milk in the morning, as this will reduce disturbance and allow calves to settle down to concentrate feeding.
- ▶ Concentrates should also be fed at a time when milk is not being fed (if you're feeding milk in the morning then feed concentrate in the evening). This ensures compliance with EU legislation on twice daily feeding.
- ▶ It's important to continue to check calves twice daily to detect any potential problems such as scour, etc.
- ▶ Being consistent on feeding time, temperature of the milk fed, concentration and volume offered, as well as hygiene, is of the upmost importance.



Calves on Alan Clarke's farm in batches of 12

Key information about once-a-day milk feeding

- ▶ As calves are dependent on a mostly milk diet for the first four weeks of life, OAD feeding should not start before this point.
- ▶ Only healthy calves should be transitioned to OAD feeding.
- ▶ Calves are not under-fed when an OAD feeding protocol is correctly implemented; rather they receive their daily allocation of milk powder in one feed rather than two.
- ▶ For OAD systems, the mixing rate may be gradually increased to 180g of powder to 820ml of water. At a feeding rate of 4.25-4.5L/day, this gives the mixed milk a solids content of 18%. It will take a high-quality milk replacer to achieve this mixing rate.

Communication on farms

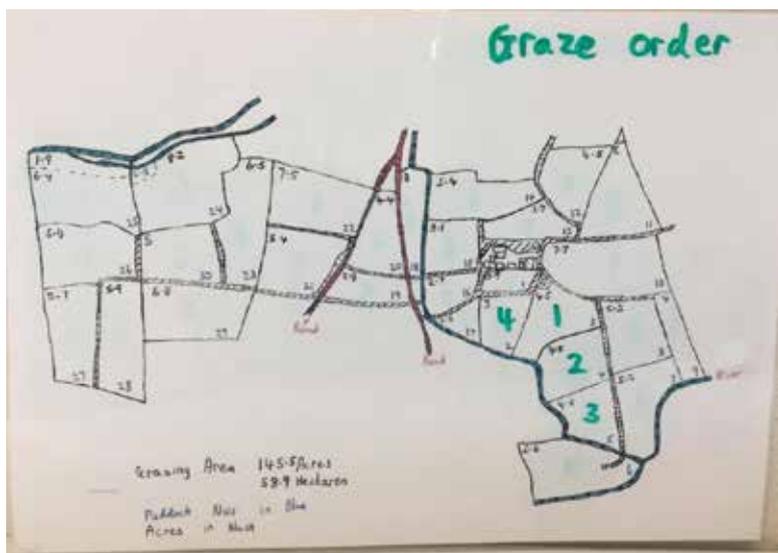
As farm businesses expand, skilled employees, students and family are hired to accomplish the goals of the farm business. All the processes of the farm must be organised and simplified, as different people perform different tasks each day.

Good communication:

Results in improved work efficiency, increased employer and employee satisfaction, and will increase the overall operational efficiency of the farm business.

Leads to motivated and productive staff. Staff should know what is going on and what is expected of them and feel that their ideas are valued, and their good performance praised.

Creates strong working relationships. Open communication helps set expectations and coordinate actions. It builds trust, enables people to act on facts, not assumptions, and provides feedback on performance.



Farm maps are a simple and effective communication tool

Effective communication methods on the farm

1 Informal verbal:

This can be on a daily basis – when you go through the “to-do” list for the day. This could be held each morning after breakfast or over a cup of tea or coffee.

2 Structured meeting:

At the start of the week, where the tasks for the week are listed and prioritised for each person on the farm. Responsibilities are assigned, feedback and coaching is given (as required), and demonstration of jobs/tasks is carried out if needed. These meetings can be an opportunity to discuss different options and methods of carrying out tasks. They also provide an opportunity to discuss positive events and progress on the farm and what improvements can be made.

Trying to communicate in an unsuitable environment leads to misunderstanding, e.g. avoid machinery noise, livestock noise, standing in a wet cold shed etc. These are all unsuitable environments. Make sure that your weekly meetings occur in a comfortable setting where the messages can be easily understood.

3 Informal written:

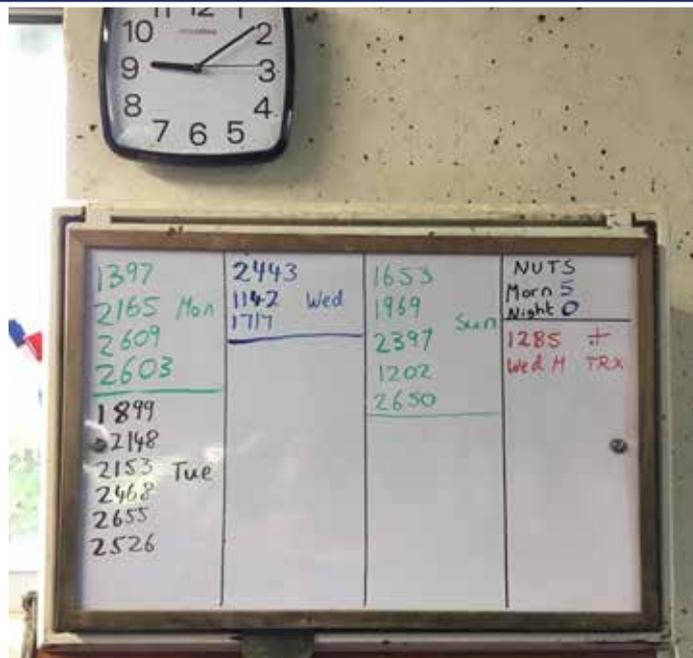
This could include the use of notice boards, diaries, WhatsApp, or texts to note relevant work, information or material needed. This can be a very effective method of ensuring that everybody working on the farm is up-to date with critical information, e.g. date of cow treatment with antibiotics or date of fertiliser application. It is useful to provide the employee with a pocket notebook.

