Experimenting with maize silage

By Dan Burling

Dan farms with his family in Cambridgeshire on 600ha of predominantly heavy arable land. Cropping is based around two milling wheat’s and oil seed rape. They run a herd of around 200 stabiliser and stabiliser cross cows.

The suckler herd grazes on flood plains of the river Ouse, river bank, ancient grazing land and reclaimed gravel extraction land which is under management by the RSPB. Therefore there are no opportunities for Dan to grow grass of a high enough quality or quantity to produce good forage. Grassland cannot be improved due to various stewardship agreements they have with the RSPB and therefore they require a good, forage efficient and productive maternal cow.

The suckler herd is run under a multiplier agreement with the beef improvement group. Stabiliser bulls are selected from the Estimated Breeding Values (EBVs) (top one per cent) and net feed efficiency (NFE) results mainly to produce maternal bloodlines for the production of breeding heifers. The herd is fully performance recorded by Signet which allows them to monitor performance very closely.

AI has been used in the past and this year they will be using more embryos in a bid to increase the bloodlines from high NFE proven lines. Bulls are finished on the Morrisons stabiliser yearling beef scheme with the aim of finishing a bull to meet a maximum carcass weight of 370kg at R4L at 13 months of age.

As members of the SRUC premium health scheme they have a pro-active approach to health, Johnes, BVD and IBR are all monitored. Everything is marketed through the stabiliser group both on and off the farm and therefore the disease risk is reduced.

In an attempt to feed the cattle on less whilst also improving herd health and performance Dan switched to a TMR system. Previously they were buying in pre-mixed rations for the bulls.

At the time the only viable feed produced on farm was wheat straw, which was fine for dry cows over the winter but no good for finishing bulls or growing heifers. So last year, when the opportunity arose to try a very small area of maize as a forage crop, they gave it a go.

They made a makeshift clamp from large bales and used contractors to grow and harvest the crop. The results in terms of fresh yield was about 9/10 tonnes per acre, lower than they’d have liked but not unexpected. The land hadn’t been used for arable crops for about 30 years and recent soil testing and mapping data has now shown that there are highly acidic areas within the fields. This increased the cost of feed per tonne. However, the dry matter (DM) and starch levels were good and the average gain for both heifers and bulls is on target. The family are happy they have the ability feed a number of cattle from such a small amount of land.

And therefore this year Dan and his family are growing maize again. Taking what they learnt last year to try and reduce cost and increase yield. They’re increasing the area of land used to grow maize this spring to 25 hectares and will focus on land preparation in order in improve establishment. They will also be pushing the contractors to harvest a lot earlier to enable them to establish a following wheat crop.

Dan will continue to evaluate the maize crop, and if it’s successful he may consider investing in a clamp.

Take a look at the BRP Growing and feeding maize silage for Better Returns manual for more information

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