



ABOUT NORTH AYRSHIRE MONITOR FARM

Farm name Girtridge Farm, Drybridge Road, Dundonald, Kilmarnock, KA2 9BX

Meeting Number 15 – Grass seed mixture trials, cattle performance and rotational grazing

Meeting Date Wednesday 5th June 2019, at Girtridge

Next Meeting TBC

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: 344 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.

<u>The Management Group</u> is chaired by Craig Bryson and includes John Howie, Hazel Muir, William MacTier, Andrew Welsh, Beth Errington, Gordon Walker, Louise Walker, Iain Reid, James Morrison, John Cowan, John Hunter, John Paterson, James Smith, Matt Mitchell, Philip Close, Robert Munro, Willie Campbell and David Young

KEY MESSAGES

- Cattle turnover and feeder's margins increased by selling them earlier at a slightly lighter weight instead of letting them get too fat.
- Monitoring ewe body condition score and tailoring the ration appropriately ensures ewes are provided with the correct nutrition for their needs throughout the year. This can reduce problems at lambing, increase fertility and reduce feed costs.
- Keeping good records using the death register over lambing allowed major problems to be identified which will help to prevent this in future.
- Adopting rotational grazing systems increases grass utilisation allowing more stock to be carried.

AREAS OF DISCUSSION

- Comparison of cattle performance 2017-2019, carcass grades, DLWG and feed costs.
- Sheep update Scanning and lambing percentages, death register and lamb growth rates.
- Grass trial dry matter contents and estimated yields (t/ha).
- Barley update spring barley and winter barley.
- Sheep and cattle on rotational grazing system.









FARMERS UPDATE

- Since the last meeting on 27/02/19 John has been busy with spring work and getting on top of problems.
- Changes have been made to the sheds to improve ventilation. Strips of ventilated sheeting have been cut out of the sidewall of the cubicle shed, increasing airflow into the shed, while the closed ridge of the roof has been replaced with an open ridge, providing a good outlet for heat-loaded air.
- Selling cattle to Stoddarts, Highland Meats & Lanark.
 - Cattle turned out on 30/03/19 & 09/04/19 more to be turned out soon.
 - Foot-bathing to prevent lameness in sheds.
 - Bought in 101 at mart and 47 privately (148 in total). Still needs 40 more.

Barley

- Winter barley up to date 56 kg N/acre, 69 kg N/acre. Including 2 applications of 6:22:22.
- Spring Barley needs spraying and a top dressing.

Sheep

- Dog worrying has been a problem.
- Issues with sheep couping since 07/03/19.
- Twins all lambed outside.
- Enzootic abortion tests show 12 ewes to have been infected.
- Ewes given booster of Heptavac P Plus 4 weeks before lambing.
- 2 workers hired at lambing this was a big help and worth the expense.

Silage

- ightharpoonup 1st cut in on 24/05/19 22.47 m²/ha slurry applied.
- 2nd cut 90 kg N/ha of 21:3:13 + Sulphur has been applied.

FACTS & FIGURES DISCUSSED

CATTLE UPDATE

- Average live-weights of cattle sold in 2019 are much lighter at 603 kg compared to 630 kg in 2017. Selling
 at a lower fat class has been key to improving efficiency of the cattle system with cattle being sold as
 soon as they are heavy enough and have good conformation. This results in less money and time wasted
 just to gain excess fat.
- Higher growth rates at 0.87 kg/day have been achieved in 2019 compared to 0.69 kg/day in 2018 and 0.73 kg/day in 2017.
- The feeding period has reduced from 317 days in 2018 to just 266 days in 2019. Selling the cattle slightly lighter allowed a greater turnover of cattle throughout the year.
- Feeder's margins/head/day has improved in 2019 to £1.49, from £1.37 in 2017 and £1.31 in 2018.
- Overall carcass grades have improved in 2019 with more cattle at U grades and less at O grades compared to 2017 and 2018.











| | 2017 | 2018 | 2019 |
|--|----------------|----------------|----------------|
| Average DLWG | 0.73 kg/day | 0.69 kg/day | 0.87 kg/day |
| Feeding period | 289 days | 317 days | 266 days |
| Feeders margin (sale price – purchase price/ | £1.37/head/day | £1.31/head/day | £1.49/head/day |
| days on farm) | | | |

