

BETTERfarm

BUSINESS, ENVIRONMENT TECHNOLOGY through TRAINING EXTENSION RESEARCH

Improved growth conditions in the south east



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Rainfall has been welcomed by the programme farms in the south east as grass growth had become severely hindered in the past month due to drought. The farms had built up a good grazing buffer ahead of cattle over the

summer, but they have been eating into this in the past fortnight. Grass quality is still good on the farms, but re-growths have been slow to materialise after paddocks have been grazed off.

As of yet, the farms have not needed to use baled silage to slow down the rotation length. Calves and weanlings have been receiving concentrates to make sure that there has been no drop in performance. Ground conditions are still extremely good, which is allowing for high levels of grass utilisation.

Around the country, growth rates are much better. Ground conditions are also

good in the west, north and east of the country, which is again allowing cattle to clean out paddocks tight.

The farms with autumn calving herds have been grazing silage aftermath, which has helped to improve milk production and cow body condition. The improved body condition is helping to bring cows back into heat quickly. The priority for

some of these farms is turning to breeding.

With ration prices falling to €240/tonne, cattle that will be ready for slaughter from November are being housed and placed on a silage and concentrate diet. This is freeing up grazing ground for autumn cows. The plan is to serve July and early August calving cows at grass before they have to be housed from

mid-October onwards. Cows calved from mid-August onwards will be served indoors.

Having the cows on a settled diet before, and during, the breeding season will increase the chances of conception.

Freeing up grazing ground will provide a longer rotation for autumn calving cows so that they have every chance of grazing right up to mid or

late October and hopefully settled in calf.

Calf health is also the fore on the farms, with calves having received their first shot of a pneumonia vaccine. Vaccinating well in advance of housing, and weaning, reduces the likelihood of pneumonia at housing when stress levels are high. Prevention is always better than trying to cure disease.

Table 1: Converting growth rate into kilos of liveweight per hectare/acre

	Daily growth rate kg/DM/HA						
	20	30	40	50	60	70	80
Kg/LW/HA	700-1,000	1,000-1,500	1,400-2,000	1,750-2,500	2,100-3,000	2,450-3,500	2,800-4,000
Kg/LW/Ac	280-400	420-600	560-800	700-1,000	850-1,200	1,000-1,400	1,100-1,600

*during period of poor utilisation, use figures at the lower end of the range.



ON THE GROUND

JONATHAN CARSON

“Cows are wintered on the kale as it keeps them in ideal body condition prior to calving”

Last week, the participating members of the BETTER Farm programme headed north of the border to visit some of the most progressive farms in Northern Ireland. Along with a visit to ABP Newry, three farms were visited. This week, we feature organic beef farmer Jonathan Carson, one of the farms visited by the programme farmers.

FARM FACTS

Jonathan farms 166ha (410 acres) alongside his father, John, near Downpatrick, Co Down. Of the land area farmed, 81ha (200 acres) are owned. The farm increased in size this year with an additional 24ha (60 acres) rented. The farm carries a suckler herd of 90 cows and a small flock of 30 ewes to help manage grass quality.

The suckler herd is split into two thirds spring calving and one third autumn calving. Spring calving starts in late February and finishes in late April. The autumn

calving herd calves over September and October. Cow type is predominantly Limousin cross Friesian. Charolais and Limousin stock bulls are used to serve all cows and heifers. Bulls are selected for calving ease and growth rates.

All cows are served over a 10-week period. The calving interval in 2013 was 375 days, which has been reduced from 415 days in 2012. In 2011, the calving interval was 401 days. Replacements are usually purchased as calves, although some homebred heifers are kept.

Jonathan is now part of the Focus Farm programme in Northern Ireland, which represents the best practice within specific farm sectors and demonstrate this to other producers through farm visits.

STOCK PERFORMANCE

The Carsons' farm has been in organic production since 2006. Despite having to comply with strict regulations, Jonathan is achieving output



levels and livestock performance that most conventional farms would envy.

Steers are slaughtered through ABP Newry. Slaughter weights have increased annually since the farm made the changeover from conventional beef production. The last conventional steers that were slaughtered in 2006 averaged 348kg.

