Teagasc Advisory Newsletter

Dairy

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Closing the farm up correctly

Edited by
Tom O'Dwyer,
Head of Dairy
Knowledge Transfer

The most important task any dairy farmer will undertake over the next two months is to ensure that the farm is closed up correctly. You need to plan the last rotation to ensure an adequate supply of grass early next year.

- Aim to start the last rotation in early October; this date will vary a small bit according to grass growth, soil type and to a lesser extent stocking rate. For farms with more difficult soils, closing up should have begun in late September. Later closing reduces spring grass supply.
- The first closed paddocks will carry most grass over the winter period; most of these paddocks will not be grazed until March, when more cows are calved and grass intake is rising.
- The most critical paddocks to close up correctly are those needed for the "rainy day" next spring. These paddocks are typically drier, square in shape, have entrances from the roadway on two sides with multiple access points, and have good access to water. These should have a medium cover of grass next spring (800-1,000kg DM/ha), so should be closed in late October. Identify four or five of these paddocks on your farm to set up for the "rainy day" next spring.
- Finally, your target should be to have 60% of your grazing platform closed by November 1 (70% for higher stocked farms).

Check weanling and in-calf heifer weights

Lower survival rates to the third lactation and reduced milk yields are the consequences of failing to achieve the target weight for their age when rearing replacement heifers. The maintenance sub index determines the appropriate target weight. Most dairy replacements have a maintenance sub

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index of between €0 and €20. Appropriate mature weights, target pre-calving weights and target October 1 weights for spring-born in-calf and weanling heifers are presented in **Figure 1**. Heifers with a greater sub index have a lower mature liveweight than heifers with a lower maintenance sub index. Just prior to calving, they should weigh 90% of their mature weight. On October 1, the in-calf heifer should weigh 75% of her target mature weight, and the weanling should weigh 36% of her mature weight. Supplementation is required to maintain growth rate where grazing conditions are poor or grass is scarce. Weanlings in particular respond well to autumn supplementation. Research at Teagasc Moorepark shows that replacement heifers respond to autumn supplementation at grass. Supplementing heifers with 1.5kg concentrates from late August until early November increased daily growth rates by 0.2kg/day. When supplementing, a high-energy rather than a high-protein feed will deliver the best response rates.

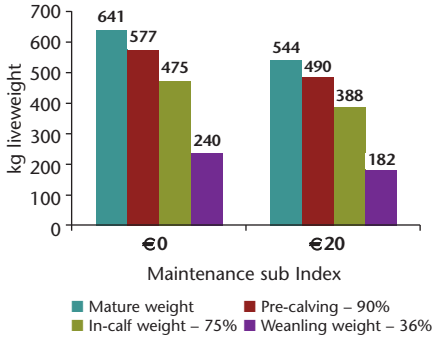

Figure 1: Appropriate weights at different stages for spring-born in-calf and weanling heifers.

Getting winter ready

CellCheck
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Now is the time to catch up on farm maintenance and repairs, as before you know it, you will be housing animals for the winter. Anything that will reduce the number of mastitis-causing bacteria in the cows' environment or minimise the exposure of teats to these bacteria will reduce the mastitis risk. You may already have made a start on some, or all, of these tasks. If not, create a checklist of the tasks below and mark each one off as it is completed:

- if cubicles have not already been power hosed and disinfected there is still time to do it;
- if you have mats, check their condition, as any cracks act as reservoirs for bacteria;
- repair any cubicles that may have become loose during last season to make sure cows are lying correctly;
- ensure you have enough cubicles, with a minimum of one cubicle per cow and ideally 10% more cubicles than cows to allow for normal cow behaviour and movement;
- if you are in the process of building a new shed, seek advice on cubicle design and dimensions;
- service the scrapers and make sure they are working properly before the cows are in the sheds;
- check slats for any damage that may need to be repaired;
- check roofs and gutters (take care when working at a height);
- make sure housing is well ventilated;
- clip cows' tails as this will help keep udders cleaner;
- check water troughs and fix any leaks;
- pre-order cubicle lime or any bedding material that you will use;
- organise your last milk recording before drying off to ensure that you have the most up-to-date information on each cow before drying off; and finally,
- put a generator on your wish list (the initial cost of purchasing it will be covered before you know it).

