

ABOUT THIS MONITOR FARM

Farm name	Girtridge Farm, Drybridge Road, Dundonald, Kilmarnock, KA2 9BX
Meeting Number	16 - 35 people in attendance
Meeting Date	Wednesday 25 th September 2019, at Girtridge
Next Meeting	TBC
Report date	Monday 30 th September 2019

Girtridge Farm is run by the business of Messrs John Howie, a partnership consisting of John Howie, his mother Margaret and his sister Mary. The business farms a total of 140 hectares of non-LFA land and 35 hectares of LFA grassland.

Livestock

Finished Cattle: Approximately 250 finishing cattle purchased through the local market and direct off farm all year round. The aim is to sell cattle at R4L deadweight through either Stoddarts or Highland Meats.

Sheep Flock: 500 Aberfield and cross ewes put to Abermax and Texel cross rams. All lambs are sold finished either direct to slaughter through Farmstock or through the live market. All replacement females are purchased privately.

Cropping

Barley: 19.32 hectares spring barley and 7.70 hectares winter barley grown. All barley and straw is used on farm.

Forage: 2 cuts of silage are taken with 7.13 hectares of hay also being produced.

KEY MESSAGES

- Carry out FECs to determine if your drenches are working.
- TST for worming can reduce anthelmintic use and cost – as a minimum you only need an EID scanner, a weigh head and a weigh crate to do this.
- Do not use TST for fluke treatments – too risky.
- Follow the NADIS fluke risk forecast.

AREAS OF DISCUSSION

- Fluke and worms research (Moredun) including the use of Targeted Selective Treatment (TST).
- Sheep and Cattle Health.
- Losses from bulling to reared – where can you save one more calf?
- Demonstration of EID equipment and Te Pari auto-drench gun using TST method.

FARMERS UPDATE

- John has been pre-mowing paddocks for cattle.
- Things have been quiet in terms of sales and purchases lately, with finished prices so low.
- 2nd cut silage harvested on 16th July, plus 20 acres of 3rd cut was baled.
- Winter Barley yielded at 3.5 t/acre of grain and 11 bales/acre.
- Spring Barley yielded at 2.8 t/acre of grain and 7 bales/acre.
- Barley fields sown in grass mixtures from Tarff Valley varieties “Culzean” and “South West Silage”.
- Not continuing with contract rearing dairy heifers into the winter due to movement restrictions with cattle purchased and sold.
- 2nd August the first batch of lambs was sold, and then second batch sold on 13th September.
- John has bought 1, 2 and 3 crop ewes from one farm, increasing his breeding ewe numbers up to around 500.

FACTS & FIGURES DISCUSSED

WORMS (Speaker: Fiona Kenyon, Moredun)

- Look for low Faecal Egg Counts (FECs) post-treatment.
- Can do an FEC pre-treatment and then again 14 days post-treatment to determine effectiveness of treatment.
- Quarantine drenching – look at using group 4 or 5 wormers (Startect or Zolvix) for incoming stock as history of animals may not be known and they may be resistant to other wormer drench groups.
- Targeted Selective Treatment (TST) – use EID, weigh crate and dose animals based on weight gain. Research has shown this can reduce anthelmintic use by 40%.
- After the Nematodirus risk is past, the TST method can be employed.
- Anthelmintic resistance by:
 - Avoid under-dosing.
 - Do not put animals onto clean pasture post-treatment.
 - Rotate wormers with different active ingredients.
- Most noticeable effect on weight gain is up to 8 weeks after infected with worm burden.
- A research trial run from July to October revealed that the total worming cost, including labour, for a conventional system was £213 compared to £42 using TST – this resulted in a reduced worming cost of around £1.60/lamb on average.
- Throughout the season, some lambs may need 1 drench whereas some lambs may need 5 drenches – New Zealand research reveals that lambs requiring fewer drenches perform better overall over their lifetime.



Figure 1: Worm samples

FLUKE (Speaker: Gillian Mitchell, Moredun)

- Many farms have resistance to triclabendazole – carry out FECs (can also blood test lambs).
- Oxytoclosanide active ingredient works for treatment against liver and rumen fluke.
- Do not use TST for fluke as it is too risky – dose all animals.
- Do not treat with Closantel less than 6 weeks apart as it can be toxic and cause blindness in sheep.
- Moredun have been researching fluke vaccines. However, not successful so far as it is very complex.
- NADIS – fluke risk forecast.

