



A Teagasc Joint Programme supported by:

GREEN SHOOTS

In the first of our monthly updates on the Green Acres Calf to Beef programme, **Gordon Peppard** of Teagasc profiles two of the participating farmers

JOE FARRELL and his family farm 75ac of grassland just outside of Castledermot, Co Kildare. There is also a tillage enterprise on the farm in which maize, winter and spring cereals are grown. The maize silage is used on farm for the feeding of livestock over the winter period.

Each year Joe rears and finishes approximately 80 Angus heifers and 20 Friesian bulls. Calves are bought from a local cattle agent who sources them predominately in the south of the country.

2015 Calves

This spring two batches of calves were reared on the farm. The first batch consisted of 41 calves from which 24 were weaned since early April, and the remaining 17 were weaned last week. All 41 are now outdoors on grass and on 2kgs of concentrate.

From mid-June these calves will have access to good after-grass once silage is cut and they will be fed 1kg of concentrate for the remainder of the season.

The second batch of 39 Angus calves is currently being reared. They are fed twice a day with 4-5 litres of milk.

They also receive fresh concentrates every day and

are being built up to eat 1kg per day by weaning.

These calves also have free access to a chopped hay/concentrate/molasses mix to aid with rumen development, in preparation for the transfer from a liquid to solid diet at eight to 10 weeks of age.

The 19 Friesian bull calves are eating over 1kg of concentrate per day and they were cut back to once-a-day milk in mid-April and now have been weaned totally from milk for the last week. They will be let out to grass to join the heifer calves for the summer months and at the first sign of any mounting they will be separated.

Angus yearling heifers

Last year's calves are doing well and have been at grass since mid-February. The plan is to weigh these as soon as possible to monitor growth rates over the main grazing season. The traditional method of set stocking was always practised on this farm where a group of approximately 30 yearling heifers were allowed to graze a set area for the summer months.

Friesian yearling bulls

The yearling bulls are currently housed and on silage plus 6kgs of concentrate, they will be built up to an ad lib diet in order to finish them over the

next couple of months. These animals will not return to grass as they are a small group that would require to be kept separately as there are heifers on the farm and this would necessitate an extra grazing block.

Also the damage that they may cause around fields and the danger in handling these animals means housing is the safer option.

Grassland

With tillage in the rotation, Joe has a lot of young grassland with high ryegrass content. In addition, the spray programme from the tillage crops means the grassland is very clean with little or no weeds present.

For this reason Joe has decided that he could make better use of his grass. Following discussions with local Teagasc advisor Christy Watson, he has decided to move away from set stocking this year. Instead, he has put in some paddocks to create

FARM FACTS

- 75ac grassland
- Tillage consisting of maize, winter and spring cereals
- Rearing 80 Angus heifer calves and 20 Friesian bull calves
- Angus yearling heifers out to grass early
- Friesian yearling bulls remain housed for finishing
- Changing from set stocking to paddock grazing system



Joe Farrell rears and finishes Angus heifers and Friesian bulls on his farm at Castledermot, Co Kildare

six grazing divisions for the yearling heifers.

The aim is to grow fresh leafy grass of high quality every three weeks and each paddock will then be grazed out in three to four days creating a 21-day rotation. This will improve performance on the farm, with the result of increasing liveweight gain.

Depending on growing conditions this summer it may also be possible to save extra silage or hay if some paddocks get strong and can be taken out as fodder.

Paddock layout

In deciding on locations for electric wires to create these new paddock divisions, water access was the most critical issue. To simplify the change and to keep costs low fields were split diagonally with a reel of wire in order to access the existing water troughs.

Temporary reels can be used for the first year to get the feel for a paddock system and also to ensure that the new paddock divisions are in the correct location before doing a more permanent job.

Fertiliser

Most grazing fields received three bags of 15-03-20 plus Sulphur per acre in early March. All grassland fields were well grazed off by early April.

