

Driving grass production

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One of the larger holdings in the third phase of the Teagasc/*Irish Farmers Journal* BETTER farm beef challenge is that of Dwayne, Raymond and Gilbert Stanley, a son, father and uncle team who farm 123ha at Brittas, Thurles, Co Tipperary.

“Prior to joining the programme in 2016, the farm was achieving a gross margin of €649/ha,” says Raymond. “Fixed costs are low on the farm so we were generating a positive net margin but with Dwayne joining the team in the last year a third income must be derived from the farm.”

Driving the gross margin to more than €1,000/ha, while controlling fixed costs, is the main aim of the team. “Traditionally, we ran 100 suckler cows with stock slaughtered at 24 months of age,” says Gilbert. Included in the herd are a number of pedigree Hereford cows with male progeny sold as bulls to dairy farmers in the region at 18 to 20 months.

Teagasc Thurles B&T advisor Michael Daly has been working with the Stanleys through their discussion group for a number of years and saw potential in the farm to increase production through utilising more grass in the diet.

“The farm, in 2016, consisted almost exclusively of old pasture laid out in large fields – some were larger than 35 acres with little in the way of water troughs,” says Michael, “so there was scope to increase grass production and utilisation through more intensive field management.”

Raymond, Gilbert and Dwayne met Michael Daly and the BETTER farm management team in April 2017 to develop a farm plan to drive profitability. From this meeting, a number of ideas crystalised and are now being progressed:

- Increase suckler cow numbers to 120 and continue to finish progeny at two years of age as steers and heifers.
- Purchase 120 dairy-bred calves,



Overview of the field prior to paddocking.

splitting purchase over spring and autumn to make use of housing, with all calves slaughtered as steers and heifers at two years of age.

- Examine option of purchasing “short-stay” store bulls at around 450kg to 500kg with the aim to slaughter indoors after 100 to 120 days.
- Revamp grazing infrastructure. Establish a new water and paddock system. Invest in reseeding and P&K to improve weight gain from grass.

While the suckler to under 16-month bull system has shown the highest level of profit per hectare in previous BETTER farm programmes, and there are undoubtedly merits to this system, it was felt given the scale of this farm that a system producing beef predominantly from grass was more suited to the Stanleys.

“Running a suckler to under 16-month bull system would require an increase to over 200 cows to utilise grass in the system and leave a satisfactory margin,” says Michael Daly. “This would require significant investment in new housing. The two-year-old steer and heifer finishing system leaves more scope for utilising the land available to the farm while not requiring major building investment.

Raymond says: “In future years, we may consider adding a store bull-to-finish system from April to July as

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The farm had potential to increase production by utilising more grass in the diet of cows

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sheds are empty at this time of year anyway.”

One of the major problems faced with expanding on a farm of this size is financing the operation. The Stanleys have decided to cut all unnecessary spending on fixed costs for the next two years at least.

“We chose to prioritise investment in increasing stock and grass immediately,” says Dwayne. “In March 2017, we targeted a 42ac block of ground across from the main farm yard for levelling, paddocking and correcting soil fertility. Soil index on this block of land was similar to the rest of the farm at index 1 for P&K, along with a requirement for lime.”

Water troughs were installed across the farm. Terra Services was employed to run one-inch pipe underground to service over 114ha. Utilising some existing water troughs and moving them to more central locations helped cut costs. The total bill for the looped water system installation including all materials such as troughs, piping and fittings came to €15,000 plus VAT or €52/acre.

“We decided to split the reseeding into two sections with half of it sprayed off in April, power-harrowed twice and seeded a few weeks later,” says Raymond. “Three tonnes of lime per acre was spread along with three bags per acre of 10-10-20. A post-emergence spray was applied six weeks later.”

As this half of the 42 acres was run as one large field, five paddocks were created with centrally positioned water troughs allowing the paddocks to be split easily again with a strip wire. A roadway was fenced along the bottom of the paddocks to allow safe movement of stock by one man and each paddock has a gap handle at either end of the paddock to make daily movement from the paddock easier. The total cost of fencing this 21ac block was €6,000.

All of the work, apart from rolling and spreading fertiliser, was carried out by a contractor.

Table 1: Cost of reseeding and infrastructure on 21ac (8.5ha) block

Item	€ cost (total)	€ cost per acre (hectare)
Spraying (contractor)	210	10 (25)
Round up	275	13 (33)
Tilling	735	35 (88)
Sowing	1,135	54 (135)
Fertiliser	1,197	57 (142)
Lime	950	46 (114)
Post-emergence spray	390	19 (46)
Spraying (contractor)	210	10 (25)
Water troughs	280	13 (33)
Water pipes (including installation)	1,100	53 (131)
Fencing	6,000	286 (714)
Total	12,492	594 (1,487)

Reseeding

The second half of the land block was reseeded in early September and a post-emergence spray applied in October. This block will be fenced into paddocks once weather allows in spring. In the meantime, the land will be grazed by light stock using temporary reels and pigtail posts.

“In previous years, this land would have been grazed extensively with little fertiliser applied, growing in the region of five to six tonnes of dry matter per hectare,” says Raymond. “With a newly reseeded sward

dry matter, this block of land should carry three livestock units per hectare at its ease.”

While the costs of reseeding and infrastructure on this land is significant as outlined in Table 1, if the land grows almost 10t dry matter per hectare more than in previous years at 80% utilisation, this equates to 8t DM/ha utilised.

At an average value of €105/t DM utilised, this equates to a gain of €840/ha or €7,050 on the 21ac block of land reseeded per year. Within two years, this investment will have paid for itself. Not many other investments on farm have the potential for such a fast payback.

The Stanleys will be increasing their stocking rate over the next number of years to around 2.5 LU/ha, so will have a demand for this extra grass and can justify the investment. There isn't any incentive on farms to grow more grass unless the stock will be on farm to eat it.

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receiving adequate nitrogen, paddocked and soil fertility rectified, the team reckons this land is capable of growing 15t dry matter per hectare,” says Raymond. “That’s a three-fold increase in production over previous years. Given that each livestock unit requires roughly five tonnes of

The Stanley farm hosted a Grass10 autumn closing walk in September 2017 and will host a Grass10 early spring grazing walk on Wednesday 28 February at 11am.

FUTURE PLANS

The plan for 2018 is to continue to reseed and put more land in paddocks as stocking rate increases. “The first step has to be installing a more extensive

water system,” says Dwayne. “Without this, it would be impossible to manage splitting paddocks. Positioning of water troughs is important with the centre of the field under a paddock wire allowing the greatest amount of options when using the strip wire.”

The eventual plan is to have the suckler herd and the dairy calf to beef herd producing a target of 1,000kg of liveweight per hectare from a grass-

based system, leaving a gross margin of €1,000/ha while keeping fixed costs at around €400/ha.

Another option being looked at for 2018 is to plant a kale crop to graze weanlings over the winter period. Dwayne Stanley is very impressed with this ideas given the expected thrive for stock, the health benefits and also that it will fit in with a reseeding programme on the farm.



Alan Dillon, Teagasc, with Gilbert, Dwayne (front) and Raymond Stanley.