

## ABOUT THIS MONITOR FARM

<b>Farm name</b>	<b>Mill of Inverarity, Inverarity, Forfar, Angus, DD8 2JN</b>
<b>Meeting Number</b>	<b>06 – Arable Systems, Rotational Grazing &amp; Fodder Beet</b>
<b>Meeting Date</b>	<b>Thursday 17 May 2018</b>
<b>Next Meeting</b>	<b>Sunday 15 July 2018</b>

Mill of Inverarity Farm is run by the Stodarts and in total the business farms 358 hectares. The farm is a traditional mixed unit growing 130 hectares of cereals, with 160 spring calving suckler cows and an increasing breeding flock of 700 ewes. The business also annually buys in store cattle and lambs for finishing and has an operational laying hen enterprise on farm of 4,500 hens.

This meeting looked at the rotational grazing system that is in place for the sheep flock on farm as well as the first year of fodder beet being grown for wintering lambs. On the arable side we looked at a problem field which had consistently been performing poorly and the results from GPS soil sampling and yield maps produced from 2017 harvest.



**Management Group:** Graeme Mather, Fiona Lawson, Ian Pattullo, Neil McGowan, Stuart Lawrie, Duncan Wilson, Graeme Neill, John Kidd, Robin Norrie, Sam Ruddell.

## KEY MESSAGES

- When thinking of an alternative fodder crop for winter grazing fodder beet is a good option. Although establishment and growing costs are slightly more expensive than other catch crops the bulk and quality of the crop makes it an excellent feed.
- GPS farming and the use of pH maps alongside yield maps has shown up areas on farm which need closer attention paid to them for nutrient balances.
- Rotational grazing has meant that the farm is now carrying more sheep and less grassland is required for them to graze throughout the season. This has the possibility to increase silage production going forward as well.

## AREAS OF DISCUSSION

- This is the first year that the monitor farm has grown fodder beet to feed lambs. The two varieties grown at the mill this year were Blaze and Brick. Kirsten Williams, SAC Sheep Specialist discussed the growing costs, feeding guidelines and nutritional value of fodder beet. Fodder beet if grown correctly and treated well can yield up between 75-100t/ha fresh weight which equates to approximately 30t/ha dry matter yield. The monitor farm plan to use this as a way of finishing lambs throughout the winter with a grass area as a dry run back for the lambs.
- One of the fields at Mill of Inverarity has also been a problem to grow and yield crops well. Robert McCoull from Glenside Agronomy Group has been looking at the field more closely and analysing using more detailed soil tests that look at nutrient ratios. This was discussed on the day and it was thought the problem lay with the soil structure and nutrient ratios within the soil as opposed to just the pH and lime needed. The field will be treated with gypsum to combat this and we will look at the yields next year to see if any notable differences can be seen.



## FARMERS UPDATE

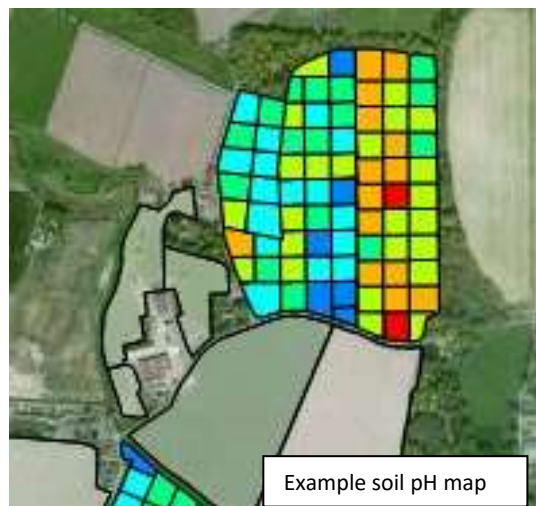
- The rotational grazing system on farm has been developed since the start of the project with the help of Poppy Frater, SAC Grassland and Sheep Specialist, to get the most out of the area designated fields put into the system. This year so far there has been a 5ha field which was split into paddocks and has managed to hold 120 ewes with twin lambs and 80 ewes with single lambs following on behind them. They have been put on a 3 day shift pattern, which may change if grass growth changed and Rory has been measuring the amount of dry matter yield in each of the paddocks to allow for this.
- After initially investigating problems areas within the arable system, most of the nutrient balances for fields have been levelled out however the Kennels field had been a problem that went further than routine sampling and trace element testing. With the help of the Glenside Agronomy Group



The group discuss soil testing and grazing management.

the problem was found to be more in the soil structure and gypsum applied to the soil should help with this. This has been a good learning curve for the monitor farm and the community group to all benefit from that problem fields, or problem areas, should be pushed to investigate the problems further.

- GPS farming and yield mapping has been developed further on farm this year with more fields mapped to give a more precise indication of field performance. A lot of the fields on farm have also been precision sampled for pH and lime requirements. This means the lime is applied more accurately to the areas in the field that need it the most. This has meant a slow drop in the amount of expenditure on farm on lime and more precise application. An example of the pH maps for Mill of Inverarity can be seen on the right.



## FACTS & FIGURES DISCUSSED

- The cost of growing fodder beet is expensive but when compared with the bulk and feeding quality of the crop it works out well for the farm. The cost of growing the fodder beet with all ground works and inputs included comes to approximately £730 per hectare (£295/acre). The fresh weight yields from the crop can be in the range of 75-100t/ha with dry matter yields of approximately 30t/ha for roots and tops. This means as a feed the cost is £24.30 per ton of dry matter per hectare. The wintering costs of feeding fodder beet can be seen in more detail in the technical note on growing fodder beet.

## OPPORTUNITIES/CHALLENGES

- **Tightening up rotational grazing system**  
Rory has been working on the rotational grazing system himself as part of an ongoing trial to get more out of the grass for his sheep flock. However, the design could be altered and tightened up a bit to make the rotation more beneficial and yield better. He is working with Poppy Frater to improve on this and will provide an opportunity to carry more animals over the grassland available.



## ACTIONS FROM LAST MEETING

- Strone store lambs will start to be sold and performance of them will be recorded to compare against the other store sheep on farm.
- Attention to detail will be looked at on the cattle enterprise and whether or not the breed of cow should be altered to better fit the system.
- Monitoring of fodder and beet and other winter fodder crops will continue to measure growth and performance when compared to one another.

### FACILITATOR CONTACT DETAILS

David Ross & Stacey Hamilton

SAC Consulting

Arduthie Business Centre, Kirkton Road, Stonehaven, AB39 2NQ

Tel: 01569 762305

Email: [fbstonehaven@sac.co.uk](mailto:fbstonehaven@sac.co.uk)

