

ABOUT SUTHERLAND MONITOR FARM

Farm name	Clynelish Farm, Brora, Sutherland, KW9 6LR
Meeting Number	13 – Improving pasture through basic soil management with Soil Clinic
Meeting Date	Wednesday 13 February 2019
Next Meeting	Wednesday 13 March 2019

ABOUT THIS MONITOR FARM

Clynelish Farm is a 125-hectare farm run by Jason Ballantyne and his wife Vic, in partnership with Jason’s dad Murdo.

Cattle: The family run 80 suckler cows with calves sold store at 10 months of age. Cows are all out-wintered.

Sheep: There is a flock of 900 breeding ewes, of which about half are Lairg type Cheviots and the other half Lleyn cross, currently lamb outdoors at the end of April.



Unusually for the area, the cattle and sheep enterprises are both on forage- based diets with virtually no concentrate feeding.



James Bretherton discusses soil texture.

Management Group:

John Scott (Chair)
 Rory MacKenzie, Sheena MacKenzie,
 Brian MacLeod, Danny Miller,
 Iain MacKenzie, Donald Ross

KEY MESSAGES

The key messages delivered from this meeting were:-

James Bretherton from Agscope Ltd gave a very interesting talk about how to improve your pasture through looking after and improving your soil.

The attendees have a wide range of soil types, from peat to sandy to clay, growing forage and arable crops. Soil is just as important to livestock producers as arable farmers.

Soil is a living environment and must be looked after to maintain its lifespan. Soil structure is very important and affects its health and impacts how it absorbs nutrients from the environment.

James likened soil to a cow's rumen and it needs to be managed in the same way and emphasised how one aspect of soil affects all the others.

AREAS OF DISCUSSION

Soil is made up of:

- Minerals 44-45%
- Organic Matter 5-10%
- Air 22-24%
- Water 22-24%

i.e much more than just pH, P and K

Soils structure affects many different aspects of pasture; including palatability, grass yield and quality, nutrient uptake, utilisation of FYM, effective fertiliser use and mineral profile. This impacts on the grass growth and the production and profitability from grass. Grazed grass is the cheapest feed stuff.

How can farmers maintain soil structure and its health? .

Maintain the organic matter in the soil- keeping ploughing to a minimum and the application of FYM will help to maintain the organic matter. Over cultivation can cause soil to collapse. The use of aerators and subsoilers can be useful but take care not to exacerbate any issues.

Soil contains many bugs and insects including earthworms- earthworms are a good indicator of soil health, 6-10 earthworms per cubic foot of top soil in the spring. To encourage bugs care should be taken to keep soil as aerobic.

James recommended soil analysis every 4-5 years. Soil pH affects the uptake of nutrients and soil biology. Application of powdered lime should be limited to 5 tonne per hectare per year. Calcium should ideally be 5 times higher than Magnesium in the soil. To choose between calcium or magnesium lime for neutralising check the Ca :Mg ratio Calcium is removed through the production of meat and milk. Calcium can also help to combat rushes. James finished by reminding everyone that soil is a living environment.

The soil clinic in the afternoon at Clynelish Farm included the field that the Ballantynes had chosen for James which had been tested recently with a pH of 5.3. After digging a small pit (no bigger than the spade width) James explained that as the soil was sandy that pH can change quicker than heavier soil types. The soil structure was OK but lime is needed. Following discussion on timing and type of lime to apply it was agreed

that quick acting prilled lime should be applied in the spring, with powdered lime in the autumn would have the best impact.

The possibility of stitching in grass seed was discussed but with the forecast of warm weather for the next 10 days or so grass could be sown but finding a contractor now time may prove difficult.

James talked through the other 5 samples that the attendees had brought along. He spoke about the soil structure, type, earthworms and compaction. Each attendee took home some new information about their sample and advice for future.

FARMERS UPDATE

Sheep Update

- Ewes and gimmers are to be scanned next week- details at the next meeting
- Sheep are only getting half a bale at a time
- Worms burden is low
- Fluke burden is high- they were dosed before tugging

Cattle Update

- Average calves LWG is 1.1kg
- Calves not as clean as usual- straw not as absorbent not the same quantity due to availability and price
- Cows are in good condition
- Sold Stabiliser bull (coming back on his progeny) - on the lookout for another
- 1 empty cow to be sold

Grass/Forage

- Grass fertiliser has been ordered
- Fodder Beet Part II- after consultation with agronomist going to try it again.
- Lime has been ordered

Other stuff

- In the winter routine feeding and bedding
- Looking at Herbal leys and if they are suitable for Clynelish
- Attended a QMS event recently about minerals- going to look at the mineral in the water supply

FACTS & FIGURES DISCUSSED

- Calves are costing 40p a day more to keep due to increase in beet pulp price
- Fodder beet part II will be in the ground earlier but managed differently. One half will be ploughed and sown and the other will be direct drilled. Costs and yield will be compared.
- Giving sheep only half a bale a day- has reduced waste, improved intake, sheep seem to eating more regularly and there is no jumping when the bale goes in

- Group were asked about sheep scan results- in general scans have been down but fewer empties- Clynelish is prepared for a fall in scanning percentage.

OPPORTUNITIES/CHALLENGES

- Sowing grass trial area in calving field- within short time- to see if grass would establish
- Getting ground prepared for fodder beet
- Making straw last and keeping calves bedded
- High fluke burden in sheep

ACTIONS FROM MEETING

- Find contractor for grass seed
- Fodder Beet 'try out'
- Report on scan results

FACILITATOR CONTACT DETAILS

Willie Budge & Cat MacGregor

SAC Consulting

Industrial Estate, Janetstown, Thurso, Caithness, KW14 7XF

01847 892602. Email: fbsthurso@sac.co.uk

