Teagasc Advisory Newsletter

BEEF

December 2014

You can achieve two-year-old calving

A heifer needs to weigh 400kg at breeding and to achieve this she must be 270kg at weaning and 320-340kg by mid-December.

Research from Grange shows that two-year-old calving is a critical component of a profitable spring calving herd. We know from ICBF that only 16% of heifers calve at 22-26 months in Ireland. Farmers are very reluctant to try it and some will come up with more reasons not try it, such as: heifers aren't big enough for bulling; and, it will stunt their growth. We should be discussing the positives, which are: 1) more output from the heifer leads to more calves to sell, which puts more money in your pocket: 2) reduced costs – Grange showed that for a 50-cow herd with a 20% replacement rate,

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In this issue

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each additional month that calving is delayed costs €490 or €50/heifer/month; and, 3) potential to reduce number of groups of stock on your farm.

Now is the time to target weanling heifers on your farm for two-year-old calving. These heifers should come from the best cows in your herd and be sired by bulls with strong maternal traits. Heifers should have been born early in the year (January/February 2014) to allow them to be heavier at bulling. They need to have achieved a daily liveweight gain of 1.1-1.3kg/day up to weaning (see **Table 1**). Target weight next spring at breeding is 400kg so they have to be fed well over the first winter to achieve 60-80kg. They will need good quality silage plus 1-2kg of concentrates. They should be earmarked to be turned out to early spring grass. Your target weight in spring for your heifer is 60% of her mature weight at breeding, e.g., targeting cow mature weight of 670kg means breeding at 400kg in spring 2015.

Heifers should be bred to an easy calving sire with a calving difficulty of <4%.

In-calf heifers need to gain 0.4kg/day over the winter. If fluke is an issue, dose going into the winter. 65DMD silage *ad lib* should be adequate to produce a heifer that is "fit not fat". Introduce minerals six to eight weeks pre calving. Heifers should not be "starved" pre calving, as this will have a knock-on effect on re-breeding.

Table 1: Target daily liveweight gains.

Mature cow weight spring	Weaning weight autumn 2014	Bulling weight spring 2015	Calving weight spring 2016
Target % mature weight		60%	80%
600kg	260-280kg	360kg	480kg
700kg	300-320kg	420kg	560kg

Remember cows only reach their mature weight at around five years old

HEALTH & SAFETY

Safety in your home

December is a month when farm work reduces to minimum levels. Particular vigilance is required in the home because of the risk of fire due to the use of festive lights and candles. Now is a good time to check if smoke alarms are fitted and are working properly. Following the festive season, it is a good time to consider what changes to make in advance of the busy spring season. The Farm Safety Scheme provides grant aid for a range of farm safety improvements. Applications will close on January 9, 2015, and further information is available on the DAFM website or from Teagasc advisers.

Water requirements of stock

Livestock can survive for a period of time without food but they will not survive without water. With a cold winter forecast by some, do not leave animals without water for more than 24 hours. Finishing cattle on high concentrate diets should never be left without clean drinking water.

Table 2: Drinking water requirements.

	Litres/day
Dry cow	40-55
Cattle – 300kg	20-25
Cattle – 600kg	35-65
Calves	20-25

BVD eradication programme

Last month, some 7,300 farmers who participated in the voluntary phase of the national BVD programme in 2012 received a letter from the BVD Implementation Group updating them on their herd status and testing requirements for 2015.

Negative herd status

From January 1, 2015, these herds will become eligible to qualify for negative herd status (NHS) if they can satisfy the following requirements:

1. completion of a minimum of three years of tissue tag testing on calves born into the herd;
2. existence of a negative BVD status for every animal currently in the herd (on the basis of either 'direct' or 'indirect' results); and,
3. absence of any animal(s) deemed to be persistently infected with BVD virus from the herd in the 12 months preceding the acquisition of NHS.

A total of 2,140 herd owners received letters stating that they currently qualify for NHS and that this status will be formally assigned on January 1, 2015.

A further 4,321 herd owners received letters informing them that their herd does not currently meet the requirements due to the presence of some animals (typically one to three) without a direct or indirect negative status. These animals can be identified on the ICBF database, retested in advance of January 1, 2015, and qualify for NHS, assuming that the test results are negative.

Finally, 816 herd owners were informed that they cannot qualify for NHS on January 1, 2015, due to the presence of one or more persistently infected (PI) animals in their herd during 2014. These herds will become eligible for NHS 12 months from the most recent date of PI removal, subject to the other criteria also being met.

Testing arrangements for 2015

In order to maintain negative herd status, herds must carry out tag testing of all newborn calves and this will be the only method used for monitoring NHS herds.

RESEARCH UPDATE

Graze tightly if you want highly digestible silage

By Padraig O'Kiely, Teagasc Grange.

Silage digestibility depends on the quality of the harvested sward, the success of the silage making and the feeding out process. The quality of the harvested grass depends firstly on its growth stage – leafy grass has a much higher energy value (digestibility) than stemmy grass with mature seed-heads. The species and varieties of grass, and the presence of clovers (good) or 'weeds' (bad), also impact on digestibility.

Optimising the balance between grass yield and digestibility to produce high DMD silage is achieved by harvesting intermediate-heading ryegrasses when their seed-heads start to emerge. To achieve comparable silage with late-heading ryegrasses it may be necessary to harvest before the seed-heads appear. These general relationships between grass growth stage and digestibility can be misaligned if there is an accumulation of dead vegetation at the base of the sward. Dead vegetation accumulates, for example, if fields for silage production are not grazed bare (i.e., to a stubble height of 5cm or lower) in late autumn or early spring. Sward digestibility is reduced because this dead vegetation, accumulated over several months, can have a digestibility below 50%. The scale of impact of such dead vegetation is summarised in **Table 3** and shows that, on a given date in mid-May, it can reduce sward digestibility by 6-7% units. It would take almost 2kg of supplementary concentrate per head daily to undo the impact of this scale of unplanned reduced digestibility. The message, therefore, is that sward re-growths need to start from a 'bare stubble' when they are to be used for producing high digestibility silage.

The quality of the harvested grass depends on its growth stage.

Table 3. Grass digestibility (DMD%) for a first-cut harvest on May 18, depending on previous management (average of two years results).

	Previous grazing management		
	Ungrazed in autumn or spring	Graze to 5cm stubble In late autumn	In early spring
DMD%	75.4	82.1	81.8