The silage ground then received 1,500 gallons of cattle slurry per acre and 2.3 bags of Sulpha CAN per acre on closing at the beginning of April. It is planned to cut high quality silage at the end of May. Some of the grazing ground received 1.5 bags of 19-0-15 per acre on April 10 and other grazing ground that had earlier received slurry got 1 bag of Sulpha CAN per acre.

GREEN ACRES AT A GLANCE

THE Teagasc Green Acres Dairy Calf to Beef programme aims to demonstrate best practice on the rearing and finishing of purchased dairy calves through to beef (steers/heifers/bulls) on a whole-farm basis. Green Acres aims to achieve a net margin of €500/ha or over on the participating holdings.

The project is also providing technical support and training to the staff of the commercial stakeholders to the programme – Liffey Mills, Drummonds, Volac, MSD Animal Health and Grassland AGRO.

Two of the 10 participating farms will be profiled each month in the Farming Independent. These reports will give an outline of the holding, the farmer's goals and progress as the programme unfolds.

SIX STEPS TO WEANING CALVES OFF THE BUCKET



Gordon Peppard

THERE ARE six key target areas to successful weaning of your bucket-reared calves. Planning for successful weaning from milk to solid food starts from the time the calf first arrives on the farm.

Many February and early March born calves will be weaned in the next few weeks – the key area targets to be met at weaning are:

- You need to target the birth weight of the calf to double within eight weeks. Therefore a 40kg calf at birth needs to

be at least 80kgs at weaning. To ensure the calf reaches this milestone, up to 750g of milk replacer in six litres of milk per day needs to have been fed.

The calf needs to have 24-hour availability of fresh clean water, straw and a fresh palatable good quality concentrate of 18pc protein. Water is essential to replace fluids that are being used up in the body. Milk should be seen as a food source and not a drink.

- Calves must be consuming at least 1kg of concentrate per

day for at least three consecutive days.

Concentrates are important to develop the rumen, and to replace the milk in the diet.

To replace four litres of milk replacer (500g of milk powder) your calf will need to eat an extra 1kg of concentrate per day.

Gradual or Abrupt weaning

- Gradual weaning is preferred as the concentrate and or volume of milk fed is reduced over a number of

days and the calf makes up the difference in other feedstuffs. Abrupt weaning is when milk is cut out abruptly and the calf has to rely solely on other feedstuffs straight away.

- Minimise stress or change at weaning. Avoid activities such as dehorning, castration, vaccination, changing social groups at weaning and leave the calf housed for one week after weaning.
- Do not wean calves if they are stressed, underweight or sick. These calves should be retained on milk replacer until they meet the required weight or recover from illness.

Post weaning,

Target fresh leafy grass of a lower cover of 7-8 cm for the weaned calf. Continue to feed 1kg of concentrate for at least one month or more if required

No two farms are the same, so it is important to consider all options, taking into account your particular circumstances and overall objectives, when deciding which weaning policy is best for you.

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Gearing up for expansion

BASED in Ballymore, Co Westmeath, Michael Ryan and his family farm 100ac of grassland which is all in the one block. Michael currently has 48 calves bought in and it is planned to bring this up to 90 calves within the next two to three weeks.

Michael plans to rear and finish approximately 90 Angus cattle every year. These will predominantly be heifers but may also rear and finish a few bullocks.

Soil fertility

Michael's entire farm was soil sampled in early March by his local Teagasc adviser, Paul Gibney before any slurry or fertilisers were applied. On analysing the results it was discovered that the levels of phosphorus (P) and potassium (K) were quite low on the farm.

In order to grow enough quality grass these levels of P and K need to be improved over the next two to three years.

In order to help correct these low levels, more P and K need to be applied than is being removed.

See the table below for amounts of P and K removed from different off-takes on farms.