4 Formal written communication:

Standard operating procedure (SOP). The SOPs provide step-by-step direction for detailed practices such as:

1. How to carry out routine checks of the milking machine.
2. The correct washing procedure for the milking machine and bulk tank.
3. Machinery maintenance and operation

Standard operating procedure manuals could also contain lists of types of antibiotics, detergents or fertiliser used. Such information is important for a new employee, for farm relief personnel or anyone not usually working on the farm. A farm map with paddock names, numbers and hectares should be displayed on the notice board. Large laminated maps can be written on with a dry wipe marker.



Notice board with calved cows

“One third of employees believe that a gesture as small as ‘thank you’ goes a long way towards motivation, and 75% of workers remember a time they were verbally praised. Good managers are generally effective motivators and provide regular feedback, both good and bad, on a fair and consistent basis.”



Farm stock take

Keeping organised and stocked up during spring is a key job in maintaining early finish times. It is beneficial to do a stock take on all supplies on the farm.

Running out of dry cow minerals or vet supplies will cause unnecessary trips to the store and delay treatment for animals.

Things to check

Dry cow minerals	Milk replacer
Calcium	Electrolytes
Vet supplies	Concentrates
Fencing supplies	Bedding and forage

Contractors, essential members of your farm business

As mentioned in edition two, contractors play an important role in a successful farming operation. Contractors will play a huge role in the application of slurry and fertiliser over the months of March and April. Most farmers are busy with calving and calves and haven't the time to spend hours on a tractor.

The example below shows how similarly priced contractors are (to your own costs including labour), with higher capacity machinery.

	Farmer	Contractor
Equipment	1600-gallon tanker	2000-gallon tanker
Rate of application	3 load/hr for 7 hours	
Gallons/hr	4,800	6,000
Total gallons spread	33,600	42,000
Cost /hr	€35/hour *	€45/hour
Cost / 1000 gallons	€ 7.30	€ 7.50
Additional hours to spread 42,000 gallons	1.75 hours	-

*€35/hour of which €20 is for fuel, depreciation, wear & tear. €15 is for the farmer's own time

Other farm benefits of using a contractor

- ▶ The option to spread these quantities of slurry is generally not available to the farmer or may take 2-4 days' work among all other jobs. It also distracts from profitable farm jobs, such as grazing and managing animal health.
- ▶ Contractors with higher capacity would be able to complete the work in a faster timeframe, reducing farmyard disruption.
- ▶ Nitrogen effect: In this example, if the 42,000 gallons of slurry was spread using a LESS method, an additional 126 units of nitrogen would have been utilised. LESS methods recover 3 more units of nitrogen per 1,000 gallons when compared to spreading with a splash plate. **Worth €60 - €65 at today's fertiliser prices.**
- ▶ **You're busy enough: Managing a farm is difficult with lots going on in spring. The ability to offload a task such as slurry, with no significant effect on overall profit, should be practiced to take pressure off yourself and become more labour efficient.**

Bulk fertiliser spreading

This cost neutral practice is a huge time saver. Many farmers try it out in spring for spreading fertiliser on silage ground and blanket spreading the milking platform.

Once they see the benefits, some farmers move to full contract fertiliser spreading services. Bulk spreading would take place every 10-20 days. Advancements in GPS have also led to a more accurate service.





Farmer Focus



Alan and Thomas Clarke Killinkere, Virginia, Co. Cavan

Farm Profile

Started calving: 28th January

% of herd calved: 70%

Spring Labour: Alan, Tommy, Student (Mon-Fri),
Neighbour (Sat & Sun)

**Most effective labour-saving practice
this month:** Once-A-Day milk feeding to the
older calves.

To the 1st of March we had 104 cows calved.

The rate of calving has slowed down from 6-7
calving a day to 1-2 calving per day.

On Monday we moved to twice a day milking
with only the cows that are going to the tank
being milked twice daily.

All fresh calved cows, and cows producing
transition milk, stay on once-a-day milking for
the following two weeks.

Most of the heifers are now calved. They have
transitioned into the parlour with relative ease.

Training of the heifers to the parlour before
calving has been beneficial and an essential
practice to reduce stress at milking time. We
start milking at 7:15am. Our student for this
year brings out the milking cows and cleans the
cubicles. When he has that done, he helps in
the parlour for the last couple of rows.

Calf care is going to plan. When we start
milking twice a day, we put the older calves on
once-a-day milk feeding. Currently, we have
one batch of 12 on once-a-day milk feeding and
by the end on the week there will be 3 batches
of 12 on once-a-day.

We feed them milk in the morning and
concentrates in the evening. It's surprising how
much time you save in the evening not having
to prepare another kart of milk.



Bulk Calving pen on Clarke's farm



Farmer Focus (Continued)

The calves are on milk replacer before moving to once-a-day to ease the transition. We increase concentration of milk replacer when calves are on once-a-day, calves get 750 grammes of powder in 3.75 litres of water to make 4.5 litres of milk.

The difficult weather conditions in the middle of February put us behind on fertiliser and slurry applications. We have booked the local contractor with the umbilical piping system to apply slurry with the dribble bar on grass covers under 700KgDMHa, even though we have our own slurry tanker. One or two days with the contractor really takes the pressure off the slurry for the whole year. Even with the best intentions, we would not get out as much slurry as the contractor can in the spring. There are enough other tasks to be carried out.



Joint Development Programme

Lakeland Dairies/Teagasc Joint Development Programme has produced this Spring Management Series. Our advisors are currently available by phone to discuss all farm related matters.

- ▶ Colin Anderson 087 7467424
- ▶ Owen McPartland 087 3302254
- ▶ Adrian McKeague 087 4138584