



Aberdeenshire Arable Monitor Farm

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May 2014 Meeting Report

**[Agronomy Programmes](#)
[Future Farm Policy](#)**

Date of next meeting: Open Evening 15th July 2014

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The Aberdeenshire Arable Monitor Farm Programme is an HGCA project supported by the Scottish Government SRDP Skills Development Scheme.

Meeting Programme:

- Andrews update
- Growing Crop Inspection – Ian Dalley & Iain Learmonth
- Market Outlook Update – Charlie Birnie
- Fly and a news
- Future Farm Policy & Plan

1. Welcome

Chairman, Peter Chapman, welcomed everyone to the meeting. The project is now in its final phase and one of the main legacies is to leave Andrew with a clear farm policy including systems & rotation for the next 5-years. There were 30 farmers and others from the Community Group present.

2. Andrew's Update – what has happened since the last meeting

Andrew's Comments:

- Crops looking as well as ever been – even poor areas, endrigns look good
- Noel (new man) moves into cottage, his partner will come across from Ireland
- Cut ground for new grain store, hope to have completed by August. Will be two x 500t on-floor drying stores. RPD are building the shed and Kenny Addison, Grintek, will develop the control systems.
- Drying system will be based on a 500KW biomass boiler from Colin Elrick. Aim is to be eligible for RHI.
- The store will include a weighbridge, the final cost is still unknown but approx. £350k, looking at a 8-years pay-back.
- Wheat sales currently average £160/t but nothing else sold. Set trigger price at £150/t
- Took more ground at Bridge of Don, 16ha suitable for spring Oats
- Set trigger price of 83p per € for next year's SFP

3. Growing Crop Inspection – Ian Dalley and Iain Learmonth

A feature of the project has been the regular inspection of a range of Andrew's crops led by the usual two agronomists, Ian Dalley (farm's agronomist) and Iain Learmonth (an independent agronomist). The aim was to discuss Andrew's agronomy programme, gather views, share experiences and highlight any potential problems. Unfortunately, as soon as the group went out to inspect the crops the heavens opened up with heavy rain making meaningful discussion very difficult!

Overview

Winter crops have never looked better, in stark contrast to the previous year. Never seen crops so strong, new experience. Established early in autumn, good backend growth, no frosts, no snow, no pigeons, etc.

Been a shortage of agrochemicals due to a combination of factors. Manufacturing capacity is limited. Good growth conditions in south mean producers feel its worthwhile spending on the crop, hence high agrochem use.

Jim, I'm on holiday just now so I will sort out invoices when I get back. Threshold for seed weevil is no more than 1 but this level was not reached this season. Comment on canopy vs Moddus was Alan's opinion only!

Sp Barley

- Only growing 2 varieties, Waggon and Odyssey.
- Inspected a field of Odyssey. Seed rate 230kg/ha, target 400 plants /m², TGW 52g farm saved. Big seed.
- Previous crop Winter barley
- Not combine drilled with fert although Group believe best if possible
- At GS 1 tiller. Bad with field cleavers
- Was sprayed with pre-emergence weedkiller (tawny), especially to catch meadow grass. Worked well here, but variable results across country.
- Surprisingly Mn and Copper deficient. Had both applied now.
- Leave till 3 tillers then bit of Proline fungicide in the mix to give early protection.
- N at 125kg/ha

W Barley

- Field – Clayhole. Worst field, but crop looks great!
- Variety Retriever, one of the last sown fields at 16th September
- Whole field was subsoiled pre-sowing as nice dry soil cracking conditions. Top half was also done with Sumo + discs before one-pass drill.
- Stopped growing WB hybrids as haven't done well on this farm
- Brown rust remnants in the crop – just get along the coast here. Was bad in March, got Siltra with growth reg. Still wee bit of mildew in the base of the crop.
- GS – awns out
- T3 spray?
- Retriever always susceptible to spray scorch
- A lot of potential but depends on the summer
- Had plenty of growth reg as it looks so lush. One member who sprays 10,000acs/season thought that Canopy is working lot better than Moddus – apply more Canopy earlier and not Cerone later. Feel worth separating out PGR and fungicide spray passes as timing of growth reg is important.
- Glacier is looking better than Retriever at this stage
- Lot of rhynchosporium & ramularia. Ryncho favoured by the moist mild growthy conditions.

