



CLONHIE MONITOR FARM 18th and Final Meeting Report

Meeting Date – 27th Feb 2020

Report Date - Mar 2020

ABOUT CLONHIE

<u>Clonhie</u> is a tenanted farm on Buccleuch Estates run by Andrew and Aileen Marchant, new entrants to farming in 2012. Neighbouring Glengar was added to the farm business in 2016 taking the farmed area to 303ha (750ac), from 100m to 300m above sea level near Penpont in Nithsdale.

Sheep - numbers are up to 1000 lambing ewes all lambing outside in April. Moving over to Aberfield and Highlander cross ewes and using Abertex, and Beltex cross terminal sires.

<u>Cattle</u> – Herd of Luing cattle is now up to 31 in calf cows & heifers. Summer grazing heifers are also taken on and dairy heifers are wintered in the sheds on a B&B basis as well.

<u>Red Deer</u> – A herd of breeding hinds is being established in collaboration with Buccleuch Estates. 175 hinds went to the stags in 2019 and the Marchants have plans to grow numbers to 250 - 350

<u>Management Group</u> is chaired by local farmer Colin Forsyth, Bennan, and includes Nithsdale Vet Alistair Padkin, David Wilson, Marwhirn; Robert Osborne, Castlehill; John Wildman, Glenkiln; Alisdair Davidson, Poldean; Colin Cuthbertson, Thripland and Andrew Best of Watsons Seeds



Attendees at the last Nithsdale Monitor Farm meeting with Andrew, Aileen Anna and William Marchant

KEY MESSAGES

- 315t of lime has been spread on 65ha raising the average pH of treated fields from 5.6 to 5.9
- calculated an average increase in grass growth/Ha from xxt/DMha in 2017 to yytDM/ha in 2019













- Improved grass swards through reseeding, stitching in of grass mixtures with clover and through rotational grazing management, which has also increased utilisation of the grass grown
- Have increased stocking density on the farm by ~ 30% through establishing the red deer herd
- Have reduced the total amount of concentrate feeds purchased for cattle and sheep
- Improved sheep health and welfare through vaccination for lameness and addressing Fluke trichlabendazole resistance learned a sobering lesson on the effects fluke has on health & fertility
- Introduction of NZ genetics [Aberfield and Highlander tups for breeding flock replacements] is having a very positive effect on flock performance off grass, ability to reproduce without much labour requirement as ewes lamb themselves, lambs get up and suckle quickly and ewes have plenty of colostrum and milk meaning lambs thrive from day 1. Will improve further as flock settles
- Carbon Footprint per kilo of lamb produced has dropped 25%. From ~ 12% above the AgreCalc average in 2017 to ~ 12% below the AgreCalc average in 2019. When production targets are met and we're not applying such large amounts of lime this should reduce still further
- Continued Variable and Fixed Cost control is proving central to profitability.
- Much has been achieved but there is still plenty of potential to be exploited and we trust that Andrew
 and Aileen will continue to drive on. We all look forward to re-visiting Clonhie in a few years' time
 to review further growth and development of their farm business

AREAS OF DISCUSSION



Aileen & Andrew Marchant, Rhidian Jones, Colin Forsyth and Judith Hutchison

Colin Forsyth, Management Group chair, welcomed 50 community group members to the final meeting at Durisdeer Village Hall. In the morning Andrew, Aileen, Rhidian, Judith and Emily Grant did a quick resume of the changes, trials and topics we have covered over the past 3 years – please see the meeting handout and PowerPoint presentations, which detail all of this information.





















Emily Grant

Colin thanking the Marchants

Justin McCarthy

Kate Rowell

OPPORTUNITIES / CHALLENGES

After lunch Justin McCarthy, Editor at the Farmers' Journal talked about what he sees as the main challenges and opportunities for our Scottish Livestock Industry over the next 5 years. He did an excellent job of outlining the clear and present dangers we face in the light of BREXIT / politics and environmental and climate change issues. He both challenged our thinking and encouraged us to exploit some great opportunities that he believes our industry can benefit from. His main points included:-

Challenges

- An increase of 1.5tDM/ha grass grown should lead to an increase of ~ £175/ha in profits/ha
- If the price of our produce goes up [as many seem to be campaigning for] the price of our inputs will also increase and you, as producers are likely to only be left with a small % of that increase
- It is preferable to drive internal resources and their potential for increased production
- Farming with soils pH, phosphate and potassium not at target levels is equivalent to buying a big fancy tractor and driving, the whole time, with the hand brake on !!!
- Only ~15% of Irish farm soils are at optimal levels for pH, P & K [suspect Scotland is similar] So what
 is the potential for increased efficiency and production?
- Environmental Sustainability is producing more using less inputs to increase efficiency, productivity and profitability.
- Putting nitrogen on the day you are running short of grass is too late and a waste of time and money
 it needs to have been applied 3+ weeks earlier
- Focus properly on what is going to maximise profit and you need to be flexible in order to get there
- Debt focusses the mind on profitability, removes barriers and replaces them with new thinking
- Know and understand your market. It changes. Move with it and follow the value
- How do we value carcases? does it encourage the right breeding choices? can it be improved?
- GO out and challenge yourself, taking yourself outside your familiar comfort zone is a good thing. Ask
 Am I doing enough to maximise profit?













