BETTER PASTURE MANAGEMENT CAN DOUBLE PRODUCTION

Managing grass, and in particular white clover, was the theme of a QMS Grazing Group meeting held on **Alastair and Alex Brewster's** Rotmell Farm at Dunkeld earlier in the summer.

Several local farmers attended this fourth meeting of the Perthshire group and Michael Blanche, QMS Knowledge Transfer Specialist, said he was pleased with the commitment farmers are showing to the group.

"The aim of the grazing groups is to increase kg of liveweight produced per hectare through better utilisation of grass," said Michael.

"The theory is that farmers can double production over average set-stocking systems through better pasture management and, through the grazing groups, we are setting out to prove this."

There are six grazing groups in Scotland – from Tain in the north to Glenluce in the south – and they are now at a stage where benchmarking is starting to mean something.

Michael added: "We are developing cost of production figures meeting by meeting and measuring soil temperatures and grass growth in order to make comparisons.

"Everyone can see that grass growth is less than last year. However, we have measured it and we have grown less than 70% of the grass we grew last year.

"That is over a tonne of dry matter per hectare as of June 1st. Over three years, we will be able to build a picture of growth trends and costs of production. Knowing this information is one step; the real leap is how we fit our grazing systems to make the most of these growth curves and hence reduce production costs."

New Zealand pasture researcher John Brock spoke to the meeting about white clover. He said it underpins New Zealand pastoral agriculture, with research showing 60% of white clover in the diet is optimum for animal production.

There is no doubt that those present will have left the meeting with a better understanding of how to establish and manage white clover, and one of the key messages from John was that clover will only fix nitrogen if natural soil nitrogen is low, so there is no point in over-fertilising with bagged fertiliser.

ROTMELL FARM: AT A GLANCE

- Run by **Alastair and Alex Brewster**
- **986ha** – **140ha** improved pasture/ **120ha** rough grazing
- **100** Aberdeen Angus cows
- **800** Blackface ewes

For more information about the QMS Grazing groups please visit: **www.qmscotlandco.uk/grazing-groups**

Image: John Brock

He pointed out that a relatively productive pasture will use approximately 1200kg/ha of nitrogen and the vast majority of that comes naturally from the soil. Clover can fix 50 to 200kg/ha of nitrogen per year but will only do so when it has to. This could be a real challenge for any Scottish farmers who think that if they do not fertilise grass then it will not grow.

John was encouraged by the pasture on most of the farms he has seen in Scotland, and particularly at Rotmell where the clover swards were impressive. He said: "The Scottish soils seem to have less organic matter which makes a difference to the clover, but on the whole the pastures are fine. It is the management which is important."

Alex runs 800 Blackface ewes and 100 commercial Aberdeen Angus cows on 986 ha at Rotmell. The farm is all LFA, with around 140ha of improved pasture and 120ha of rough grazing.

> "Market prices are beyond our control, so we have to become more efficient at producing kg of liveweight from grass."

Although he has experimented with rotational grazing for a couple of years, since joining the grazing group in July 2014, Alex has picked up a lot of ideas from the meetings. He said: "It is good to get the feedback from other farmers who are genuinely trying to cut costs. The market prices are beyond our control, so we have to become more efficient at producing kg of liveweight from grass."

One of the ideas grazing group host Alex Brewster is putting into practice this year is to run his 50 spring calving cows and heifers as one batch with two bulls. He hopes this will improve conception rates and shorten the calving period, while helping with grass management. He operates a three ha paddock rotational grazing system and explained: "The ewes with twins are a priority in the summer and they get first shot at the grass for 48 hours, eating the best of the leaf and clover. Then the big mob of cows come in and clean up for up to 48 hours, before the field is left for 21 days until grass growth is 8 to 10cm or 2500kg/ha DM.

"The theory is that we are using stock to manage the grass while increasing production at the same time. Ryegrass and clover want to reproduce, so we are using stock to control the growth. We try to graze between 1500 and 2500kg/ha DM. If it gets to more than 2700kg/ha DM then it needs to be kept for silage, as it has lost its full grazing potential."

He is currently using electric fencing for his paddocks but is planning something more permanent this year. "It may seem like a lot of work moving stock every two days but it takes no longer to walk them through a gate into the next field than it would to check them," said Alex.

Michael said that managing grass is as much of a skill as stockmanship. He said: "Parallel to all grazing group meetings, we like to see step-by-step changes in how the rotational grazing is developing. We are definitely seeing that at Rotmell."

Alex agreed, saying: "As farmers, we are guilty of concentrating on stock and we do not give enough consideration to what the stock eats." He is heading to New Zealand for a couple of months in January to see for himself how grass is managed on the other side of the world.

"I believe that subsidies are on their way out, and in order to grow the business I need the tools to do it," said Alex. "Fertiliser and concentrate feed are very expensive, and lamb and beef prices are beyond our control, so the only way forward I can see is to be technically able and produce meat from grass."+

Paddock rotational grazing system

Sheep are grazed for **2 days** then cattle are grazed for **2 days**. The field is then left for **21 days** until grass growth is **8 to 10cm** or **2500kg/ha DM**