Wheat

- Growing two varieties Viscount and Horatio
- Very similar varieties although Horatio fast growing, 7 days earlier
- Differences in opinion of the varieties – Alan had both varieties last yr, both looked very good, but Viscount yielded much better.
- Lots of septoria in bottom leaves despite having full spray programme
- Had T0 and T1 last week. GS Leaf 3 out
- Been a difficult spraying season
- Top dressing, had 201Kg N/ha – delayed N application as a lot of residual N. Some growers have actually cut their N rates
- Next park has lot of Groundsel, big prob due to years of using Stomp which was poor on Groundsel control

OSR

- Variety Compass
- Had PGR (Compass is a tall variety) and early mid-flower spray a week ago (first of 2 spray programme, lots of side branches, will flower long time)
- Conditions been too cold for sclerotinia – now getting warmer, develops if night temp above 7 C.
- Top dress 185 Kg N/ha – have cut back a little
- Pollen beetle (shiny black) not a problem once flowering starts – may even assist pollination? Seed weevil (mealy grey, long snout) now the issue, critical level is 1 per plant
- Had 3 different cultivations across the field. No difference visible? Bit done with Sumo discs is sharper ground.

Sp Oats

- Variety VOK (used to grow Firth)
- 220kg/ha seed
- Looks good, easy to grow, good straw strength
- Next week will get herbicide (AllyMax plus Prompt plus 0.1 l of Torpedo)
- Key for oats is to keep them standing plus keep on top of mildew.

4. Market Update – Charlie Birnie, Commercial Manager, Grainco

A feature of the project has been the regular market update from the trade which has been a great success. Summary from Charlie's verbal presentation;

World Wheat

Stocks April (est) 187MT up 10MT on year

Production 889MT up 34MT on year

US wheat conditions deteriorating, rated 17% very poor, last year same date 19% very poor.

Area is very dry.

World Maize

Stocks April (est) 158MT up 24MT

Production 974MT up 107MT – huge increase

US planting 29% on 4 May, but ahead of last year, 5yr avg 42%, expected to be near 5yr avg by next Monday, however, have been known to plant 45% in 1wk!!

UK and Europe

Crops generally in better condition than last year. France 73% of crop good/excellent. Even in Ukraine spring plantings well on. June weather is key!

Nov 14 wheat futures

Were as low as £142 now around £158, been at £162. £142 was prior to Ukraine problems and dry weather in US wheat area. Fair to say there is +£10/t Ukraine premium and +£10/t Weather premium in the market at moment. Both situations need to be watched.

Wheat

Area in Scotland back to more normal, around 100,000ha, up 20,000ha on year.

June £173 ex farm

Nov £155 ex farm

Maize has replaced considerable tonnage of wheat this year and is still competitive against harvest 14 wheat. Estimated that 2 MT imported into UK to date. Invergordon almost certainly to stay on Maize.

Feed Barley

June £135 ex farm

Nov £135 ex farm

Market farm to farm at moment.

Malting Barley

Still old crop stock in store and on farm. Maltsters have bought over last couple of weeks but only to replace barley from harvest 14. Scottish area estimated at 270,000 to 275,000 ha, down around 20,000ha on year, but even if correct around 10,000ha above 2012. Was concern up to this week about dryness in Morayshire, could change again. What impact will 3 crop rule have? Contracts mixture of wheat futures/open priced. So if WW at £155, maybe £180 for malting?

