

Teagasc Notes for week ending Friday 24th September 2021

Achieving Target Heifer replacement weights.

The heifer of today will be the cow of tomorrow. So getting things right when rearing replacements will determine future performance of your dairy herd. Heifer rearing is one of the largest costs on any dairy farm, costing in the region of €1,500 from birth to calving down at 22-26 months of age. However, looking at the ICBF dairy calving statistics for 2020, the national average is only 71% of heifers calved at 22-26 months of age. This means that just under one third of heifers do not achieve optimal first calving age. Older calving heifers are non-productive and they are a cost on the farm business until they start producing milk. The main reasons for achieving or not achieving optimum calving age depend very much on the weight gain performance during heifer rearing. Poor performance during heifer rearing also expresses itself in the survival of cows in the herd to third lactation and beyond. Keep in mind that third lactation cows and beyond are the cows that really drive herd performance in terms of milk solids output. Therefore, lower survival rates to third lactation and reduced milk and milk solids yields are the consequences of failing to achieve the target weights rather than age when rearing replacement heifers. The first year of rearing replacements can be the most difficult as calves are more prone to setbacks so if you can achieve the target weights in year one and up to breeding there is a greater chance that they will calve down at the correct weights and survive longer in the herd. The autumn is an important time to assess whether your replacement calves are on target.

Table 1 outlines the target weight as a percentage of the live weight of a mature cow at different ages with calves 30% of mature live weight at 6 months of age and 90% of mature live weight at 24 months of age (pre calving). A good rule of thumb is for calves to gain 20 kgs per month from birth plus its birth weight so if a calf was born in mid-February it will be 7 months by mid-September its target weight is 180kgs (40kg at birth and 20 kgs per month).

	% Mature Weight	Hol/Fr 600 kg	Br/NZ Friesian 570 kg	JeX/Hol/Fr 540 kg
6 Month Weight	30%	180	170	160
9 Month Weight	40%	240	230	220
15 Month Weight	60%	360	340	325
24 Month Weight (Pre-calving)	90%	540	510	485

To monitor performance of your heifers and to make critical management decisions, it is important to weigh your replacement heifers regularly to get an accurate handle on performance. Based on this information devise a plan to take advantage of the autumn grass for the next 2 months before stock are housed. Weighing your calves now will allow you to divide them into at least 2 groups, those on or above target and those below target. Subdivide the calf paddocks so that calves will get fresh grass every 3-4 days rather than spending too long in the same paddock where performance will drop.

As we are in September the energy level in grass is falling but protein levels are still good so it is good policy to feed meal to all groups. The calves on or above target weight could get 0.5 to 1 kg meal per day while those under target should get 1-2kgs of meal depending on quality of grass supply and weather. Adequate trough feed space is vital as within any group bullying can take place so make sure each calf has plenty of room. While some may be tempted to just increase the level of concentrates generally the

stronger calves will bully the smaller calves and while the stronger calves will put on extra weight the smaller calves will still struggle to catch up.

Teagasc Research has shown that by grouping these smaller calves and putting them on a higher level of concentrates while maintaining good quality grass can result in an increase of 0.20 kgs Average Daily Gain over the on target group.

Tillage Update

Winter Cereal Varieties 2022

Variety selection is one of the most important agronomic and Integrated Pest Management (IPM) decision on any farm.

IPM approach to variety selection

- Look below the top line yield figures when evaluating any variety
- Select a variety with good disease resistance.
- Avoid planting a large area of one variety.
- Avoid early planting. Planting in mid-October significantly reduces disease, BYDV, and grass weed pressure over end of September planting.
- Tiller number is temperature driven so seed rates need to be higher when planting later in the season.
- **Thousand grain weights are lower than 2020 so adjust seed rates accordingly.**

Soil Sampling

September is the ideal time to take soil samples and check soil fertility levels. Under nitrates regulations soil sampling area is a max of 5 hectares per sample & soil samples are required every 4 years. Soil test results over the last 5 years show that a large percentage of tillage soils have a lime requirement. Now is a good time to identify fields that have a lime requirement and plan lime applications over the coming months. Only apply lime based on a recent soil test report.

Autumn P & K Build-Up

Building soil P and K fertility takes time depending on the soil type. On low fertility soils (Index 1 or 2) consider the application of P and K as either chemical fertilisers or organic manures. Cereal crop phosphorus (P) applications of 20 and 10 kg P/ha to index 1 or 2 soils can be applied up until the 31st October provided that the P is either incorporated or placed at sowing time. There are no restrictions on the application of potassium (K).

Event: Future Farm Walk

<https://www.teagasc.ie/news--events/national-events/events/cathalmoranfarmwalk.php>