EID & TST TREATMENT DEMONSTRATION

John carried out a demonstration with cattle of his new equipment which was funded through the Monitor Farm Innovation Fund. This included a static UHF reader fixed to the roof of the cattle crush to read cattle EID tags, a Te Pari weigh head and an auto-drench gun. These pieces of equipment work together and record the weight of the animal against the tag and also allows TST to be carried out. The Te Pari weigh-head could also be used to record performance in the sheep flock. Next steps include getting the technology to transfer the information into an animal medicine record.



Figure 2: John demonstrating auto-drench gun

MAXIMISING CALVES REARED (Speaker: Megan Fergusson, SAC Vets)

Megan spoke about where calf losses are happening, from bulling until calves are reared, and used figures from a research trial to demonstrate this. The trial included 1,822 cattle that went to the bull from various commercial farms in Aberdeenshire:

- 0.9% cow deaths – mainly due to Johnes.
- 3% still births – mainly due to calving problems (calf suffocating) and also issues with Bacillis which is a feed-borne infection.
- 1.6% died within 1 week – mainly due to failure to get sufficient colostrum.
- 1.4% older deaths – mainly due to pneumonia and navel infections.

The result was that 1,502 calves were weaned, which equates to 82% weaned. Key messages include:

- Poor/mouldy feed and dirty water troughs drives abortions – feed clean forage to in-calf cows.
- Ensure safe handling facilities are in place at calving to allow you to assist a calving cow and ensure the calf gets sufficient colostrum without putting yourself in danger.
- Cow colostrum is far superior to any powdered colostrum on the market. However, Megan advised not to take colostrum or a dairy herd if you are keeping your own replacements due to Johnes risk.
- Scan cows at 40-100 days to pick up twins at PD and feed the cow accordingly to maximise calves reared.



Figure 3: Megan Fergusson talking about how to minimise calf losses

SHEEP HEALTH (Speaker: Megan Fergusson, SAC Vets)

DISEASE

- Purchasing sheep – what are you buying and what are you mixing them with at home? Minimise the risk of spreading disease throughout the flock, consider Toxoplasmosis and Enzootic Abortion (EAE).
- Maedi Visna (MV), OPA and Johnes are all infectious diseases with long incubation periods. MV is a wasting disease and it can be culled out. You can ultra-sound scan the lungs for OPA and use a scan and cull policy. For Johnes you can do a blood test or you can post-mortem a cast ewe to determine if Johnes is an issue.

- Sheep scab can be spread directly and indirectly (e.g. fences/livestock trailers). The clinical signs include scratching and wool loss. It can be treated by injection or plunge dipping. Sheep Scab is a Notifiable Disease so you can get a free skin scrape/wool check which is completely confidential. Some injections have a short persistency for scab so sheep must be put onto clean fields post-treatment.
- EAE and Toxoplasmosis = abortions. One-off vaccine 6 weeks pre-tupping to cover for Toxoplasmosis and EAE.

RICKETS IN HOGGS

Megan heard of a few reports of Rickets in hogs (big swollen joints at the knees). Rickets is caused by Vitamin D deficiency which is required for bone development. Vitamin D is absorbed through the skin or diet. This has been seen mostly in away-wintered hogs on lush dairy pasture. Absorption of vitamin D is limited by low sunshine hours (UV light) in the winter months, and sheep with dark skin and full fleeces are more vulnerable to this. To prevent this, the hogs can be treated with vitamin D before they go to the wintering and again after Christmas.

GRASS TRIAL

Results from the grass trial which was set up to compare the performance of seven different grass varieties are shown below:

sample	Dry Matter (g/kg)	Crude Protein (g/kg DM)	D value (%)	Metabolisable energy (MJ/kg DM)	Yield FW (t/ha)	Yield (t/ha DM)
A – Sinclair McGill Prosper	180.5	129.5	72.5	11.5	14	2.53
B – Sinclair McGill Turbo	185.5	151.5	73.5	11.7	18	3.34
C – Sinclair McGill Scotsward	173	131.5	70.55	11.1	23	3.98
D – Sinclair McGill Castlehill	155	137.5	71.6	11.3	21.5	3.33
E – Tarff Valley Dundonald Castle	179	123	72.5	11.5	25.5	4.56
F – Barenbrug SCT Protein	186	130	74.25	11.85	19.5	3.63

It must be stressed that this is not a scientific trial, only an on-farm trial where variables were eliminated as far as possible. The results show that there is not one clear winner. Some seed mixtures provide higher energy and protein whereas others may provide a higher yield.

OPPORTUNITIES/CHALLENGES

- Use new equipment for TST to reduce anthelmintic usage and the associated costs.
- Quarantine drench incoming stock and be aware of the risk of spreading disease (John plans to inject the purchased stock for Enzootic Abortion).
- Can use the grass trial results as a foundation for selecting grass seed mixtures in the future.



FACILITATOR CONTACT DETAILS

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