Milling Oats

Still considerable stock in store. Winter oat area in England up, spring area in Scotland down. Nov price around £160

OSR

Area in Scotland remaining similar at around 35,000 to 36,000ha. UK crop estimated at around 2.4Mt (300k t above 2013)?

Soya prices ease back as South American material is readily available

Today's price around £300/t Harvest around £255 ex-farm?

General discussion

- Weather in US particularly important
- Volatility is continuing feature of the grain markets
- Been less forward sales due to the uncertainty and volatility (but opportunity!)
- CAP reform and Scottish Referendum adding to the uncertainty.

5. Future Farm Policy – group exercise

As we approach the end of the programme Andrew wants to consider firstly what has been learned and secondly how he can build on this in a strategy for his business into the future. Five sub-groups considered the following strategy headings. Points inevitably overlapped, but the feedback is presented pretty much as received. Key themes are pulled out at the end. These points will be considered by Andrew and the Management Group, and a more detailed strategy developed.

Group 1. Management of the business

– Facilitator Alan Grant

Prompts: Goals? What would improve Andrew's management of the whole business, what's been learned from the programme? Ongoing financial budget? Regular benchmarking? Crop software?

Feedback:

- Expansion is a goal. Why? Want a motivator, need economies of scale in arable production. Could be another farm enterprise if it was profitable.
- Need to employ a manager or management support. Even 1,000 acres is not enough to justify a farm manager. Andrew feels the Management support will be in The Store. This relates to what Andrew sees as his role in the farm (see Group 2 feedback).
- Short term goal is to set aside one day a week for management. Need regular time to do the numbers, analyse, look forward, plan. Perhaps even more critical in The Store.
- Aim to invite someone in to the management meeting – to share ideas/ mentor. Have found a financial controller/mentor to fulfill that role on a twice per month basis. Would help drive budgeting and analysis. This is also discussed in the Group 2 feedback below.
- Feel the programme has got to the root of the strengths and weaknesses of the business, and is setting out a strategy, but also feel there would be value in a Whole Farm Review approach. This basically means taking a fresh look at all the options which could be out there. This would be done within the Management Group to get everyone's experience and views.
- As is brought up repeatedly elsewhere, timeliness must be a key aspect of the future management of the business.
- Benchmarking is an absolute must.
- The move to Farmworks sheets and soil nutrient mapping has meant a great improvement in seed and fert use.

Group 2. Day to day operations

– Facilitator Peter Chapman

Prompts: Labour? Contractors? Machinery policy? Use of buildings and infrastructure? Andrew's day to day role?

Feedback:

- Andrew's role in day to day operations: The programme has given Andrew a renewed interest in the farm after years of concentrating on The Store. Through his increased

involvement attention to detail and hence results have improved – margin per acre has gone from bottom third of the arable business group to top third. He wants to maintain this virtuous circle of improvement. The farm has an important therapeutic/ thinking time impact, so if correctly balanced it can enhance performance of both bits of the business. This suggests that Andrew needs to bring in assistance to manage The Store, especially as his parents have taken a step back from the business. The recent appointment of a part-time financial adviser/ organizer/ mentor is a step in this direction. Also Ian Dalley has an important agronomy specialist and third party role, and this should continue.

- Increase to 1,000 acres in next 5 years (800 acres now). Some questioned if an acreage goal was wise, but on balance it was felt that economies of scale were real in arable farming, this was a modest increase, and of course it was an aspiration dependent on the opportunity being available.
- Labour decision: aim for one full time farm employee plus contractors to give flexibility in a difficult year. It's a challenge getting a good full time person, but Andrew has managed to secure a good replacement for the employee who left. Timeliness was highlighted as critical for this farm so reliance on contractors would be a risky option. The desire for a full time employee drives the ambition to increase to 1,000 farmed acres.
- Contractors: an essential safety valve. Feeling that the machinery ring is underestimated.
- Machinery policy: no change. Well tooled up at moment. Could cope with small expansion. Investment can respond to tax situation.
- Buildings: Addressed storage and drying issue with planned investment, and hence large part of marketing flexibility. Continue to use Aberdeen Grain for Oilseed Rape. Investment to expand shop/retail – need to be looking at next step in expansion?

