



Agriculture & Horticulture
DEVELOPMENT BOARD



Fife Monitor Farm



Third Meeting Report

28th May 2014

Date of Next Meeting: 17th July 2014

Facilitators: Stephen Young 07502 339 613
Greg Dawson 07766 421 130

Introduction

Newly elected Chairman David Aglen welcomed around 40 community group members to the third meeting At Demperston. David was keen to point out the three year project belonged to the group and in order for all members to get the most out of it they should feel free to feed ideas to the management group and facilitators.

Danny then gave a summary on the work undertaken at Demperston since the previous meeting in February.

- Precision Soil sampling was undertaken on two fields destined for Spring Barley by Soil Essentials
- Spring Beans were sown by the 17th March but there was then a two week delay before sowing resumed with spring barley. All a sowing was completed by the 17th of April.
- Nitrogen applications had been completed on all crops but the weather conditions had created challenges in finding windows for both spreading and spraying.
- Some S Barley sold forward at £162 in hindsight more should have been sold!
- “Scrap Heap Challenge” nearly completed with around 7 days having been spent on the “new” drier.
- Cottage for Alison & Danny to move into had begun to be renovated although this had stopped over calving/spring work.
- Bulls were fertility tested, resulting in the Charolais and Limousin bulls being culled.
- Calving finished with the usual issues but no major problems

David then introduced Peter Chapman who, for the past three years, has chaired the HGCA Monitor Farm at Savock Farm, Aberdeenshire.

Peter outlined some of the more successful topics covered by the group, including Crop establishment, compost trials, precision farming as well as innovations such as automating a tray drier system.

Peter has thoroughly enjoyed his experience with the monitor farm and felt that his business has improved as a result of that. In addition to this Peter is a passionate about the value of Arable Business Groups (Benchmarking).

Top Tip: “if you really want to know what makes the good guys good, join the ABG, it really will improve your business”. Peter Chapman

From experience the difference between the most and least profitable members of the group comes down to yield and in particular marketing with up to £50/t difference between well and poorly managed crops.

Peter finished by urging the group to make the most of the opportunity provided by the Monitor Farm and get involved as much as possible.

Agronomy Update

The Group split into two and were led on a crop walk by Greg and Agrii agronomist Neil Drummond. The crop walk provided the opportunity to consider crop management to date as well as planned applications.

Current Issues

- Differences noted in the rate of crop development in the Winter Wheat variety strips. The hybrid wheat was notably more advanced than the adjoining strips of Viscount, Invicta and Leeds.
- The T2 (flag leaf) spray was still to be applied to the Winter Wheat but was planned as soon as conditions allowed. The high seasonal disease pressure and crop development dictate that this is a priority.
- T1 fungicide had just been applied to the spring barley. A herbicide was also included, however, Danny reported that control had been good where a pre-emergence herbicide had been used.
- Winter Oat management was up to date with a further fungicide spray planned at panicle emergence. The herbicide strategy for autumn 2014 was being reviewed following a disappointing result from the pre-emergence residual herbicide under very dry soil conditions in 2013.
- Spring Beans were well established but some way off the planned fungicide input at early flowering. The crop stimulated considerable debate about their place in the rotation. This was centred on the groups perceptions of potential agronomic benefit, financial return and risk compared to other available break crops.
- Peak flowering was starting to come to an end on the Winter Oilseed Rape and the planned crop protection programme had been completed. The subject of appropriate seed rates and optimum plant spacing were also raised. Neil Drummond pointed out the depth of branching and pod set achieved in the canopy where plants had adequate space to develop.
- Seed rates have been based on sowing weight rather than seeds per square metre. This potentially affects the ability to tailor plant population to sowing date/ground conditions and manage spending on seed when variation in thousand grain weight occurs.
- Weather conditions have been challenging but workload pressure has also resulted in some difficulties in using the available windows to maintain the target timings for the planned spray programmes. An example is the adaptation to the Wheat herbicide strategy after the planned autumn residual spray was not applied.



OSR Seed rate effects branching & pod set

Market Update

Keith Headridge Commercial Director from Scotgrain (the farm trading and procurement division of Baird Malt), gave the group a short talk on the current grain markets. An overview is given below.

- Following USDA report on 9th May markets corrected sharply lower due to lack of fresh bullish news and this encouraged aggressive Fund liquidation
- Rain in Australia, the US Plains, and mainland Europe eased drought fears and improved crop forecasts
- E.U weather patterns suggest a hot & dry spell may be a threat to Russia, Ukraine and East Germany, something to keep a watchful eye on.
- Generally crop growth is in line with the norm with the exception of Germany where they are around 10 days ahead of the norm.
- Market volatility continues and timing of sales is crucial, looking at 2013 harvest we saw a variation in malting barley prices (same quality) of £145 - £225 (spot market vs pre harvest futures related) and milling oats £115 - £220 (spot market vs futures related)
- Currently Nov 14 wheat futures around £143, recent high point £162 (Mid-March) now trading around where we were late Dec 13.
- Scottish Executive Dec survey figures were: wheat 102,000 Ha's (vs 83,000 last yr.), OSR 36,000 Ha's, Barley 56,000 Ha's, Oats 8,000 Ha's and our estimate is the Scottish spring barley area will be around 285,000 Ha's this year (vs 296,000 last yr.)
- Political issues in the Ukraine seem to be "improving" (as far as grain values are concerned)
- More feed barley & oats were consumed on farm this year which has eased what was possibly going to be difficult end to the marketing campaign.
- E.U. osr crop forecast around 21.5mt, Brazilian soybean forecast at record 86mt with the large Canadian canola crop slow to move
- Closer to home our crops look well (and substantially better than last year which did stifle new crop sales), this year crop potential looks good hence prices trading lower recently.
- Going forward to harvest weather will play a crucial part (as normal), Fund activity along with the £ /€ exchange rate which is around 1.2310 (81.2p) currently, late 2013 1.1988 (83.4p) which has a significant effect on values.
- Some Feed compounders and Distillers are using maize and looks like they will continue to do so, enhanced energy values, improved PSY (predicted spirit yield) and processing efficiency are the benefits to them.
- Current market values for new crop (depending on area) Wheat £140, Feed Barley £125, OSR £260, with the wheat value capped by imported values.

