



SAYFC AGRI & RURAL AFFAIRS

ROAD TRIP 2019: WEST of ENGLAND & WALES

‘The Road to Success’

19th July to 23rd July 2019



INTRODUCTION

The 2019 SAYFC Agri Affairs study tour took the form of a road-trip through the West of England and Wales. From handsfree farming to coffee milk, from performance recorded ewes to 2000 cows all seven of our visits fitted with the our theme “the road to success”

The following reports provide a brief summary of the interesting, inspiring and cutting edge businesses we were very grateful to have been allowed to visit.



L to R – Andrew McGregor (Carluke YFC), Thomas Renwick (Ettrick & Lauderdale JAC), Bruce Keillor (Forfar JAC), Scott Lindsay (Carluke YFC), Murray Stephen (Turriff & District JAC), Hamish Logan (East Lothian JAC), Lucy McClymont (Lower Nithsdale YFC), Alan Bankier (Carluke YFC) and Samantha Haining (Thornhill YFC)

THE GROUP

All members of the group are involved in agriculture, some directly farming, whilst others are in careers supporting those at grass root level. All are members of the Scottish Association of Young Farmers, and represent a wide geographical spread of Scotland

Name		Club
Andrew	McGregor	Carluke YFC / Agri Affairs Chairman
Alan	Bankier	Carluke YFC
Samantha	Haining	Thornhill YFC
Bruce	Keillor	Forfar JAC
Scott	Lindsay	Carluke YFC
Hamish	Logan	East Lothian JAC
Lucy	McClymont	Lower Nithsdale YFC
Thomas	Renwick	Ettrick & Lauderdale JAC
Murray	Stephen	Turriff & District JAC

Day 1: Coffee Milk Production

Friday 19th July 2019

Writer – Hamish Logan

After meeting the bus at Stirling and other pick up points on route our first visit on the road trip was visiting the Lune Valley and going to **Brades Farm** owned by the Towers Family. We were shown around the farm by Ed one of the sons running the family business along with his father, mother and brother. The family farm has a strong history as Ed will be the third generation on the farm. Farming in the Lune Valley has got its challenges due to the high flooding rate that happens on a yearly basis.



Brades Farm milks 480 cows producing high end milk for barista coffee shops which is high in protein and fat to make the perfect coffee. To do this in the herd there is a mixture of jersey and Holstein fresien cows and this helps get the balance with the correct protein and fat levels for barista milk. Barista milk needs to be high in protein and fat so it can hold its froth and also to allow coffee shops to do coffee art with it. This was a very entrepreneurial idea and a great way of targeting another market place for the product. Out of the total production from the herd about 80% is sold as barista milk and the remaining 20% is sold on a contract price. One of the biggest challenges for producing this product is the distribution to the customer because of the short shelf life and the requirement of refrigeration. On average there is

about 2-3 lorries that take the barista milk to London a week.

On the farm there are 5 full time employees with the additional 2 part time staff when required. All staff were from the local area and Ed was passionate about keeping this to help benefit the local community. All the cows are bedded on sand which helps improve the welfare of the animals, whilst also keeping them clean, however this does come with challenges due to the sand blocking up passage ways and drains.

Ed was very passionate about climate change and looking to reduce carbon emissions. One way that this has been trialled is by using a concentrate that contains a garlic additive which gives the cows 10g/day of the garlic additive which has proven to reduce methane emissions by approximately 30%. This is a great initiative in helping climate change and Ed thinks moving forward farmers won't just be supplying food for consumption but also will be capturing carbon and helping to reduce the global carbon emissions.

Overall it was a great visit to start the road trip off and we are very thankful for the Towers Family taking time out their day to show us round.



Day 2: Harper Adams & Cherrington Farms

Saturday 20th July 2019

Writers – Lucy McClymont & Murray Stephen



On Saturday morning the group visited **Harper Adams University** where we were greeted by Kit Franklin who is a senior lecturer in Agriculture Engineering. From the beginning the group were amazed by the facilities on campus. Kit explained his background and interests where he has spent 11 years at Harper. He specialises in Hands Free Hectare and Ag automation. The university has invested in its engineering department where they believe they are the leaders in agricultural technology. They also invest in their students and ensure they are industry ready when they graduate.

