

ABOUT THIS MONITOR FARM

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| Farm name | Girtridge Farm, Drybridge Road, Dundonald, Kilmarnock, KA2 9BX |
| Meeting Number | 18 (Final Open Meeting) - 58 people in attendance |
| Meeting Date | Friday 28 th February 2020, at Girtridge |
| Report date | Friday 6 th March 2020 |

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 Aberfield rams. All lambs are sold finished either direct to slaughter through Farmstock or through the live market. All replacement females have been purchased privately, although John plans to breed his own replacements from now on.

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

- Since starting the Monitor Farm Programme, John has taken on and implemented many suggestions from the community group.
- Weigh regularly and monitor performance – this will help aid management decisions.
- Paddock grazing has enabled an increased stocking density and an uplift in production at Girtridge.
- The future involves EID in cattle – use it to your benefit.

AREAS OF DISCUSSION

- Grassland management including rotational grazing.
- Changes to the sheep enterprise - sheep performance, sheep breed changes and increasing ewe numbers to 500.
- Changes to the finishing cattle enterprise - cattle performance, housing alterations, cattle handling, EID performance recording and cattle nutrition.
- Key Performance Indicators and Girtridge's carbon footprint.
- Future options for Girtridge.

FARMERS UPDATE

- Before the Monitor Farm, John felt like he was at a crossroads, as well as the farm.
- The Monitor Farm Programme began on 1st February 2017 with the first open meeting.
- Topics covered at meetings are all being driven by the community, business and management groups.
- Topics covered at previous meetings include:

- Cattle and sheep handling systems, anthelmintics, and finishing system.
- Grassland and soils with specialist speakers Michael Blanche, Bill Crooks and Poppy Frater.
- Marketing options (LW vs DW) – John has started selling some sheep DW and cattle LW to make a comparison.
- Looking at land options including drainage, woodland, lime and fertiliser options and the cost vs benefit of these options.
- Performance recording using EID technology and Targeted Selective Treatment (TST).
- BREXIT and its potential impacts.
- Succession.



- A lot of data has been recorded and used for FarmBench (benchmarking) – the business group are keen to keep this benchmarking group going.
- Records also include lamb deaths register, weights and growth rates – this helped to identify toxoplasmosis in the flock which are now vaccinated for this.
- Collaboration – Neighbours sharing machinery and working together at peak times.
- Collaborating with other Monitor Farms and community group members, i.e. buying stock.
- Sold cows to focus more on finishing enterprise and increased sheep numbers.
- Looked into lots of options suggested by community group and tried most things including rotational grazing, increasing ventilation in sheds, lime applications, and purchasing new handling systems, as well as increasing stock numbers.

FACTS & FIGURES DISCUSSED

GIRTRIDGE SHEEP ENTERPRISE CHANGES

Year 1:

- 140 ewes – Mules & Texel crosses (21% of the flock are gimmers).
- 4 tups – Suffolks and Texel crosses.
- Tup to Ewe Ratio was 1:35.
- 196% scanning percentage.
- 158% lambs reared percentage (at the end of May).



Year 3:

- 344 ewes – Mules, Lleyn crosses, Aberfield crosses and Romney crosses.
- 5 tups – 4 Abermax and 1 Texel cross.
- Tup to Ewe Ratio was 1:69.
- 183% scanning percentage.
- 148% lambs reared (at weaning).



John has changed sheep breeds to include more Innovis genetics. The current flock consists of Mules, Lleyn crosses, Aberfield crosses and Texel crosses. Abermax tups (terminal sire) are used to produce prime lambs. Two Aberfield tups were purchased for November 2019 tugging, with the aim of John breeding his own replacements. John has increased ewe numbers again to just over 500 ewes.