Group 3. The Farming System

– Facilitator Ian Dalley

Prompts: What's the learning from the soil and crop work, nutrient mapping, precision techniques, rotation, compost/straw use, fert trials? What's happened to physical performance and why? Future policy/targets?

Feedback:

Crop Nutrition

- Whole farm GPS nutrient mapping has had a massive impact. pH is key.
- Been round whole farm once, some twice. Now will regularize the re-mapping to 1 yr in 4 or 5. Need to repeat as the variation is not removed in one correction – it's basically about soil types.
- Big savings in P and K through move to field by field nutrient budgets
- Putting fertiliser down the spout still splits the group! Especially valuable for spring crop, well proven.

Compost and Organic Matter

- The compost trial results will be long term, not evident yet. Do tests yr 5.
- Feeling that soil structure is improving after 4 years of compost application

- Feeling that little (4t/ac) and often is the best way to use it, plus use best quality = food grade, to maintain P and K.
- Straw chopping needs to be part of the annual rotation (OSR and WW), plus all endrigs

Urea/Nitrate Inputs

- Trials showed that the optimum level of N application was well above the NVZ limit
- Yield data field by field would provide evidence to justify the higher N input, as it is being utilized.
- Over a field, the trial evidence suggests that some parts would justify much higher levels of N because these parts produce very high yields, while poorer parts should get less. The overall field rate could still be below the NVZ max. This targeting is surely the way forward both for the good of the environment and the economics of cereal production.

Crop Protection

- Winter Oat volunteers in Winter Wheat has been a big issue. Winter Oats are now out of the rotation.
- Specific weed problems we have had to deal with; groundsel, meadow grass, fumitory and especially brome. Telephone poles and endrigs continue to harbour brome.
- Chemical choice being limited by legislation

Varieties

- Been through hybrids and decided not working well for this farm
- Winter oats taken out of the rotation on performance and volunteer grounds
- Stuck with limited range of successful varieties for winter wheat – Viscount

Rotation

- Now have one!
- Simplified without winter oats. OSR – WW – 2 x WB (but not late sown WB, so leave for bit of SB if caught out at end Sept. Bit of SB will help Brome problem)
- Minimal SB on this heavy land. On lighter soil out-farms continue with spring oats and SB.
- This rotation should help avoid clubroot and hence the need to rely on Cracker.

Cultivations

- Seedbeds better due to operator and more organic matter
- Management of endrigs is critical as these have been a major drag on overall yield in the past. Use of the Sumo trio on the endrigs to break deep compaction when soil is dry is the key. Even consider bringing in a contractor to do the endrig cultivations after main chunk of fields are sown. Also chop straw on endrigs.
- Min till OSR using Sumo will continue, great success; stronger plants and faster, slightly cheaper establishment. Opportunity to subsoil a lot of the land if get the correct dry soil cracking conditions.

Group 4. Post harvest grain management and Marketing – Facilitator Robert Drysdale

Prompts: Lessons of the last 3 years marketing, and future policy? How get the best out of mainly commodity grain products?

Feedback:

Started with poor quality multi-purpose bulk storage shed and mobile drier. Marketing was ad hoc to suit the facilities. Propcorned feed barley helped cope with lack of capacity, but had a limited market. OSR was moved quickly to Aberdeen Grain Coop.

Future: Budget and Forward Plan is Key to Marketing Policy. It's a "decision tree".