In 2012, steers were slaughtered at 23 to 26 months of age and had an average carcass weight of 390kg. Heifers slaughtered in 2012 produced an average carcass weight of 322kg at 20 to 22 months. Table 2 outlines



slaughter performance on the Carson farm over the past three years for both steers and heifers.

FINANCIAL PERFORMANCE

The farm is benchmarked annually through CAFRE to monitor both the physical and financial performance. Organic beef receives a substantial premium over conventional price, up to €1/kg more at certain times of the year. This has helped to drive the level of profit being generated on the farm.

Table 3 outlines the financial performance of the farm and provides a comparison with the average conventional NI beef farm.

The net margin does not account for conacre, finance or labour. Even at conventional beef prices, the farm would still be in the top 25% of suckler to beef producers. One of the main reasons for the profit margin is the high level of liveweight gain that is being achieved from grass on the farm.

GRAZING

Under organic principles, fertilizer cannot be applied. Therefore, there is a greater reliance on clover to produce sufficient nitrogen throughout the growing season. The farm is fragmented with out-farms being grazed, while the land closest to the

yard is set up in a five to six-year crop rotation. The farm grows 14ha of spring cereals annually, which are then used to provide winter feed for finishing stock.

Crops are under-sown with red clover, or a mix of clover and hybrid grass, so that cattle are able to graze the land over winter and in spring. These swards will stay in grass for three to four years before they are ploughed and sown in kale and forage rape. After this, they are sown in cereals again to re-start the rotation. This rotation policy helps to reduce the build-up of weeds in grassland. Jonathan uses the grazing days ahead principle to



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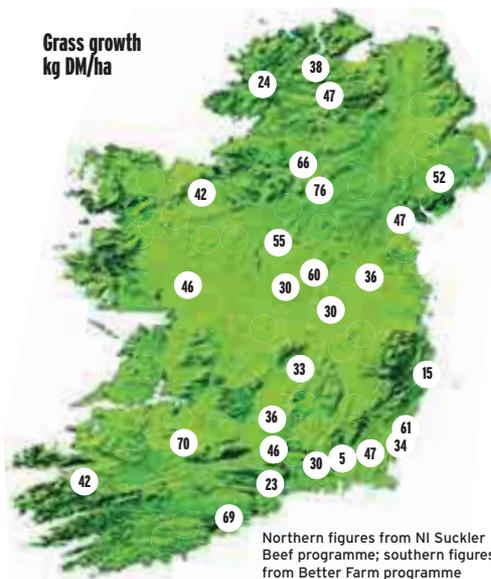


WEEK IN REVIEW

- ➔ Rainfall in the south east this week has been welcomed as grass growth rates remain under pressure.
 - ➔ Across the country, ground conditions remain relatively good despite the recent rainfall and cattle continue to clean out paddocks tight. This is keeping sward quality high.
 - ➔ On some autumn-calving farms, attention is turning to breeding cows at grass. Finishing cattle are being housed to free up grazing ground for cows.
 - ➔ Only cattle that will be finished before the end of the year are being housed.
 - ➔ Calves are being vaccinated for pneumonia well in advance of housing.
- ➔ Spring calving cows that have scanned empty should be weaned now while they are likely to be in good body condition. These cows will only require a short finishing period before slaughtering. If they are held until later in the year before weaning, they will be losing body condition resulting in a longer feeding period before finish.



Grass growth kg DM/ha



Northern figures from NI Suckler Beef programme; southern figures from Better Farm programme

FARMER COMMENTS

I found the organic farm to be very interesting in terms of how they were using a crop rotation to manage soil fertility and soil structure. This is something that maybe not enough conventional farms think of doing. The farm was extremely well managed in all aspects of production. It was good to see and hear what levels of grass can be grown without being reliant on fertilizer. Clover can definitely play a part on conventional farms also, but there has to be a good mix of clover and ryegrass. It may be an option to grow more clover on a couple of out-farms to help increase grass growth rates and cattle performance.

– Patrick Grennan, Co Wexford



This was the first time I had been on an organic farm and it was completely different to what I was expecting to see. The grass-land management was excellent. The grass was good quality and swards were free of weeds, which was a surprise considering that spreading fertilizer and spraying is not allowed. The cattle were of great quality and comparable with any farm. The farm was profitable and, with the management in place, it would be profitable in a conventional farming system.