GRASSLAND MANAGEMENT & ROTATIONAL GRAZING

Sheep Year 1 (2017)

- 120 ewes & lambs (1.72 LU/ha).
- 12 ha (30 acres) split into 10 paddocks of 1.2 ha (3 acres).
- Rotated on 3 day shifts.
- 70 lambs sold finished straight off the ewe.
- Remaining lambs weaned 1st August at 143 days old.
- No fertiliser applied.
- 2.5 t of lime per hectare.
- Had to top to control the grass.

| Cost of setting up rotation | |
|-----------------------------|---------------|
| Electric fence & energiser | £1,429 |
| Water pipes | £ 150 |
| Total | £1,579 |
| | £130/ha |

The table above shows the cost of setting up the paddocks for the rotational grazing system for the sheep; the cost split over 5 years comes to £316/year. This equates to 3 p/ewe/day. Implementing the system allowed a 39% uplift in production.

Sheep Year 3 (2019)

- 320 ewes & lambs (3.75 LU/ha).
- 12 ha (30 acres) split into 6 paddocks of 2 ha (5 acres).
- 2 day shifts.
- Surplus of grass gave John the option to skip a paddock and use for hay or deferred grazing – John chose to graze anyway.
- Lambs were gaining 377 g/day at 8 weeks.
- LU increase of 46% from year 1.
- 500 ewes to go onto rotation after lambing 2020 and more land to be added.

Cattle Year 1 (2017)

- 70 cattle at around 600 kg totalling 46 LU.
- 12.95 ha split into 8 paddocks of 1.62 ha (4 acres).
- 2 more paddocks added after silage.
- 10 paddock rotation on 3 day shifts from May-September.
- Peak growth of cattle was 1.2 kg/hd/day.
- 50 finished off grass with no concentrate.
- Fertiliser application halved to 154 kg/ha (1.25 cwt/acre) of 25:5:5.

The cost of setting up the cattle rotational grazing system was £532 for the energiser and electric fencing, which works out as £33/ha or 10 p/hd/day. The rotational grazing came to a 30% uplift in production on that area.

Cattle Year 3 (2019)

- 70 head grazed on 20 ha (50 acres).
- Split in to 9 paddocks.
- 2 day shifts.
- Total of 45.5 LU (2.3 LU/ha).

FINISHING CATTLE

The finishing cattle were not performing as well as was hoped, so John and the community group explored the possible reasons behind this and what could be done to help improve performance. It was found that there was inadequate ventilation in both sheds and insufficient water access in the straw-bedded shed. Also, cattle were preferentially feeding, particularly in the cubicle shed where the stocking density was higher.



- **Ventilation Straw Court** - The inlet has been increased by removing a layer of blocks along the top of the wall in the straw courts, costing £1,500. The outlet has been increased by removing every second ridge cap (cost was £80 to hire the cherry picker).
- **Ventilation Cubicle Shed** – The inlet has been increased by stripping sheets (with 2 inch gaps). The outlet has been increased on the end 3 x 20 ft bays by removing ridge caps – this seems to have solved the issue at the end of the shed. John is reluctant to remove more ridge caps in this shed as the rainwater will fall on the cubicle beds, and the open side of the shed should provide adequate ventilation.
- **Water Access** – 4 nose bowls were replaced with 4 troughs in straw-bedded shed which will help improve water intakes, resulting in higher feed intakes (approximately up to 60 litres/day is required for each growing or finishing animal).
- **Handling Area** – New system cost £23,981 (which over 15 years equates to £1,599/year). Advantages include labour hours saved, improved operator and livestock safety and allows better performance recording.
- **Weighing and Recording Equipment** – Te Pari weigh-calls, weigh-head, auto-drench gun and a UHF tag reader were purchased to allow improved performance recording. The equipment eliminates human error and the auto-drench gun gives the cattle accurate doses and allows TST with wormers, reducing the chance of resistance developing. This equipment helps John make management decisions including when cattle should go.
- **Rations** – Stocking density in cubicle shed was reduced and molasses was added to bind the ration to prevent cattle sorting the feed. John has recently installed a tower for storing molasses and has re-introduced it to the ration.