- Am I producing the right produce for what the market wants now and in the future?
- Population currently spend ~ 9.8% of disposable income on food and around half of that on holidays!
 They demand food value for their money. We have to accept this and work with it
- We have allowed Vegans' narrative to surface and gain traction need to ensure correct messages get to the majority. Now also beginning to see more scientists backing our understanding/side
- 70% increase in world demand for food with reducing resources to produce it
 - Where is the increase in population going to happen? Africa / SE Asia?
 - What's this going to do to economies and markets?
 - Need to provide food and water in these regions to prevent mass migration
- IPCC recommends land be moved from food production to bio-energy production challenge or opportunity?
- There are going to be massive changes in World Markets
 - E.g. supply & demand effect of Corona Virus on international trade
 - UK producers' trading position depending on the outcome of BREXIT and other international trade agreements
 - Currently impossible to tell what the future might be

Opportunities

- 70% increase in world demand for food with reducing resources to produce it
- UK and Ireland have a good climate for livestock production we should be exploiting this and raising the profile of our systems and their benefits and plenty of opportunity/potential to increase production – SUSTAINABLE INTENSIFICATION
- Science doesn't change, but our understanding of it does
 - We can exploit scientific understanding of the biogenic carbon cycle, CO2 sequestration and environmental benefits of what we do and how we do it.
 - Removing ruminants will lead to reductions in soil carbon this message isn't yet being heard clearly enough
 - We need to put our positive messages out more clearly and more effectively
 - We need to show we are doing our bit even admit the negatives and damage been done in the past BUT that we are very much part of the solution.
 - It's complicated and we need to ensure those that need to know [stakeholders and policy decision makers] understand that one size solutions do not fit all circumstances
- It's important for us and decision makers [UK, EU and across the world] to understand that livestock farming, although it has been part of the problem, is also a very big part of the solution. We are the only industry that can harness nature to both sequester enormous amounts of Carbon into the world's soils and at the same time improve / re-establish ecology, habitats and world environment
- 25% of world's surface area is land mass [the rest is water and ice
 - Less than 25% of that is agricultural land [~6% of the total world surface]
 - ~30% of agric land is arable [~ 2% of world surface or 7.5% of the land mass]
 - 70% of agric land is Marginal i.e. untillable [~4% of world surface or 17% of land mass]
- Researchers now communicating lots of new research findings and information:
 - E.g. in relation to human digestible protein cattle are actually more efficient than pigs or poultry
 - Cattle produce more human digestible protein than they eat
 - Pigs require 2kg of human digestible protein to produce 1kg of human digestible protein
 - Poultry require ?kg human digestible protein to produce 1kg of human digestible protein













- New technologies will also play an important role :-
 - Genetics high genetic index emit up to 25% less CO2e per unit of production
 - Feed additives there will be a way of reducing CH4 methane emissions from ruminants. Red seaweed looks like a possibility for the present.
 - Improved soils management techniques
- World meat protein markets are changing massively
 - Exports are both an opportunity and a challenge. Can be difficult to manage and maintain markets in fluctuating supply and demand
 - Expect a global shift in beef and lamb prices as there's a fundamental shift in demand for protein including the effects of swine fever in China.
 - But everything depends on the immediate implications of the BREXIT and international trade agreements reached by the Westminster Government...... Will they open up the jewel in the crown and give access to UK food market as UK already imports so much Tarrifs / WTO . . . ?

LOOKING FORWARD

Kate Rowell, chair of QMS, rounded off the afternoon by talking a bit about her experiences as a Monitor Farm host, how the project has driven changes on their family farm and how it has given her the opportunity to go on and do other new and interesting things. She did the Scottish Government Rural Leadership course and highly recommended it to all. She encouraged the Marchants to take time to recover and reflect on all that they have been involved in over the last 3 years. So much goes on in that short time it is difficult to take it all in. When it all calms down don't forget to continue to drive the improvements you have already implemented, as already discussed today there is plenty more for us all to do.

THANKS

Thank you to all involved in the Nithsdale Monitor Farm project.

- Andrew and Aileen, who have fully committed to this invasion of their lives with such energy, openness and fun. We admire how you have embraced the concept, implemented the changes and welcomed the regular intrusions at Clonhie. You really have done a brilliant job, achieved an unbelievable amount [in 3 short years] and we are sure that you will both continue to drive the business and all aspects of life.
- The Management Group, who have done a sterling job coming up with topics and issues to cover, ideas for different meetings and speakers and who have helped in numerous ways to support the whole project and all its different aspects. Working with you has been fun and we hope you all have a real sense of achievement.
- The whole Community Group. Your attendance, input, questions and participation in discussions at meetings has increased markedly over the 3 years. But the most important thing is that having been and seen what others are doing you go home and make some of these changes in your own farm businesses and we do believe that this has been happening....
- The EU, Scottish Government & QMS funders and the QMS Team who managed the project & contributed in so many ways

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