Grain Handling

Danny outlined the issues he has with his current grain handling system. The wet grain being tipped in the general purpose shed necessitating double handling with the forklift (to the drier then into the main grain store for long term storage). This involves significant additional labour at harvest (currently provided by Danny's father). Danny has a fairly open mind and was keen to hear the thoughts and ideas of the group for how he could improve this with minimal capital investment.

Groups were led by the management team and fed back their ideas for improving on the current situation.

Suggestion	Pros	Cons
Add Bin Storage Inside existing shed for lower volume crops	Good use of space, ease of segregation. Increases capacity	Would be expensive and a more complicated system.
Portable Grain Walling	Segregate crops to increase storage capacity, can be varied in bay size for different crops.	Can be difficult to move around and potentially insecure. Estimate of £300/2500mm freestanding unit.
Extend Shed out into yard	Increases capacity, keeps all storage together, gets drier under a roof	Greater cost and takes space away from yard. Est cost £15k for all work.
Addition of a wet bay/pit	Cuts out need to dump into Gen purpose shed.	May not have enough capacity if drier isn't keeping up. Cost similar to above.
Drier moved to unload directly into store	Will cut down on need move by trailer from shed to shed. Can unload auger be moved to different heaps?	Will still need to be moved by forklift inside shed. Can create more dust/mess in an enclosed shed.
Move awkward crops early, only store wheat in the shed	Frees up space in shed, no need for crop segregation inside the shed.	May not be marketed at best time
Use concrete pad to tip wet grain outside.	Saves on cost of a roof, allows one person to run the drier if dumped next to it	Will be some (minimal) moisture which gets into crop. Est cost of £36/m ² laid

Following a discussion with Danny, the recommendation is to extend the shed to incorporate the drier, allowing easy offloading into the store and cut down on handling. A wet "pad" to be considered next to the drier which would allow one driver to handle the grain from the field into the store. The group will be updated on this at the next meeting.

Lacesston

The group made the short journey along the road to Gateside to have their first look at Lacesston where potato grower John Weir is based. An outline of Johns farming system can be found in the report from meeting 1.

John gave an update on work done since the last meeting.

- Approximately 1,700 tonnes Saxon, Maris Piper, Orchestra and Excalibur remained in cold store.
- Some Excalibur had recently been sold on contract at £110/t with price now £100/t. Significant additional movement on all varieties is currently proving challenging.
- Planting began on 18th April initially in good conditions but weather delays meant it wasn't completed until the 17th May
- The pre-emergence herbicide has been applied to the earlier planted material.



John went on to outline his wind turbine and how this has contributed to the energy efficiency of the long term cold stores. He is currently looking at software which can make better use of the variable supply from the wind turbine. The system is designed to 'over cool' one or both stores within set parameters when there is the opportunity to use excess power. It was argued by several members of the group that the amount John was being paid (3.2p/kw) for power returned to the grid could be improved greatly. Although it was accepted that the greatest benefit to the business came from the power used on farm there is still the possibility of increasing income.

Precision farming is something which is widely used at Lacesston with GPS used for ridging as well as soil mapping for pH, P&K. These inputs of lime and P&K fertiliser are applied at differential rates to address the variation observed. Having done this for many years (now the third round of soil sampling) the pH profile is still not flat it is however getting closer. Nitrogen is still applied flat rate.

The group were then led in a discussion on the key issues which were effecting potato growers with particular focus on Lacesston. The following were discussed and will form the basis for further meetings and discussions.

- Nematode and disease mapping to target rotation planning and potentially inputs.
- Yield mapping to evaluate management decisions such as seed rates and variable inputs.
- Availability of clean land to rent and the pro-active approaches that need to be evaluated to promote potato rents to landlords. Examples included direct break crop comparisons, two year rentals, land swaps and equipment investment to minimise impact on land.
- Energy use in long term cold storage and the effects on crop margin from measures to improve efficiency.

Management Group

The management group has been established. It is their role to represent the community group and to drive the project. Members of the community group are encouraged to contact both the management group and the facilitators if they have any suggestions or ideas for the project.

Contact details are listed below.

Danny & Alison Milne	Demperson	07809 747044/07764 747418
David Aglen (Chairman)	Balbirnie	07730 529055
Andrew Aitken	Percival	07714 046070
John Evans	Raemore	07709 761555
Donald Hay	Agrii (farm agronomist)	
Sandy Storrar	Rossie	07917 431051
John Weir	Lacesston	07718 872050
Richard Wilson	Forthar	07740 823818

Benchmarking

The benchmarking group are meeting on the 17th June for training on the software. Please contact Stephen (07502 339613, Stephen.young@saos.coop) if you would like to be part of this group.

Next Meeting will be Wednesday 17th July 2014