At a minimum, fertiliser applied has to match these off takes in order that the level of fertility will decrease no further. But for soil fertility levels to increase, levels of fertiliser applied have to be greater than off-takes, so that build-up of soil fertility can occur.

Therefore Michael has decided to use 18-6-12 instead of straight CAN every time that he is going to spread fertiliser. This will mean that P and K is being continually applied on a little and often basis. In the autumn, Michael may apply a product like 0-7-30 or 0-10-20 to further boost the levels.

This will depend on available finances, and it is planned to spread this soil fertility build up over a couple of years so that

substantial costs are not all incurred in the one year.

Lime

Lime levels on a number of fields are fine with pH levels of 6.2 and higher. Some of the fields require between 1t and 1.6t of lime per acre.

Fifty tonnes of lime were applied in the past week, with 20t going on 9.5ac that was reseeded and 30t spread on 20ac of grazing ground. Silage ground also requires lime, but it was decided to leave this until after the silage was cut for fear of bringing lime back in the silage and the risk of affecting preservation in the pit. These fields will have lime spread in the autumn.

Reseeding

A 9.5ac section of grassland beside the yard had become very poor due to low growths and a lot of weeds. It was also an area that needed a couple of drains to relieve a wet patch. With the good weather in April Michael took the opportunity to carry out this drainage work and reseed this area.

The field was sprayed off and left for about four weeks. Farmyard manure was applied and the ground was then heavy disked, left to dry, disked again.

Up to 2t/ac of lime was then applied, the grass seed was then sown with a one pass and rolled.

This reseeded ground also received three bags of 10-10-20 in order to help establishment of the new seed.

This area of fresh grass is earmarked for the 2015 calves to graze, as they will be the lightest animals on the farm and should do little damage to the new grass – the grazing will also promote tillering of the new sward.

2015 Calves

Forty-eight Angus calves are currently being reared. These calves were born between the last week of February and the first week of March. They are fed



PLANS: Michael Ryan is aiming to rear and finish approximately 90 Angus cattle per annum on his farm in Co Westmeath

FARM FACTS

- 100ac of grassland
- Rearing 75 Angus heifer calves and 15 Angus bull calves
- Angus yearling heifers out to grass since mid March
- Changing from set stocking to a rotational grazing system
- Soil fertility levels need correcting

twice a day with six litres of milk.

They are receiving 640gr of milk replacer per day at present.

They also receive fresh concentrates every day and are being built up to eat 1kg per day by weaning.

Michael plans to cut them back to once per day milk, one week to 10 days before weaning.

These calves also have free access to straw in hanging baskets in each pen. Michael plans to have all calves bought by the middle of May.

Yearling stock

The yearlings are currently grazing in two groups of 45. They have been out at grass since March 20.

These animals were weighed before they went to grass and Michael feels that they are a little bit behind

where he would like them to have been.

They will be weighed again throughout the grazing season and if still behind the option of introducing meal at grass in August will be looked at in order to try and make up some ground.

Michael always operated a set stocking system, where a group of animals were left on the one area for the entire grazing season. In order to try and make better use of grass and to improve growth rates, a rotational grazing system has been devised and Michael over the next few weeks will split fields up with a wire fence.

These smaller fields can then be grazed off in three to four days and animals regularly moved to fresh grass.

Silage and grazing ground

The grazing fields received 1.75 bags of 18-06-12 per acre on April 10. The silage ground received 1,800 gallons of cattle slurry per acre at the start of April and 3.75 bags 18-06-12 per acre on April 10. All silage ground was grazed off tight before being closed up.

| P AND K REMOVAL | P removed (kgs) | K removed (kgs) |
|----------------------------|-----------------|-----------------|
| Off take removed from farm | | |
| 5000 litres Milk | 5 | 5 - 8 |
| 1000 kgs live weight | 10 | 5 - 10 |
| 10 ton fresh silage | 10 | 60 - 65 |
| Rainfall (1000mm) | - | 10 |