



ABOUT SUTHERLAND MONITOR FARM

Farm name Clynelish Farm, Brora, Sutherland, KW9 6LR

Meeting Number **08 – Soil Management**Meeting Date **Tuesday 13**th **March 2018**

Next Meeting Wednesday 6th June 2018 – Grassland – Trevor Cook

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.



The soil at Clynelish was discussed at the meeting

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

KEY MESSAGES

The key messages delivered from this meeting on soil management were:

- Dig a pit to really look at your soil and see what's going on underneath
- Calcium, Potash, Sodium and Magnesium are analysed to determine the PH of soil
- If you get the physics and chemistry of the soil correct the biology will follow
- Drainage can be costly but can have huge benefits long-term

AREAS OF DISCUSSION

Mark Hodkinson, soil specialist jumped into the pit that had been dug on Clynelish and explained what we could see. The pit was approx. 3m x 3m and 1m deep.

Mark explained that if you were thinking about buying or renting ground this was the best way to see what the soil and the potential of the field was.

Discussions were held about the drainage of the field but Mark thought that the iron plate could be causing some issues; this plate could only be seen due to the large pit.











Mark gave a real insight to the health of the soil in a field using a broad-spectrum soil analysis.

Mark's key points from the soil anaysis was:

- Good 10% organic matter
- Potash is at a good level but remember to feed the soil as grazing or cutting removes it
- Calcium-essential to keep crop sweet
- Sulphar is crucial for growth
- Copper- crucial for animal fertility
- Boron- important for the biology of the soil

General points were:

- Application of any products should be applied accurately as possible.
- Get a broad-spectrum soil analysis

After lunch Mark gave a presentation titled "To Drain or not to Drain" in which he looked at drainage and the cost of drainage and encourage people to look at the field and its potential.

Key points:

- Use all the tools avaible to you to determine old drainage- including google earth.
- What are the limiting factors of the field? Are they easily fixed
- For crops to grow the water temperature need to warm up and the more water there is the longer it takes- thus stalling growth in the spring and stopping growth in the autumn.
- Returns could be 5, 10 or 15 years- dependant on cost and crops

FARMERS UPDATE

Jason and Victoria gave an update on developments on Clynelish which centred on the sheep scanning results as shown below-

	Ewes	Lambs	%	Empty	Singles	Twins	Triplets
All Ewes	943	1401	149%	38 (4%)	429	456	20
Cheviots ¹	193	310	161%	1 (0.5%)	77	109	5
Aberfields ²	290	417	144%	13 (4.5%)	139	133	4
Suffolks ³	461	674	146%	23 (5%)	213	214	11
Hoggs	128	78	61%	52 (40.5%)	72	3	0

Notes: ¹ No gimmers ² Mostly Cheviots inc 100 Gimmers ³ Cross

³ Cross Ewes inc 200 Gimmers







FACTS & FIGURES DISCUSSED

The calves were weighed on 12 March with weights of each breed shown below:

	Total	Avg Kg 14-Nov	Days Old Weaned	Avg Kg 200 Day	DLWG 14-Nov	Kg 12-Mar	Kg Since Wean (118 days)	DLWG since 14-Nov	DLWG Birth to 12-Mar
ALL	74	218	172	254	1.0	349	131	1.1	1.1
MALE	38	234	174	269	1.1	373	139	1.2	1.2
FEMALE	36	201	168	239	1.0	323	122	1.0	1.0
SIM	32	223	169	264	1.1	354	131	1.1	1.1
SM M	19	230	168	274	1.1	369	139	1.2	1.2
SM F	13	214	172	250	1.0	333	119	1.0	1.0
LIM	9	232	173	267	1.1	364	132	1.1	1.1
LM M	5	257	179	287	1.2	396	139	1.2	1.2
LM F	4	200	166	242	1.0	324	124	1.1	1.0
AA	22	204	168	242	1.0	332	128	1.1	1.0
AA M	9	229	182	252	1.1	363	134	1.1	1.1
AA F	13	191	163	234	1.0	316	125	1.1	1.0
СН	11	212	177	239	1.0	349	137	1.2	1.1
CH M	5	234	182	258	1.1	383	149	1.3	1.1
CH F	6	195	174	224	0.9	321	126	1.1	1.0

Detailed below are the costs:

- 131 kg x 74 calves = 9694 kg (118 days)
- Straw =55 bales @ £12/bale = £660
- Silage = 24 bales @ £18/bale = £432
- Draff = 120 ton @ £25/ton = £3000
- Beetpulp = 27ton @ £170/ton = £4590
- Soya = £400, Minerals = £300
- TOTAL = £9382
- £9382/ 9694kg = 97p/kg











OPPORTUNITIES/CHALLENGES

Based on the cost to put a kg of weight on, there is an opportunity to improve DLWG to 1.3kg/day which gives the potential to an extra 1657kg to the total weight of the stirks, thus an increased income of £4142, broken down below:

- 1.1kg/day = 131kg x 74 calves = 9694kg
- £9382 / 9694 = 97p/kg
- 1.3kg/day = 153 kg x 74 calves = 11351 kg
- £9382 / 11351 = 83p/kg
- 1657 kg @ £2.50 = £4142
- Think it unlikely costs would remain the same
- Smaller ones just don't eat as much
- But still cheap weight so more Kg would be more profitable

ACTIONS FROM MEETING

- Get AEC scheme completed.
- Following feedback from the community group, the Angus steers are to be sold store.

FACILITATOR CONTACT DETAILS

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