

Northampton Monitor Farm meeting report

Summer meeting and farm walk

2 July 2019

Speakers: Martin Grantley-Smith (AHDB, Strategy Director Cereals & Oilseeds); Sean Rickard (Agricultural Economist)

Newton Lodge Farm

For more information, visit: cereals.ahdb.org.uk/northampton



Meeting summary

- Key drivers for the industry going forward include loss of subsidy and public concerns
- Integrated pest management is now very important due to policy changes rather than science
- Brexit is a distraction – “We have our focus wrong”
- UK agriculture needs to become more competitive, more sustainable and to raise its standards
- There are many opportunities but our costs are too high and we can't lower these so need to increase the value of the final product
- We need to become more focused on exports and produce what importing nations want
- The key to increasing production efficiency is sustainable intensification which is underpinned by technological advancement and vertical partnerships
- Some countries are making this work well, e.g. Holland

Monitor Farm update

Rick Davies, Monitor Farm host

Wheat (all milling)

- N for protein applied last week of May – 40-50 kg/ha except on lighter land where it was too dry and was dying off (with significant yield loss)
- T3 completed 6th June – Teb & Amistar Opti
- Employed rogueing gang for 9 days - 232 Ha (all the wheat apart from 18 ha which is bad and due to go into spring wheat)
- Average cost of rogueing £42/ha
- Spread £13/ha - £85/ha in worst cases
- Money well spent if you want to grow 2nd and 3rd wheats
- Finally had some rain (June 86 mm, May 35mm, April 8.5 mm); year to date 243 mm
- Crops picked up; light land has struggled
- Wheat has potential on better land but below average overall

Other

- Oilseed rape (remaining 6 ha) is poor due to frost and pollen beetle
- Spring beans looking very well; had two bruchid beetle sprays
- Spring barley is filling well

Marketing

- Wheat
 - 2018: 100% sold; average £177.36 including premiums
 - 2019: 40 % sold at 8.75 t/ha; average £164 including premiums
 - 2020: 10% sold at £156 feed base
- Beans: 75% sold at £204 feed base
- Barley: 50% sold at £127 feed base
- Overall pleased with price

Disease

- T0 was missed out on Zyatt due to this variety's high disease rating
- This was a mistake – resulted in significant yellow rust and septoria
- Had to adjust at T1 by increasing rates **Cancelled out cost saving at T0**
- Drill trials update (covered in [May meeting report](#))
- Barley – Claydon vs. JD 750A
 - Claydon gives wider rows and more light can get to the ground
 - Barley drilled with JD 750A seems to have more blind sites – could this be because it is drier?



Head counts

	Drill	Heads/m ²	Grains/ear	Thousand grain weight (kg)	t/ha
Wheat	Claydon	662	46	0.048	14.5
	Dale	610	53	0.048	15.4
Barley	Claydon	1044	22	0.042	9.5
	JD 750A 7"	980	24	0.042	9.7
	JD 750A 3"	1004	21	0.042	9.0

- Claydon more heads/m² in both wheat and barley
- Wheat, fewer ears with the Dale but significantly more grains per ear
- Same thousand grain weight so looking as though Dale could be higher yielding
- Harvest results will be reported in November meeting

Plans for 2020–21

- Joint venture fattening beef on a paddock system; cover crops – this is an extension of currently growing grass for silage for a local dairy farmer
- Look into machinery sharing/ joint ventures – this has to be the way forward to reduce costs further
- Mid-tier agreement for owned & FBT land
- Looking at sprayer options – self-propelled vs mounted vs trailed
- More containers
- Look into erecting more industrial units

The future for UK cereals and oilseeds production

Martin Grantley-Smith

Markets

- The UK produces only 1% of the world's grain so we have no effect on global prices
- Drivers are:
 - Weather
 - Politics – e.g. what goes on in the US – we see this reflected in price although the US has high grain stocks so we are not seeing the impact of any changes at present
 - Local effects – such as the proximity of processing plants; closure will impact transport costs – but these have no impact on the global situation

Wheat – global supplies look good; good conditions in the US; heatwave in Europe but the effect on harvest is not known; overall neutral

Corn (affects the price of grain) – bigger US area and supplies are above average

Barley – supplies are tight and this has affected price; malting barley has been doing well; possibility of a tariff war (politics leading to volatility)

OSR – tightening of supply; demand from EU tight; plantings in Canada are down but stocks are good; no sudden price shifts expected

Soya (biggest driver of OSR price) – a lot of stocks in South America

UK rainfall has been beneficial to growers in some areas but not all; recent rainfall has firmed up slightly the results of harvest and it might be better than we thought at one time.

Drivers for the industry going forward

Loss of subsidy – we are not sure what will replace it; farmers will be more exposed to the market and the risk of volatility is greater; you need to get more from the market place and get your costs down

Public concerns – policy is being driven by supposed representatives of the public, e.g. getting rid of pesticides; we need to think what to do to change people's perceptions and those of the people who make decisions

Where AHDB can help

- There should be opportunity to get payments from other schemes; AHDB will help get you into a better position to maximise your ability to benefit from these
- See the Horizon document “Characteristics of Top Performing Farmers” – it is about making changes that make a difference
- Use benchmarking (AHDB Farmbench) to identify where changes should be made
- Skills – AHDB is offering support to develop management skills
- Technology – all about turning inputs into outputs:
- Integrated Pest Management (IPM) including crop nutrition, soils; genetics could be the main plank in dealing with reduced pesticide use through disease resistance which will be reflected in the new version of the Recommended List
- IPM is now very important due to policy changes
- It won't make much difference whether we are inside or outside the EU
- The problems are resistance to the chemistry and consumer perceptions
- In IPM, the focus is integration
- OSR – still one of the best margins; alternatives have limited markets so there are no good alternatives; it is still good value in the UK so AHDB is not spending much time looking at alternatives

