Breeding checklist

Are you still calving cows?
It may seem like a strange question to ask during the breeding season, but many farmers calve more cows in May than they do in February! Some of you may say that “a late calf is better than no calf”, but what weight will a weanling born in May be by mid October? Taking a birth weight of 45kg and an average daily gain of 1.2kg/day, this weanling will weigh just 225kg.

When should your cows calve in order to achieve a 330kg weanling by mid October?
Working backwards, a 330kg weanling needs to gain 285kg (330kg minus 45kg) by mid October to hit this target. At 1.2kg average daily gain (ADG), this means that the weanling needs to be 240 days or eight months old. This gives a mid February birth date.

When is it time to cut the bull?
To avoid having late calves next year, you need to decide on a bull out date this year. Taking the bull out by the end of June will mean that calving will be completed by mid April. It may be tempting to keep the bull in with the cows and vow to sell these with calf at foot next year, but it means that you will have these animals for an extra year, rather than scanning cows and fattening cull cows off grass cheaply. The other danger is that you will keep these cows in the herd once they are in calf!
What is your rotation length?
Aim to be grazing 8-10 cm (1,300-1,600 kg) covers. Grass growth rates per day can be very high during the month of May. However, you should still try to stick to a rotation length of 21 days or less. This means walking your farm once a week to check how much grass you have ahead of stock. Try imagining how long the grass would last if growth stopped. In very good growing conditions you only need 10 days of grass ahead of stock. Another way of looking at grass is to take the 'Goldilocks' approach. To maximize animal weight gain, grass covers can be too much, too little or 'just right'. If grass covers are too heavy, skip these paddocks and turn into paddocks that are the right cover (8-10 cm or a cover of 1,300-1,600 kg DM/ha). If you have a large number of paddocks that are too strong, you have the option of leaving some of them off to be cut with first-cut silage. Remember that you need

Grass and silage checklist

How many replacements do you need?
It's not too late to have a look at bringing in extra replacements and breeding them.
If you take the bull out by the end of June, which cows will definitely not be in calf? One thing is for sure: you can’t put a cow in calf until she has calved, so all the cows calving after June will not be put back in calf. Realistically, it’s going to take at least 40 days for a suckler cow to cycle after calving, so that means any cow calving after mid May will also fail to go back in calf. You need to replace these cows and allow for enough to replace other problem cows as well.

What should you look for when selecting replacement heifers?
Criteria for selecting heifers were outlined at the recent BETTER Farm walks and provide a very useful guide:
- select heifers with a high Replacement Index (higher than your cow herd) – use your €uro-Star report for this;
- choose heifers with a positive milk figure (this means she has milk to drive extra weanling weight);
- select heifers with a negative calving interval – this means she will be more likely to keep a 365-day calving interval as she will not carry time herself; and,
- make sure your heifer meets functional requirements. She needs to be reasonably docile and at her target weight for bulling. She needs to be 60% of her mature weight at bulling, so she needs to be 360 kg to reach a mature weight of 600 kg and 420 kg to reach a mature weight of 700 kg.

What should you breed your heifers to?
Be careful with your heifers as they have a lot to do in the first year after calving. She needs to feed her calf and continue to grow into a mature cow. Don’t add calving difficulty to the mix! Use a proven easy calving bull (<5% with reliability of at least 80%). AI is the best option to use on heifers, as the reliability of avoiding calving difficulty is much better with AI. Heifers are also generally easier to get in calf and synchronization may also be an option. Take the opportunity to pick bulls that are strong on traits that will drive profit on your farm. For most farms we have gone too far down the terminal route and should be breeding for maternal traits. Use the same criteria as those for selecting heifers, i.e., a high replacement index, a positive milk figure and a negative calving interval.
to match demand to grass growth, and at growth rates of 60kg DM/ha/day you need to carry 1,200kg live weight/acre.

**When do you plan to cut first cut silage?**
Walk silage fields weekly in May and book the contractor in time. To produce high DMD silage, mow the crop when seed heads start to emerge from the grass. If weather conditions are favorable, be prepared to harvest a few days early.

**Is the pit ready?**
**Take time to get prepared in good time:**
- clean out silos that are due to be filled, and complete any required repairs in plenty of time;
- clean the effluent channels and empty the effluent collection tank; and,
- be safe – silage making poses a series of dangers, so plan to avoid any mishaps.