– James Strain, Co Donegal



The organic system was interesting to see as there are not that many organic beef farms about. The farm had a lot of restrictions in place to comply with organic production, which must be difficult to keep to. It is definitely a niche market they are producing for and would not be as applicable to my own farm as I kill young bulls. I found the last farm that was finishing bulls under 16 months to be extremely relevant to my own farming system. The farmer was knowledgeable on his costs of production and what his goals were.

– Donal Scully, Co Limerick



I liked the visit to the meat plant but would have liked to have had the chance to try to grade the cattle before slaughter just to see how we would have compared with the mechanical grading system. The three farms were all well-run systems and they all had great cattle. The farms had different working environments compared with my own farm. However, it was good to see and hear how other farmers have to cope with the problems they face. I find talking directly to other farmers to be a great learning method. It is also good to compare growth rates and weight gains of cattle to monitor your own performance.

– Chris McCarthy, Co Westmeath



Autumn-born steers on Jonathan Carson's farm that are due to be slaughtered off grass in late September.



Table 2: Slaughter performance for steers and heifers on the Carson farm

	2010-11	2011-12	2012-13	Average NI farm (as per CAFRE benchmarking)
Concentrates fed (kg)	639	616	682	1066
Heifers				
Carcaseweight (kg)	300	318	324	
Av DLWG (kg/day)	0.75	0.80	0.89	0.73
Steers				
Carcaseweight (kg)	384	382	397	
Av DLWG (kg/day)	0.82	0.81	0.90	0.86

Table 3: Financial performance on the Carson's farm

	2010-11	2011-12	2013-13	Average NI farm
Output per cow	€1,062 (€1,249)	€1,269 (€1,493)	€1,592 (€1,873)	€1,019 (€1,199)
Variable costs per cow	€360 (€423)	€273 (€321)	€374 (€440)	€467 (€549)
Gross margin per cow	€696 (€819)	€976 (€1,148)	€1,051 (€1,236)	€586 (€689)
Net margin per cow	€151 (€178)	€474 (€557)	€533 (€627)	€87 (€102)

*Exchange rate €1 = £0.855stg

that has to be removed is getting less as he is better able to match growth to grazing demand.

OUT-WINTERING

Out-wintering on kale is a major cost saving in the system. Approximately 10 acres of kale and rape are grown annually.

The typical grazing cost of kale is around €0.20/day (€0.24/day), which increases to approximately €0.50/day (€0.60/day) when silage bales are factored in.

Cows are wintered on the kale as it keeps them in ideal body condition prior to calving. Few calving difficulties have been experienced on the farm. After calving, the cows will start to graze silage ground to remove any dead grass that has built up over the winter.

Early grazing from February onwards has helped to

increase early season grass growth.

Jonathan has completed a few small growing trials in the past.

He grazed 50% of a silage field in February to see if there was any difference in silage yields when cutting in mid-May. No difference in yield was realised.

Cattle are grazed in one-day blocks in early spring and again in autumn. Water becomes less important at these times of the year due to the low dry matter of grass. Water was offered to the cattle in previous years, but they were slow to drink. The drinker led to increased sward damage, as cattle tended to congregate around it despite the lack of drinking activity.

RED CLOVER

The farm has many red clover swards to increase the

protein content of silage and grazing land.

Jonathan has been successfully grazing red clover with cattle for almost four years which is viewed by many as not possible. By grazing in one-day blocks, the crown of the plant is not damaged, so the plant will keep re-growing.

This year, his red clover swards yielded 10 bales/acre of silage in mid-May and 10 bales/acre in August, which is an excellent yield considering that no fertilizer was applied.

The swards were grazed in the spring and will be grazed again this autumn before closing up from mid-October. Red clover in silage has analysed from 14% to 18% crude protein. With such a high quality feed value, weanlings are not offered any form of concentrate during their first winter.

match grass growth to stock demand. Cattle are grazed in a rotation with up to nine paddocks per group, depending on the group size. Grass is topped regularly to control grass quality. Out-farms are treated as separate farms.

Once cattle are turned out to these land blocks in spring, they will stay there until housing.

If grass supply is getting ahead of stock, surpluses are baled and kept on the out-farm.

They are then used to feed cattle when grass is in short supply. As Jonathan's grass-land management skills have improved in recent years, the amount of surplus grass