

Take the Tullamore bypass and watch the cattle thrive

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Conor McGrath has a 23ac outfarm on the busy N52 Tullamore bypass. Conor farms a calf-to-store system, purchasing Angus and Hereford cross heifer calves and selling them live at 18 to 20 months of age. He also operates a midseason lambing flock of 100 ewes on the home farm.

Having increased cattle numbers in recent years, Conor needed to grow more grass on the overall farm to keep up with herd demand. This prompted him to meet his Teagasc advisor in December 2016 to discuss how he could grow, and indeed utilise more grass on his outfarm.

The advisor saw huge potential with this field. Firstly, it has the ability to grow far more grass than it had been doing in previous years. Secondly (because of the field's prominent location), it was clear that any improvements in grassland management would be visible to thousands of

people who drive by the field each day.

With Conor's approval, the advisor spoke to the full drystock advisory team in Tullamore with a view to setting up a grassland demonstration for the 2017 grazing season. The aim was to graze 50 yearling cattle on this field and achieve a liveweight gain of 0.9kg per day. Our target was to have cattle averaging 500kg by their sale date. Conor felt that our targets were overly ambitious but was willing to trust our advice.

In January 2017, the drystock team visited the field. A map outlining suitable grazing divisions and location of water drinking troughs was prepared. The team met Conor and the plans were discussed and approved. The 9ha (23ac) field was divided into nine permanent 1ha grazing divisions.

Water troughs were placed so that each paddock could be subdivided into smaller areas, in effect creating 18 individual 0.5ha paddocks. The cost of the grazing infrastructure is outlined in Table 1.

Soil samples were taken and it was established that overall soil fertility was good with a soil index of 3 for both P and K and a pH of over 7. In February 2017, 23 units of nitrogen (a half bag of urea) was applied. The grazing infrastructure was installed and grass measuring began with data being recorded on the PastureBase Ireland system.

Twenty-five of Conor's yearling cattle were turned out to grass on 11 March with 50 heifers on site by the end of the month. The average weight at turnout was 297kg. This equates to an initial stocking rate of 1,650kg of liveweight per ha, but increased to 2,500kg of liveweight per ha at peak



Aerial shot of grazing divisions.



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The Tullamore drystock advisory team: Mark Coyne, Bernard Doorley, Paul Fox and Mark Gavin.

Table 1: Grazing infrastructure costings

Five water troughs (90 gallon)	€625
Water pipe(1/2 inch) and fittings	€375
Fencing 1,078m @ €1.40/m	€1,510
Total	€2,510

grass growth; when silage paddocks were removed from the rotation.

Weather conditions were excellent at turnout but deteriorated badly during March. Ground conditions were challenging with some light poaching evident. Despite this hiccup, Conor followed the plan with the first rotation ending on 15 April. Paddocks recovered very well for subsequent rotations.

Grass growth was monitored each week by the drystock team. Management decisions, such as applying more fertiliser or closing additional paddocks were made based on PastureBase reports. Surplus grass was conserved as silage during the summer and cattle continued to enter leafy grazing covers of 1,200kg to 1,400kg DM.

Cattle were moved to a new grazing paddock every two to three days ensuring excellent cattle performance was maintained. “I was surprised by how much grass this field could grow,” says Conor. “And the paddocks meant that we were able to keep fresh grass in front of the animals. You could really see that they were thriving more than before.”

In addition to maintaining the 50 cattle for the grazing season, over 80 bales of surplus grass were conserved as silage. Total nitrogen usage on this field during the year was 128kg N/ha (103 units/acre).

Benefits for Conor

In 2016, this 9ha field grazed 30 yearling heifers. In 2017, this same field maintained 50 similar cattle, almost doubling the stocking rate. Cattle performance was excellent throughout the year. In 2016, cattle achieved 0.7kg of daily liveweight gain. Improved grassland management led to daily

liveweight gains increasing to 0.92kg in 2017.

Heifers at sale were 40kg heavier when compared with previous years, and, in 2017, averaged 497 kilos. Improved weight gain and increased cattle numbers has resulted in an additional €6,500 of gross output value being generated on this field alone.

The grazing season was also extended by 30 days compared with 2016 with the help of the Teagasc spring and autumn rotation planner. The last cattle left the field on 23 November. Having seen the benefits of this grassland management technology, Conor is now in the process of installing paddocks on the remainder of his farm.

Benefits for farmers

There have also been many benefits to local discussion groups and individual farmers. Due in no small part to Conor’s generosity in allowing visitors, the field has become an excellent resource for the drystock advisory team to demonstrate best practice in grazing management and driving maximum output from cattle farms.

Teagasc grassland management demonstration farms are not unusual as the organisation has been involved with many farmers on grass projects over many years.

What makes this project unique is the field’s location with over 10,000 vehicles passing its “doorstep” every day of the year.

A quick glance into this elevated field as you drive by and you can see best grassland management practice and cattle performance without leaving the comfort of your car. So, next time you are in the area, just take the Tullamore bypass and watch the cattle thrive.