Key Points

- Continuing investment in research and development
- Researching drones spraying fields where they have observed the success of this in China. Currently spraying from drones is illegal in this country however Kit believes it will be something that will be used in the future. The idea came from China where there are up to 5,000 drones spraying daily where one 15L can cover 1 hectare. The price of a drone is around £8,000!
- Traffic and tillage trial where they are investigating field traffic management. This has been running since 2011 and it allows research to be carried out on soil conditions, crop development and yield.
- Technology on site where the 3D printer allows plastic prototypes to be checked before an investment is made in parts etc.
- The students follow a programme of learning how to build a remote control car to drive itself then eventually learning to make a tractor drive on its own.
- Probably the most interesting part of the morning where Kit explained the Hands Free Hectare project. This project started in 2017 where Kit and his team decided to study automated machines growing the first arable crop remotely, without operators in the driving seats or agronomists on the ground. The tractor used in the trial is controlled by GPS where there are cameras, sensors and lasers which can detect obstacles. This type of tractor was certainly something none of us had seen before! Kit firmly believes that robotic machines in agriculture is the future and something that we all must look at. The tractor with all the equipment on board costs around £35,000.
- Following on from this Kit explained they are now beginning to trial a hands free farm with 35 hectares beginning this year which is again demonstrating their research into the industry. This again will be something that we would all love to witness!

Final Point

The whole group were fascinated by Kit's talk and tour he gave us where we all learnt something new! He had one simple message which we all must adopt and that was none of us should be standing still, we should be embracing technology in our careers.



(Lucy McClymont)

Day 2 Cont: Cherrington Farms

Afternoon of day 2 saw the group visit **Cherrington Farm**, a 400 acre mixed farming enterprise comprising of arable, a suckler herd of 300 Stabiliser cattle on a rotational grazing system, a wood chip business and have recently just started rearing insects for the protein market. And off farm is a family run butcher shop.

The group was met with Nick Crowe, the 25 year old son of the farm owner who now acts as farm manager. He explained that the wood chip business began 4 years ago to supply various grades of dry wood chips to the biomass boiler market as well as an alternative bedding option for the poultry industry. Although in its early days the insect farm uses the residual heat from the burners to rear the insects to supply a cheap source of protein for fisheries, although they're looking to expand this business further and start supply feed companies.

The group then had a tour of the farm seeing the various mobs of their Stabiliser herd. The cattle are kept outdoors all year round, even calving outdoor, as they adopted a New Zealand style grazing system and a 100% grass fed diet. Admittedly he said that the calves take longer to finish, however the pence per kilo was far greater and with no feeding costs means they make a greater profit at the end of the day. Herd health was also of paramount importance to them operating a strict culling policy for any difficult animals. Cattle are moved to a fresh paddock every 2-3 days to not only provide a fresh bite for them, but also to get them used humans and being moved. A small flock of 80 Zwartbles is also run on the farm to a similar system.

The group were thoroughly impressed with not only the enterprise, but also with Nick's enthusiasm and willingness to try new ideas. The group were very interested to learn that alongside 2 neighboring farms run a small cooperative type system of implement and work sharing to benefit all concerned.

(Murray Stephen)



Day 3: Sheep Production & Mixed Farming

Sunday 21st July 2019

Writer – Samantha Haining

On the Sunday morning of our study tour we visited **John and Sarah Yeomans** at their farm Llywn Y Brain in Newtown, Powys. John is best known for his Farmers Weekly sheep farmer of the year award in 2018. John was also successful in winning a Nuffield Innovation scholarship in 2015 where he travelled countries like Holland, China, New Zealand and Ireland to focus on new ways of grading sheep carcasses. John's success was evident as he showed us a PowerPoint presentation before giving us a tour around his 285 acre farm.

