

Workload – reduce

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Researchers at Teagasc Moorepark recently completed a detailed study of the time that leading commercial dairy units spend on individual jobs. All tasks were measured, whether completed by the farmer, family, employees or contractor. “Work organisation and work prioritisation is the key to flattening workload peaks,” says Justine Deming, who conducted the study, and presented the findings at the Teagasc Moorepark open day on 4 July.

Only farms regarded as being already relatively labour-efficient were included. Spring accounted for 34% of their annual workload. This may seem low, but these farms had practices and systems in place to minimise and spread the peak workload.

Work organisation

Preparation and organisation in the months leading up to calving is key to reducing the spring peak.

One farmer said: “We have a busy December and January, so February is not so bad. If you are fully set up, you can deal with lots of cows calving in February.”

A weekly plan created for December and January will ensure that, where possible, work is completed well in advance of calving. The plan (Table 1) helps avoid work drifting into February or March.

Labour efficiency

In the study, herds of 200 cows required 28 hours of total work per cow. However, the range in this herd size category was from 18 hours/cow for the most efficient farms to 39 hours for the least efficient. This equates to 3,600 hours of work for the most efficient, and 7,800 for the least. Why is there such a difference? Some of the

approaches used by labour efficient farms include:

• **Machinery work:** This accounts for 20% of the work on farm. The most efficient farms contract out a high proportion. Also, there is less total machinery time on the most efficient farms, indicating that contractors are often better equipped and able to achieve greater efficiency than individual farms.

• **Milking time:** The most efficient herds have fewer rows to milk and therefore spend less time in the parlour. They also have more automation around milking, such as backing gates and drafting.

• **Milking OAD in early lactation:** Some herds milk cows just once daily for the six weeks after calving, reducing workload. This can save between one and two hours a day depending on parlour size. It will reduce milk production during this period and over the subsequent lactation – some trials show a 6% reduction in milk volume over the full lactation.

• **Cow condition at calving:** Cows calving in the correct body condition don't create the same work as fat or thin cows. Efficient farms put time into dry-off and feed groups to achieve a calving score of 3.25 units. They select sires with low calving difficulty. A calving jack should not be required on more than 1% to 2% of the herd.

• **Night feeding of silage:** Feeding cows late in the evening reduces the percentage of night-time calvings. Trials have shown that restricting silage feeding time resulted in 9% fewer night calvings (from 12.30am to 6.30am) compared with cows with full access to silage. Fifteen percent of cows still calved by night and 85% by day when silage feeding time was restricted and 24% calved by night and 76% by day when cows had continuous access to silage.

Labour-saving methods of calf rearing will be dealt with in later editions of the magazine.



Table 1: Labour-saving ideas

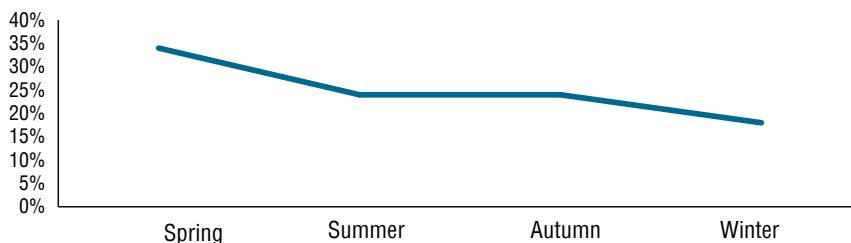
Idea	Labour saved per week	Time of saving	Saving/ annum	Initial cost and annual cost	Cost per hour reduced	Other benefits
New milking parlour	Eight less rows per day, 80 less mins per day, 9hrs per week	Feb to Nov	400 hours	€130,000 €10,000	€25	Safer farm. Tasks done on time. Easier to use relief milkers
OAD feeding calves	60 calves, 20 seconds per calf per day, seven weeks	Mar to May	16 hour	None None	None	Safer farm. Tasks done on time.
Three grazings per paddock	No wire set up each milking, 20 mins per day, For 150 days	April to Aug	50 hours	€3,000 €150	€3	Better cow performance. Better BCS in first lactation animals

the spring peak



Good planning and communication with staff are key to reducing work peaks.

Figure 1
Seasonal workload



Example of a plan for December and January

Wk	December	January
1	<ul style="list-style-type: none"> Correct cow body condition (batch) Dry off all cows Farmyard flow – do cows need to be rerouted to the parlour Parlour access and exit – improve it Clean out calving area Decide what help is needed next spring Print ICBF expected calving list Dry cow mineral programme List other jobs 	<ul style="list-style-type: none"> Complete profit monitor Order spring fertiliser Complete roster for spring workload New student/employee – should start in Jan to allow them to become familiar with the farm etc. List other jobs
2	<ul style="list-style-type: none"> Repair farm roadways Add spur roads for early access Get a fridge and freezer for calf shed Check ventilation in calf shed – change. Measure calf shed – how many calves Extra calf accommodation – hutches Increase calving area Adjust doors for easy cleanout List other jobs 	<ul style="list-style-type: none"> Purchase equipment for calving Complete paperwork with account/solicitor etc Train heifers to parlour Repair fences Increase paddock entrances List other jobs
3	<ul style="list-style-type: none"> Book contractor for slurry and fertiliser in February Check cow and calf flow in the yard at calving – make changes Gates to make cow route secure Slippy floors – get them grooved List other jobs 	<ul style="list-style-type: none"> Take a break for a few days Batch cows for calving Remove machinery/straw from spare sheds Place bedding where it is required Supplies conveniently located to minimise walking List other jobs
4	<ul style="list-style-type: none"> Make a list of equipment and materials needed for calving List other jobs 	<ul style="list-style-type: none"> Measure grass cover Make decision where to graze first Have reels/post in the paddocks set up Erect temporary shelter for calf turnout List other jobs

Evaluating labour-saving techniques

Farmers and farms don't become labour-efficient by chance. They examine each potential labour saving

technique and consider how it could eliminate work on the farm.

They talk to people who have used the techniques and plan how to deal with the cost associated with this change, if there is a cost.

Other benefits

They are willing to pay more to eliminate work during the peak season.

Other benefits also need to be considered, such as improving overall herd performance or making farms better places to work.

The following template could be used to look at potential labour-saving ideas.

Also, take a look at the labour-saving wall from the Teagasc Moorepark open day at www.teagasc.ie