Getting value from silage analysis

As the winter housing period approaches, it is important to know the quality as well as quantity of silage available.

Test your silage before cattle are housed and use the results to plan your winter feeding in good time.

To get more accurate results, make sure that: (1) the sample taken is representative; and, (2) the sample is tested using a properly calibrated system. Talk to your advisor for more details.

The main quality measures to look out for are shown in **Table 1**.

Table 1: Quality measures for silage.

Measure	Comment	Typical range
Dry matter %	The amount of dry feed per tonne of fresh weight in the pit (excludes water).	<22% is wet silage. >30% is dry silage. Average is 24-28%.
Dry matter digestibility (DMD)	The key measure of feed quality. High-DMD silages result in more intake and better performance. Target 75+ for fresh milking cows, 72+ for growing stock, and 68-70 for dry cows.	60 is very low quality. 75+ is high quality. Average is 66 (which is poor quality).
Crude protein (CP) %	Leafy silage tends to be higher in CP; low-DMD silage or crops that got low fertiliser nitrogen (N) can be low in CP.	<11% is low, >16% is high (may cause excess N in diet), 12.5% is typical average (ok for dry cows). 14-15% is a good target for high-quality feed.
Neutral detergent fibre (NDF)	Measures the fibre content. Linked to DMD. Cattle eat less if NDF is too high.	Over 50% restricts intake but ok for dry cows; 42-45% allows good intake and still enough fibre for rumen function.
pH	Measures acidity in silage, which is required for good preservation. Too high = poor fermentation. Too low results in poor 'sour silage' and poor intake.	Target depends on DM. Dry silage preserves well at higher pH levels. pH3.8-4 for unwilted crop. pH4.4 for dry wilted crop.
Ammonia as % N	Measures level of protein breakdown. High ammonia silages have poor intake capacity. Good pH prevents high ammonia.	7-9% (or lower) indicates very good preservation; over 15% is poorly preserved (feed refusals likely).
Lactic acid	High lactic acid results in clean, palatable silage. Results from well-managed harvest and preservation.	8-10% of DM indicates excellent preservation; <5% indicates poor preservation.
Ash	High ash indicates soil contamination, which may affect requirements for trace mineral feeding levels in winter.	If ash content is over 8% then testing of silage for trace mineral content should be carried out.

Things to do for October

1. Spread all remaining cattle slurry before October 14 and farmyard manure (FYM) before October 31. Spread sooner rather than later to maximise nutrient uptake and reduce risk of run-off and loss of nutrients. If you are a derogation farmer, slurry must be applied using low-emission slurry spreading (LESS).

2. If cutting your hedges, remember to either leave a whitethorn or blackthorn uncut (to mature) every 300m, or to cut hedges on a three-year cycle (that means one-third of the hedges each year). You must choose one of these options if you are a derogation farmer. Side trim to a triangular profile while leaving the height at 1.5m; birds do not nest in hedgerows of less than 1.5m height. Have a plan, and talk with your hedge-cutting contractor.

HEALTH & SAFETY

Check lighting and electrical switches

The clocks go back on October 25, which brings shorter daylight time. In advance of this, check your farmyard lighting.
Bulbs may need to be replaced and fluorescent covers may need cleaning to maximise light output.
To prevent trips and falls, make sure that all walkways are well lit and free of trip hazards. Also, safety test your electrical residual current devices (RCDs) on switchboards. An RCD is an electrical safety trip switch, which trips if an electrical leakage occurs.
A trip switch is mechanical and needs to be test tripped regularly to ensure it is working.
This is done by ensuring that there are no electrical devices operating and physically tripping the switch.

Consult the ESB Networks booklet: Farm Well Farm Safely.

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