**Harvesting the crop**
- **some useful tips**
  - Start mowing silage when you are sure that weather conditions will allow you to complete harvesting and ensiling.
  - Check the sugar content – this can be done at the local Teagasc office.
  - Mow after the dew is gone. It is easier to dry the dew off a standing crop than a mown crop. Wilting grass to above 25% DM will aid preservation, but there is no benefit to wilting above 30%. Tedding gives the best results but opening the mower gates wide will also improve drying. A wilt is required where sugar content is less than 2% and will help with preservation up to a sugar content of 3%. A wilt is not required where the sugar content is above 3%.
  - Avoid soil contamination during silage harvesting.

Patrick Grennan is operating a spring calving calf-to-beef system producing bulls under 16 months of age. The farm consists of 34ha, which is very fragmented and located outside New Ross, Co. Wexford. Patrick is managing the farm part-time, and therefore time management and labour efficiency are critical in the running of this farm. The farm has consistently achieved a gross margin over €1,000/ha over the last three years through increasing the stocking rate and beef output while keeping production costs under control. This Open Day will provide you with an excellent opportunity to see how Patrick is managing a profitable suckler beef system, and will focus on key management practices including grassland management, breeding, and the importance of achieving high weight gains for producing bulls under 16 months of age.
Finishing bulls

Finishing autumn-born bulls from pasture in the first half of the grazing season using concentrates, by M. McGee, C. Lenehan, E. O’Riordan and A. Moloney of AGRIC, Teagasc, Grange.

Incorporating a winter ‘store’ period followed by a grazing period into spring-born, late-maturing breed suckler bull beef systems can reduce production costs. However, these animals generally require an intensive finishing period pre-slaughter in order to achieve an adequate carcass fat score (≥2+/6 on a scale of 1-15). There may be scope to finish late-maturing breed autumn-born bulls at the same age, but off high nutritive value ‘spring grass’, as they are more ‘mature’ at turnout, and thus should have a greater tendency to lay down fat compared with their spring-born counterparts.

The objective of this study was to determine the effects of concentrate supplementation level in the first part of the grazing season (89 days) on growth and carcass characteristics of late-maturing breed autumn-born suckler bulls compared with a high concentrate indoor finishing system. Eighty Limousin and Charolais sired bulls (mean initial weight 554kg) were assigned to one of four treatments: 1. grass only (G0); 2. grass plus 25% daily dry matter intake (DMI) offered as concentrates (3kg fresh weight) (G25); 3. grass plus 50% DMI offered as concentrates (6kg fresh weight) (G50); and, 4. indoor ad libitum concentrates (ALC) with grass silage to appetite.

Grazing treatments were turned out to pasture on April 7, 2014, and were rotationally grazed in paddock systems. Average pre- and post-grazing sward heights were 11.8 and 4.8cm, respectively. Animals offered ALC had a greater daily live weight gain (1.83kg), carcass weight (406kg) and carcass fat score (8.2/−3=) than the grazing groups. Daily live weight gain was significantly lower for G0 (0.97kg) versus G50 (1.22kg), with G25 (1.07kg) being intermediate. Carcass weight was 20kg heavier (387kg) for G50 than G0 and G25 (367kg). Carcass fat scores (scale 1-15) for G0, G25 and G50 were 5.0 (−2=), 5.6 (−2=/2+) and 5.4 (−2=/2+), respectively. Supplementation reduced grass intake for G25 and G50 by 0.67 and 0.94kg DMI per kg DMI concentrate offered, respectively.

Supplementation with 3kg concentrates daily during the first half of the grazing season had little effect on animal performance. Increasing concentrate level to 6kg daily increased carcass weight, but may not be economical. With average fat scores of 5.0 to 5.6 (2=−/2+), the grazing treatments struggled to achieve an adequate carcass finish.

Farm safely and stay in the picture

During May, Teagasc will launch a thought-provoking poster, which will be displayed at all advisory and training centres. The poster states: "30 people died on Irish farms in 2014 – farm safely and stay in the picture". May is a busy farming month and accidents can arise from tractors and machines, livestock, and trips and falls. Children’s access to farms increases with lengthening days. ‘Stay in the picture’ by adopting safe behaviour, and give first priority to your safety and that of your family and anyone working on your farm.