

Grass key in the Royal County

James Fitzgerald
Teagasc Greenacres Programme



On the outskirts of Navan, Co Meath, Aidan Maguire farms 62ha, 14ha of which is forestry. Aidan's system involves rearing 80 spring and 30 autumn-born calves sourced from local dairy farms. They include dairy-bred males; Hereford and Angus males; and Hereford and Angus females.

"The mix of calf types and birth dates helps to broaden the range of marketing dates of cattle. I prefer not to have all my eggs in one basket," Aidan notes. There is one basket that Aidan is putting his full faith in as he builds a sustainable and profitable farming system: high-quality and high-quantity grass.

Grassland management

As well as being a participant in the Teagasc Green Acres Calf to Beef Programme, Aidan is a member of a local grassland management discussion group, co-ordinated by John Douglas and the Teagasc Grass10 campaign team.

The farm is divided into a total of 45 paddocks with permanent single-strand fencing. Water troughs are carefully located to allow each of these paddocks to be further divided in half using temporary wire.



Some of Aidan Maguire's autumn-born calves.

Grass measuring and budgeting is completed every week of the grazing season to assess grass levels on the farm and maintain a high standard of animal nutrition. On-off grazing and spur roadways are used to maximise the length of the grazing season by utilising grass early in spring and late in the autumn, practices more common on dairy farms.

"The type of stock being grazed does not matter. Good grassland management is basically the same for all farm types," Aidan says.

In the year gone by, the grazing season began on 24 January with the yearling cattle turned out by day and housed by night to maximise the use of grazed grass and the high level of weight gain it generates.

To keep sward damage to negligible levels, Aidan offered a fresh area of ground to the cattle each morning so that they would have grazed out to 4cm by housing time that evening.

These cattle had been housed on 13 November, giving a total grazing season length of 294 days. Achieving a similar turnout pattern in the spring of 2021 will reduce the winter housing period, where animals are without grazed grass in their diet, to just 72 days.

Silage

This has the knock-on effect of reducing Aidan's silage requirements far below that of similar herds with



longer winter housing durations.

"With less volume of silage needed, I'm able to focus on silage quality and not so much on quantity," says Aidan.

There is no set area of silage ground closed on the farm for first- or second-cut. Instead, the entire farm is fertilised for grazing, in accordance with the nutrient management plan, and grazing the whole year round is an option. "We make bales of silage from the paddocks which are surplus to requirement for grazing – a total of 470 bales of silage last year," says Aidan. "The majority of the slurry is spread on silage paddocks to replace the nutrients taken off."

This ensures that no overly heavy or stemmy cuts of silage are made and all silage is high-quality, averaging in the mid-seventies for DMD. It also has the knock-on effect of improving the quality of the grazed grass consumed by the herd as there are more paddocks of varying covers to choose from when deciding which paddocks to graze next.

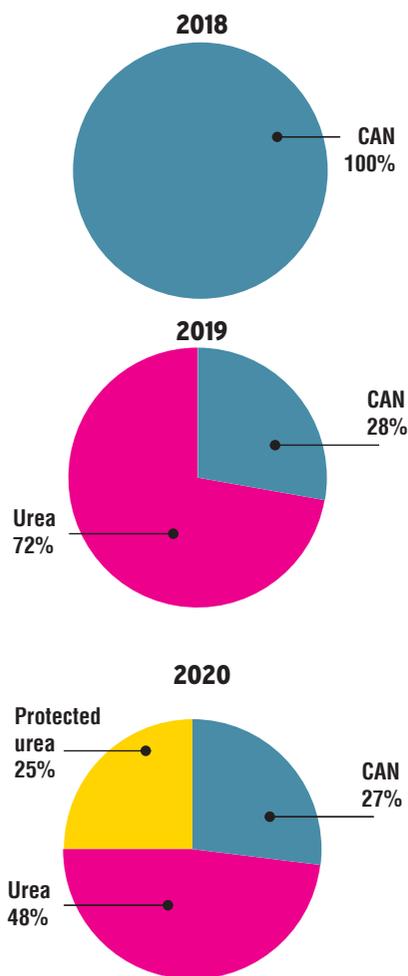
Soil fertility

In total, 56% of Aidan's land is at the



Aidan Maguire.

Figure 1: Change in fertiliser forms 2018-2020: calcium ammonium nitrate (CAN), urea and protected urea



correct soil fertility for pH, phosphorus and potassium for growing grass. “This is impressive when compared with the national average of just 5% being at the correct soil fertility for all three,” says local Teagasc advisor David Argue.

“The key to having healthy fertile soil is to first know how much lime your ground needs and getting it spread, then making sure you’re getting the right amount of P & K out to feed the grass after that,” says Aidan.

As part of Aidan’s Green Acres farm plan, all of the spring-born heifers and autumn-born steers are to be killed off grass at 19 and 24 months old, respectively.

This means that half the animals sold each year will be finished at grass at a relatively young age, doing away with the need to house these animals for a second winter, and maximising the kilos of beef sold from grazed grass.

“These animals need to be turned out of the shed in the spring of their second grazing season at the correct weight and ready to achieve a daily weight gain of 0.9kg to 1kg/day at

grass to reach the carcass weight and fat cover we want to market them at,” says Aidan.

“The earlier in spring we can begin to graze and the longer the grazing season, the more weight and fat cover they will have at the end of the grazing season.”

The same theory applies for the spring-born steers, which will be finished in the shed over the course of the winter. The more advanced in weight and fat cover the cattle are when entering the shed at the end of the grazing season, the shorter the indoor finishing period will be.

“The winter finishing period is at best a break-even exercise due to the cost of the diet and machinery costs associated with winter feeding,” adds Aidan.

“To be able to shorten the winter finishing period by having the majority of work done at grass earlier that year saves money and frees up shed space to carry more young stock.”

Focusing on sustainability

Over the last two years, Aidan says he has been putting more thought

into the fertilisers he spreads on his farm in order to get the best value for money and to do something to reduce environmental impact.

“I’ve been moving away from using all CAN based straight fertiliser to using more urea and protected urea based fertiliser,” he says.

“In 2018, all of the nitrogen that was spread on the farm was in the form of CAN. In 2019, I cut back on CAN and used more urea to reduce costs.”

In 2020, some protected urea was used in mid-summer, replacing the summer applications of CAN of years previous.

Aidan remarks: “I was very happy with the response I got from the protected urea and the amount of grass the farm grew compared to using CAN fertiliser.

“I will probably always spread a certain amount of CAN based fertiliser since almost all of the compound fertilisers have CAN in them. Still, replacing the majority of nitrogen spread with a form that does the exact same thing, is cheaper and better for the environment is an easy decision to make.”