- Benchmarking has shown the sheer importance of the average market price received – the No 1 driver of margin differences within the group
- Know your cost of production per tonne – a starting point for setting target prices
- Know what tonnes you have to sell well in advance, reassess as crop grows
- Decide what need to sell at harvest simply due to space constraints
- Cope with volatility by setting yourself "trigger prices" for a proportion of your crop. Sell if hit those prices.
- Market over a longer period to spread risk
- Start before the crop is sown
- There's not a lot of opportunity to add value to feed barley and wheat in our area, so aim is to increase the average price received, hence need to market over a longer period
- Specifics for potential premium crops – rape in a pool, oats on milling contract.

Group 5. Innovation/ Motivation/ Keeping Ahead of the Game

– Facilitators Lewis McKerrow/Willie Willox

Prompts: How does Andrew continue developing, where do you get ideas, how do you embed continuous improvement?

Feedback:

- Don't want a vacuum at the end of the programme
- Want to share monitor farmer role over several farms in the group
- Do some trials on group farms e.g. extend compost trials? HGCA aim to get more on-farm trials. Now have a lot of technology on farms to measure results e.g. yield mapping, weigh bridges/cells etc.
- How do more on biomass as new drier/store built? Opportunity to focus on biomass.
- Help the group look at more renewable energy opportunities – link to potential new housing development?
- Need Motivation – family succession 10 year plan?? Set clear goals for next 3 to 5 years for yields/crop performance, financial position, machinery, lifestyle.
- Use the burgeoning social media – a link to the wider world, means of getting new ideas from everywhere!
- Develop The Store also as a meeting venue, help spin off knowledge to wider industry
- Keep up with technology – a strong motivator
- Definite programme succession aims: The ideal would be to continue the Arable Business Group, and hold 2 community group meetings per year, one at Andrew's, one on another member's farm.

KEY STRATEGY THEMES

Pulling all the above together, what in summary could be the key parts of Andrew's future strategy?

EXPANSIVE FARMING GOALS

Modest expansion to say 1,000 acres. Economies of scale are real for arable farming. This scale justifies the labour and management structure Andrew needs to deliver other parts of his strategy. It's also a motivator.

BACK TO BASICS WITH NEW TECHNOLOGY

Improve the heavy soils with a clear rotation, little and often compost, chopped straw (OSR, WW) as a routine part of the rotation and on all endrigs, min till OSR, strategic use of 3 leg Sumo when soils are dry, separate cultivation/sowing of endrigs.

Get the best out of every square metre with ongoing soil nutrient and yield mapping, and precisely targeted lime, P, K and N. Field by field nutrient budgets. Feed to yield potential.

A MANAGEMENT AND THINKING TIME PLAN

Key learning point has been the importance of management time to measure, analyse, compare, think, plan. Employing management/ financial/ mentoring support to assist management of both The Store and the farm, freeing Andrew to have an operational role on the farm. That involvement is important for The Store image, to satisfy Andrew's interest and to provide thinking time. Will set aside a day a week for management.

TIMELY OPERATIONS

On this farm the timeliness of operations, especially sowing, drives profitability. The operational strategy is therefore driven by this need. Structure: one good full time employee, Andrew at the peaks, Ian Dalley on crop management and inputs, a full in-house machinery compliment, speedy min till where appropriate and contractor back-up.

MARKET CONTROL

The aim is to control the marketing decisions and not be forced into harvest selling of commodity grains. Hence the investment in a 1,000t floor drying store serviced by a biomass drier operating at low net cost after RHIs. Prior knowledge is key; cost of production per tonne, likely tonnes to sell, market trends. Spread marketing over a longer period to improve the average price. Use trigger prices to drive your decisions.

PLAN TO BE MOTIVATED

How? Expansion goal, set targets for KPIs, benchmarking, scouring new ideas from around the world, social media interaction, trials, start succession planning early, don't have vacuum after end of MF programme. Ideally would like to continue the Arable Business Group and 2 community group meetings per year – one at Savock, one at another members farm.

6. Other Business

Date of next meeting – Tues 15th July, 3pm, 2014. This will be an Open Meeting to showcase the project, provide an insight to the topics covered, main learning and the project's impact on Savoch.