

## ABOUT NORTH AYRSHIRE MONITOR FARM

Farm name **Girtridge Farm, Drybridge Road, Dundonald, Kilmarnock, KA2 9BX**  
Meeting Number **14 Open Meeting – sheep breeding, cattle handling soils and grassland**  
Meeting Date **Wednesday 27<sup>th</sup> February 2019, at Girtridge**

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.

**The Management Group** is chaired by Hazel Muir and includes John Howie, 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

- 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 management decisions.
- Always dig test pits to check for compaction and location before carrying out work.
- 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 and soil health – pH, P & K status, compaction and rotational grazing.
- Cattle Handling and EID.
- Sheep performance and Innovis sheep breeds.
- Housing alterations and cattle performance.

## FARMERS UPDATE

- Before the Monitor Farm project, John felt like he was at a crossroads and the farm was too.
- The Monitor Farm Programme began 1<sup>st</sup> 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 systems.
- Grassland and soils with speakers Michael Blanche, Bill Crooks and Poppy Frater.
- Marketing options (LW vs DW) – John is making a comparison
- Looking at land options including drainage, woodland, lime and fertiliser options and their cost vs benefit.
- Succession.
- A lot of data has been recorded and used for FarmBench (benchmarking). Records also include lamb deaths register, weights and growth rates – this helped to identify toxoplasmosis in the flock and 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 eg buying stock.
- Sold cows to focus more on beef finishing enterprise and increased the 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 and increasing stock numbers.



## FACTS & FIGURES DISCUSSED

### CATTLE HANDLING & EID (Guest Speaker: David Kerr, ScotEID)

- Old handling system at Girtridge was not fit for purpose and not safe.
- The new system was designed by the community group including other works around the steading it cost £23,981 (including concrete). Over 15 years it costs £1,599/year (although it will last much longer).
- Labour savings of 1 hour per handling equating to £1,200/yr; plus improved operator and livestock safety; and reduced stress on livestock. This system also allows better performance recording including monitoring weights and DLWGs resulting in overall increased efficiency.
- A practical demonstration showed how EID tags were read by a UHF reader. Although the UHF reader has a higher read rate, a handheld LF reader may be practical for John to read EID tags on cattle and sheep.
- EID tagging calves may become compulsory from 01/01/20 and 2 years later older cattle must have an EID tag before they leave the holding.
- UHF is a more future-proof reader but only reads cattle EID tags.
- UHF read range is 5mm to 8 metres and it has lots of memory.
- Currently market staff are visually reading the tags numbers from cattle tags, checking this against the passports and then putting this on the online system – time consuming and with potential for error.
- EID can be used as a management tool for recording: births, deaths, monitoring and recording weights, and medicines administered. EID can save costs for example can identify underperforming cattle and reduce feed costs and an automatic dosing gun can be used alongside EID. There are different farm management software packages available.
- EID will help keep accurate movement records giving traceability.

## 2018 GIRTRIDGE SHEEP BREED COMPARISON (Guest Speaker: Stuart Annand, Innovis)

- The Mule and Texel cross ewes at Girtridge are too big averaging 86kg and therefore the kg of lamb sold per kg of ewe mated was lower than the desired ratio of a least 1:1. Whereas the Aberfield and Mule gimmers at 60-70kg achieved 0.98-1.16kg of lamb sold per kg of ewe mated with the Mule gimmers performing the best.
- The Mule gimmers also had the highest scanning percentage at 191% and the lambs off the Mule gimmers were finished and sold quicker than the Aberfield gimmer's and the ewe's lambs. All of the gimmers were mated to Abermax tups.
- The Texel cross lambs off the ewes performed the worst with the slowest growth rate of 343g/day and therefore were slowest to finish and be sold off the farm.

## GRASSLAND & SOIL

- Equipment demonstration at previous meeting to alleviate compacted soil – pasture lifter was the tool of choice to break up cow pan 8-10cm deep.
- The pasture lifted test area measured 500kg DM/ha extra feed than the control area which equates to 3 tonnes FW/ha more grass – this resulted in a financial net benefit of £36/ha.
- The grass seed trial plots were also discussed with 6 out of the 7 plots establishment looking similar. One plot has struggled to establish.
- 2019 plan for grass trial field is to graze sheep then take a cut of silage. Grass growth will be measured to compare plots and tissue analysis for quality of each plot pre-harvest will be conducted as well as yield measured.
- Rotational grazing of cattle and sheep for the past 2 years has proved a success with increased stocking density and an uplift in production.

## HOUSING ALTERATIONS AND CATTLE PERFORMANCE

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 and 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 is yet to be increased and John plans to remove the ridge panels.
- **Ventilation Cubicle Shed** – The inlet has been increased by stripping sheets (with 2 inch gaps) on 3 bays costing £675. John is planning on stripping the rest of the sheets on that side of the shed. The outlet is yet to be increased and John plans to replace the existing closed ridge with a fixed open ridge.



- **Water Access** – Four 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).
- **Rations** – Stocking density in cubicle shed was reduced and molasses was added to bind the ration to prevent cattle sorting the feed. Rations were also tweaked to the following:

Feed	475kg 1.3kg/day	600kg 1.5kg/day	SHO X HIGH 1kg/day?
Pit silage (50/50 1 <sup>st</sup> and 2 <sup>nd</sup> cut) (£15/t)	12kg	12kg	Ad lib
Propcorned bruised barley (£188/t)	6kg	8.5kg	4kg
Hi pro soya meal (£360/t)	0.5kg	0.5kg	0.5kg
Stockmol 20 (£172/t)	0.5kg	0.5kg	0.5kg
Intensive mineral (£371/t)	0.1kg	0.1kg	0.1kg
Cost per day	£1.61	£2.08	£1.27
Cost per kg gain	£1.20	£1.40	£1.27

## Cattle Performance

- 2017/18 year average: 0.8kg/day
- 2018 at grass: 0.5kg/ha
- 2018/19 in the shed: 1.04kg/ha (John believes DLWGs have improved since ventilation, water and ration changes have been made).

## OPPORTUNITIES/CHALLENGES

- Finish similar cattle (weights, breeds, types and gender) and change management system to push cattle harder.
- Target different groups (e.g. only graze lighter cattle and keep heavier cattle inside to finish quicker).
- Suggestions for John included: weigh cattle more regularly (every 4-6 weeks); analyse his top-performing herd marks; reduce the number of different rations being fed; focus on types when buying cattle for consistency and beware of bargains.
- Opportunity to alleviate compacted soil as grass growth benefit outweighed the cost of the pasture lifting



### FACILITATOR CONTACT DETAILS

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