SHEEP UPDATE - LAMBING 2019

- A total of 344 ewes and gimmers were scanned at 183% (184% in 2018).
- The barren rate was 2.3% in 2019 which was down from 4.3% in 2018.
- The percentage of lambs reared was 148% in 2019 down from 155% in 2018.
- Higher losses were experienced in 2019 due to lambing outdoors for the first time plus abortion issues.

| | Flock performance 2018 | Flock performance 2019 |
|-------------------|------------------------------|------------------------------|
| Scanning Rate (%) | 184 | 183 |
| Barren Rate (%) | 4.3 | 2.3 |
| Lambs Reared (%) | 154.8 | 148 |



- From scanning, 119 lambs were lost, of which 95 were recorded in the death register over lambing. This
 record helped to identify the main causes of death which will aid management decisions on how to
 prevent them in future years. The death register showed that the highest number of lambs were lost to
 abortions, prolapses and suffocation in the water bag.
- Substantial numbers of lamb losses and abortions are likely due to the high numbers of bought-in gimmers within the flock this year.
- 14 ewes aborted (possibly more) several cases of enzootic and possible toxoplasmosis.
- The number of prolapsed ewes was a big problem this year ewes were too fit which was the main cause
 of the problem, so feeding had to be cut back only 2.5 t of concentrates were used this year.

GRASS TRIAL

Results from the grass trial which was set up to compare the performance of seven different grass seed mixture are shown below: Each mixture is designed for a different purpose (grazing/silage or dual purpose and includes varying proportions of perennial ryegrasses with different heading dates and ploidy.









| Plot | Dry Matter Average (g/kg) | Predicted Average Yield (t/ha) |
|---|------------------------------|-----------------------------------|
| Sinclair McGill Prosper (pipeline area) | 195 | 14.5 |
| Sinclair McGill Prosper | 186 | 14 |
| Sinclair McGill Turbo | 180.5 | 18 |
| Sinclair McGill Scotsward | 185.5 | 23 |
| Sinclair McGill Castlehill | 173 | 21.5 |
| Tarff Valley Dundonald Castle | 155 | 25.5 |
| Barenbrug SCT Protein | 179 | 19.5 |



BARLEY UPDATE- (Guest speaker - Richard Bray, Agrovista) Spring Barley:

- Dung was spread before ploughing.
- Looking well so far. Laureate variety planted at 216 kg/ha.
- 370 kg/ha of 16:16:16 has already been applied. Due another 50 kg N/ha.
- Tramlines were not used as contractor uses a GPS sprayer.

Winter Barley:

- Ideally should be sown by 20th September- won't perform as well on a wet seedbed if planted later on.
- Winter barley has had 137.5 kg N/ha over season.
- Two fungicide applications in the spring.
- Crop had a growth regulator applied later than ideal greater risk of lodging.
- Aiming to harvest at the end of July and reseed with grass.
- Estimated yield of 7.5-8.5 t/ha (3-3.5 t/acre).

GRAZING - Sheep & Cattle

Sheep

- 320 ewes grazed over a 12.14 ha block (30 acres) which equates to 26 ewes/ha or 3.12 LU/ha. Plan is to increase numbers to 500 ewes in the coming years.
- The block is grazed rotationally; split into 6 paddocks with a 3-day shift and 18-day rotation.
- Surplus grass in one paddock has got away. It was suggested to skip this paddock and to defer it for later grazing, however, the community group thought it was best to cut it.
- There is also the option of using the silage aftermath which is nearby as a buffer in case grass becomes short in the paddocks.













• Ideally sheep are entering paddocks at 7-8 cm and grazing down to 5 cm. Leaving 5 cm residual grass after grazing allows faster re-growth.

Cattle

- 70 cattle (420-470 kg liveweight) grazed over 20 ha (50 acres) on a rotational system.
- Area is split into 9 paddocks with a 3-day shift and 27-day rotation.
- The sward entry height will be around 12-14 cm which will be around 2800 kg DM/ha. The cows are then allowed to grass down to 1,500 kg DM/ha (about 6-7 cm) giving them an allowance of 1,300 kg DM/ha.

OPPORTUNITIES/CHALLENGES

- Sell cattle as soon as ready this reduces time on farm and increases feeder's margin.
- Improve next year's lambing percentage by preventing problems identified with the death register.
- Increased grass utilisation will allow increased stock numbers, extra silage or hay production for own use or for sale.

FACILITATOR CONTACT DETAILS

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