John was originally from Birmingham where his dad was a butcher but his father decided to move to Wales in 1973 where they purchased the 68 acre farm. John studied at Aberystwyth before returning to the farm in 1984 where there were 23 cows of which 12 were barren and the farm also had 200 ewes lambing at 90% but only eventually selling 40 lambs that year. Over the 35 years John has steadily improved productivity and output to now farm 520 performance recorded Beulah ewes and 75 performance recorded suckler cows which include pedigree Limousin's as well crossing them to an easy calving British Blue.



The Beulah speckled face sheep are native to Wales and John uses them for their hardiness on the hills and strong mothering abilities. The family retain ewe lambs as well as selling surplus ewe lambs at Welshpool. Fat lambs are sold direct to Dunbia. An extra income for the farm also includes selling boxed beef and lamb.

One of John's main focusses is on the health of his livestock with the strong belief that

prevention is better than cure. This is evident with how closely he works with his vet and by following a vaccination plan for his stock.

John is also helping to tackle wormer resistance in sheep by not worming 10-20% of his ewes. This is based on body condition score of the ewe and if she is fit and healthy then she does not require dosing which in turn reduces his worming costs as well. John also takes faecal egg counts every three weeks to monitor worming resistance.

John and Sarah have also taken a forward thinking approach to improving their hill ground by sowing plantain and red clover. While driving up through the land and looking over the magnificent views it was clear to see how much the fields have been improved. These pastured are all managed using rotational grazing systems as well with the cattle looking tremendous on the hill side.

Day 3 Continued: Sheep Production & Mixed Farming

In the presentation John also touched on employment in the local community and agriculture by saying how he deals with around 60 firms in one year which in turn helps to sustain 2200 jobs through these businesses which is vital for rural employment.

In conclusion this was a brilliant visit with excellent hospitality where it was clear to see John and his family's drive to improve the resilience and productivity of the business along with helping to drive the industry forward by using best environmental practices and using sustainable farming methods.

Our second visit of the day was to **Tom Jones'** 500 hectare farm in Dolanog, Welshpool. Pentre Farm is a mixed hill farm comprising of 3000 ewes and 40 suckler cows. This is in contrast to when Tom came home 6 years ago where his father and him farmed 500 ewes and 70 cows. Tom decided to change the then high input system into an extensive low input system where his flock consists of predominantly 3/4 bred Cheviots put to a Romney tup. Tom also has a flock of 75 pedigree Texel ewes where he sells around 10-12 breeding tups a year, however, some of the tups are kept for his own use as well. Tom previously did a lot of contract shepherding and shearing but does not do a lot of this now and instead focussing on his farm at home.



The land at Pentre Farm ranges from 300 - 600m above sea level with the average rainfall exceeding 2000ml per year so Tom chose the Romney to suit his extensive system best. Lambing begins in March but he lambs most ewes in May to suit grass growth. Although £ per ewe is lower with a smaller breed of sheep the farm now has a bigger margin with the change to low inputs. Tom is also on a 5 year stewardship programme which has allowed him to put 3 miles worth of fencing on his land, however, this comes at a compromise with no spraying allowed on his land.

Another income for Tom is contract rearing cock pheasant chicks. Tom rears over 40,000 birds per year for 75p per bird. They arrive on his farm at 1 day old and stay for around 8-9 weeks where he feeds them and looks after them. Tom has 26 coups in the field which each hold around 1400 birds. They have access to a netted run from 3 weeks of age.

In conclusion, we all thoroughly enjoyed this visit with the highlight seeing how Tom has diversified into pheasant rearing which was unique and interesting for us to see.



Day 4: The Royal Welsh Show

Monday 22nd July 2019

Writer – Thomas Renwick

We all woke up bright and early on Monday at the young person's village. Some managing to get a hot shower before they turned cold! Tents were dissembled before boarding the shuttle bus to the Royal Welsh Show ground.



Firstly we headed to the Charolais Cattle Society stand for a fry up breakfast to set us up for the day while watching the cattle judging outside. From there we headed up around the cattle and sheep sheds, spotting few Scottish exhibitors along the way. Then along the way John Yeoman spotted us (sheep farmer we visited the previous day) & invited us into a dairy stand for free milkshakes. After that we headed through the food and craft halls trying out some Welsh produce along the way.