Rations 2019-2020

Cattle nutrition has played an important role in improving cattle performance.

| | Proposed Growers Ration autumn 2019 (475 kg doing 1.4 kg DLWG) | Proposed Finishers Ration autumn 2019 (600 kg doing 1.5 DLWG) | Current Ration fed to all cattle as TMR (1.3-1.4 kg DLWG) |
|----------|---|---|--|
| Silage | 15 kg | 15 kg | 20 kg (average) |
| Barley | 6.5-7 kg | 9 kg | 7 kg |
| Molasses | 0.5 kg | 0.5 kg | 0.5-1 kg |
| Soya | 0.5 kg | 0.5 kg | 0.5 kg |
| Straw | 0.5 kg | 0.5 kg | 0.5 kg |
| Min/Vit | 0.1 kg | 0.1 kg | 0.1 kg |
| | £1.38/hd/day £0.99/kg gain | £1.70/hd/day £1.10/kg gain | £1.52/hd/day £1.00/kg gain for growers £1.20/kg gain for finishers |

Changes to Cattle Performance:

| | Year 1 (2017) | Year 3 (2019) |
|----------------------|---------------|---------------|
| Average DLWG | 0.73 kg | 0.87 kg |
| Average days on farm | 289 | 266 |
| Liveweight at sale | 630 kg | 603 kg |
| Feeders margin | £1.37/hd/day | £1.49/hd/day |

DLWG, number of days on-farm and the feeder’s margin have all improved. John is also selling his cattle lighter which is what the market wants. These figures have improved further over the winter of 2019-2020 since some of the changes mentioned earlier in the report were implemented.

EID TAGGING (Guest Speaker: David Kerr, ScotEID)

- EID tagging will become compulsory summer 2021 in new-born calves.
- It is likely that from 2023 all cattle moving off the holding must be EID tagged.
- Scottish cattle keepers will record births, deaths and business to business moves on ScotEID from mid-2020.
- EID will help keep accurate movement records giving traceability.



OPPORTUNITIES/CHALLENGES

- There is opportunity to improve ewe production now that abortion issues have been addressed.
- There is opportunity to increase cattle DLWGs at grass further.
- There is opportunity to explore dairy heifer rearing on a larger scale.
- A challenge is market prices, particularly for the beef enterprise.
- Another challenge facing John is keeping up the performance recording now that the Monitor Farm Programme has come to an end.



FACILITATOR CONTACT DETAILS

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APPENDIX 1 – ACROSTIC POEM

The chair of the Management Group, Hazel Muir, closed the meeting with an acrostic poem:

M Motivation

O Openness

N New ideas

I Innovation

T Technology

O Our future

R Red meat

F Future generations

A Agriculture

R Review

M Making improvements

APPENDIX 2 – FEEDBACK RESPONSES

What have you enjoyed most about the Monitor Farm Programme?

- The diversity of meetings
- Interacting with others
- Getting time away from my own farm
- Hearing about different ideas
- Meeting people
- Meeting new people and widening my network
- The farm visits and seeing other systems
- The catering. Food was brilliant
- Collaboration between farmers and wider industry
- Learning how to improve profitability without significant capital expenditure
- Benchmarking
- Meeting likeminded people
- New ideas to improve performance and profitability
- Meeting new people
- Interacting with others and meeting people (farmers and agricultural contacts)
- Efficiency gains
- Benchmarking
- New friendships
- Being in the benchmarking group
- New ideas to improve my business
- Sharing information

What changes have you made or implemented on your own farm as a result of the Monitor Farm Programme?

- Implemented a health plan for fluke and worms
- I now question everything I do!
- Improved the cattle handling system
- Paddock grazing
- Improved my grazing systems and grassland management
- Sharing data with others
- Monitoring livestock performance (LWG's)
- EID – performance recording
- Strive for efficiency gains in all enterprises
- Regular soil and silage analysis
- Improving DLWG's
- Rotational grazing
- Look at innovation and how it can help me improve my business
- Enterprise changes to improve profitability

- Undertake enterprise costings
- Grazing management improvements –paddocks
- Benchmarking
- Ventilation improvements
- Improvisation where possible
- Selling direct to a finisher
- Started creep feeding of calves to get heavier weaning weights