- Machinery – AHDB recognises that no-tillage systems are not suitable everywhere; however from looking at systems around the world, it is clear that the reason our competitors are ahead of us is that farmers use machinery more appropriately sized for their business and accept the risks involved

What type of future? Opportunities and challenges for UK agriculture

Sean Rickard

Brexit

- Has created unprecedented uncertainty
- Is a distraction and a threat in preparing UK agriculture for the future
- Challenges are the same whether we leave the EU or not; and the solutions are similar

Challenges/objectives

- Agriculture will become a high-tech industry
- There are three challenges:
 - Improve trade balance – by becoming more competitive, increasing exports and reducing imports, which would automatically increase food sustainability and security
 - Increase sustainability – make UK agriculture more productive; this needs to be done by using less of the world's resources and by reducing pollution
 - Raise standards – food safety, animal welfare, working conditions for those involved in the industry
- The industry needs to prioritise and the priority must be competitiveness

Impact of Brexit

- All possible scenarios have serious consequences for the UK agri-food industry, e.g. high tariffs on exports; no tariffs on imports forcing the UK to accept lower standards
- Do not rely on payments – there is unlikely to be much; also productivity and conservation are at odds with each other; many farmers will become unviable

Opportunities

- UK food demand is rising slowly (less than 1% per year) whereas in emerging nations it is above 4% due to population growth
- We need to be internationally competitive and super-efficient
- But our costs are too high
- We need to produce products that all those expanding middle class populations around the world want to buy
- This depends on constant development by processors of distinctive value-added products
- Becoming super-efficient relies on maximising sustainable intensification, i.e. increasing productivity and lowering production costs whilst protecting the environment
- “We need to up our game”

Food policy

- We need to develop a mindset that is dedicated to exporting by meeting the demands of importing countries
- we need to produce a plentiful supply of good quality affordable food

- A food policy needs to recognise the contribution of the agri-food chain
- It would need to be based on sustainable intensification – this is the only way to deliver both affordable, safe, high quality food and high environmental standards

How to become more competitive

- We can't rely on lowering costs
- Therefore we must increase the value of the final product
- Food markets to target around the world are the increasingly affluent middle classes – these people value distinctive food products with special attributes
- Valued attributes include not only taste and value but also provenance, safety and sustainability – which are located at the farming stage

Vertical partnerships

- A vertical partnership is a two-way relationship (i.e. not dominated by the buyer)
- Important factors:
 - Strategic outlook
 - Collaboration
 - Goodwill and trust
 - People skills (including effective communication)
- This happens in Holland

Sustainable Intensification

- This produces a dramatic increase in natural resource productivity
- I.e. it gives more output per unit of resource such as water and energy
- It is achieved through technological advance and technical efficiency
- Depends on:
 - Agri-biotechnology ("Imagine where this will be in 25 years' time")
 - Fusing machine power and information technology to bring precision
- Larger scale lowers the unit cost and vertical partnerships reduce the risk
- People skills are key
- Vertical partnerships can be augmented by local clusters
- Again they do this well in Holland

Farm walk

Discussion points

Spring barley

- Variety Explorer
- Cultivated in Autumn
- Half field drilled with Claydon 7" on 14th March and the other with JD750A on 21st March
- Good establishment in both
- Seem to be more blind sites and short tillers in the Claydon area
- 5 years continuous spring barley on this land because it is prone to flooding and then to bad black-grass

- Brome (sterile and meadow) is becoming an issue probably due to not inverting and lack of herbicide (Atlantis)



Spring barley drilled with JD750A



Spring barley drilled with Claydon

Winter wheat

- More BYDV in wheat drilled with Claydon than with the Dale – not sure why
- No difference seen in black-grass count but tend to get a lot anyway – also the black-grass is shorter here so you can't see it as well
- Are we selecting for shorter black-grass? Or is the black-grass emerging later?
- Using home-saved seed, possibly getting some crossing
- The late N application was missed because it was so dry and the crop appeared to be dying
- The wheat crop has been managed for yield potential
- T0 was not applied to every crop – but we now think it should have been
- No T2 was applied to the Skyfall (pictured below) because of its low yield potential – no point spending a lot on a poor crop
- The spend on inputs has been significantly less than usual
- Currently considering sprayer options – mounted vs. self-propelled



Winter wheat – Skyfall, drilled 24th October

Skyfall - Right side, fungicide cost £32/ha; left side £54/ha

Compost

- Home-made from woodchips, waste turf and manure (cow and horse)
- Total made – 1000 t
- This is for own use to increase soil organic matter
- Compost turner, bought second-hand, now working well
- Sewage sludge has been used this year; compost will be applied to next year



Compost turner



Compost

Find out more – Links to AHDB information sheets or research

[Machinery cost calculator](#)

[Cereals and oilseeds market information](#)

[AHDB nutrient management guide \(RB209\)](#)

[GREATsoils](#)

Sign up for market updates, [here](#).

For more information or to find out more about Farmbench, AHDB's benchmarking tool, contact: Judith Stafford

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