We then visited the Welsh Young Farmers stand, seeing what they've been up to throughout the year, there handicraft boards and spotted Michael Gove. On route to the machinery stands we then spotted Prince Charles & Camilla (from behind the security).



Next we headed back to the main ring where we briefly stopped to watch a horse class. From there we then found a nice quiet food and refreshment area with country music playing, where we spent the rest of our Monday afternoon relaxing in the heat.

Overall it was a very enjoyable day with a great variety on show.

Day 5: Grosvenor Farms

Tuesday 23rd July 2019

Writer – Alan Bankier

This Morning the group finally woke up to some glorious sunshine and headed to **Grosvenor Farms Ltd** where we had unknowingly to us saved the best tour till last.

On arrival to this impeccably presented Farm we met with Charles Steer the Arable Manager who gave us an overview of the farms Large scale Dairy and Tillage enterprises. In total the farm extends to around 5800 acres and now milks 2480 Holstein cows 3 times daily through a 60point rotary parlour. We were in time to witness this in operation and saw a team of 5 milk 340cows/hr with ease producing a total of just over 80,000 ltrs of milk a day.

Day 5 Continued: Grosvenor Farms

This sort of efficiency only became possible when the farm moved all the cows to one farm back in 2014 completing a £5million investment secured through the many board of directors from the Wearsheaf Group who invest in Agri Businesses all over the world and have worked closely with the Duke of Westminster for years who owns the Eaton estate that Grosvenor Farms are tenants of.

The farm milk is lifted by Muller with a proportion sold to Tesco and the majority sold on a standard non-aligned price of about 26.8ppl. The Dairy is completely self sufficient on energy consumption with a 300kw solar panel system installed on the roof of the sheds, a huge focus is put on being sustainable at Grosvenor where they separate the sand from their bedded cubicals then again separate the



liquid slurry, using solids as manure and liquid can then be hauled or pumped to various lagoons around the estate ready to be spread as fertiliser on any of the crops they grow which includes Barley, Wheat, OSR, Grass and Maize, this recycling operation as enabled them to reduce purchased artificial fertilisers by 40% and haven't purchased any P&K for 6 years.

The attention to detail and high standard of work was plain to see from the start to finish of our tour it got continually impressive as we were moved to each of the 3 sites visited. The calf and young stock facility was an example of the highest possible care available to the dairy industry as we know it. Weather stations operated curtain sided sheds where calves were reared in groups of 20 on automatic feeding for 8 weeks before being moved in groups to various other sheds along the rearing process where rations were altered accordingly to the differing stages of growth.



Next stop was the maternity and cow unit which was particularly impressive to see the strict protocols in place as they have to manage around 60 calvings a month, soon as calf's are born they are weighted, navel iodine dipped, 30ltrs of reviva given to the cow and colostrum administered, which is usually 4ltrs. All bulls are sold at about 14 days old to market but this is a rare occasion now as the farm uses sexed semen across the herd and only stop after a 2nd or 3rd service before using conventional semen and any Johnes cows are Angus bred.

The theme of self sufficiency continued when Charles showed us his arable operations as he manages all the forage clamps and grain stores. The farm grows all its own feed for the cows and still manages to sell around 2000 tons of wheat a year and about a 1000tons of OSR. Chester gets about 27 inches of rain a year and the farm is predominately Clay Loam and has some sandy ground which is usually reserved for the maize. No written report will do this farming enterprise justice i would personally recommend visiting and seeing for yourself the fantastic work being carried out by the team at Grosvenor Farms.

After a fantastic week touring the west coast of England and Wales the group certainly enjoyed their introduction to these areas and to the farms and farming systems we visited. Thanks must go to everyone who made this trip possible and to all the farms and businesses who hosted visits from the group, each one made this a very memorable and worthwhile trip, leaving the Young Farmers who attended with many ideas to take home with them.

(Below is a map of the area we covered during our 5 day study tour)

Route Covered During the Tour

