

Duxford Monitor Farm Meeting Report

Meeting 6 – Summer Meeting

7 June 2019

The Barn, Foxton *Kindly hosted by Tom Mead*

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



Tom Mead and David Hurst, Duxford Monitor Farmers

Key take-home messages

1. Consider using tissue testing and/or grain analysis to monitor for nutrition deficiencies
2. Make the most of your farm features in a Countryside Stewardship agreement and put in options that you would like to see on your farm
3. Aim for a diversity of options across your farm – will benefit insects, biodiversity, water and air quality and the public

Nutrition – Andy Hutchison and Tom Mead

- Why? Nutrition is important to manage in the crop to ensure crop health, maximise yield and can alleviate fungicide spend
- Key micronutrients to focus on includes: magnesium, zinc, boron and manganese
- Tissue analysis through the season can give you an indication of areas to manage through the season. Brian Barker's top tips for tissue analysis include:
 - o Tissue analysis can be done with either the whole plant or the top leaves – keep consistency of one method
 - o Aim for more than one field to allow for a comparison
 - o Get into a programme for going out and doing the assessments – this then gives you an understanding of what different varieties do
- Grain analysis of the crop at the end of the season gives you an idea of what the crop might have been deficient in and gives you a good idea of areas of focus for the following year. If you are a YEN entrant, the report gives you this detail.

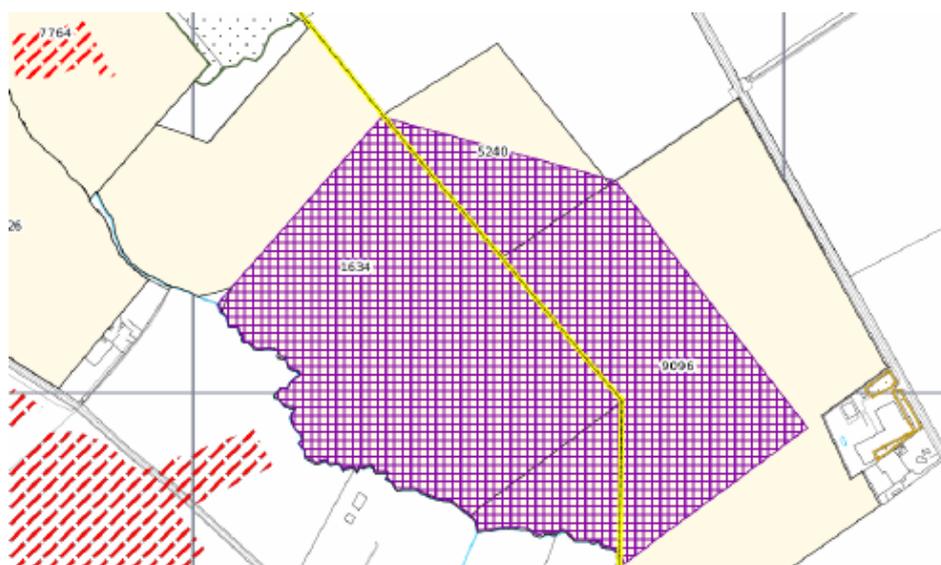
Tom Mead has tried splitting a field this year to look at impact of using different programmes on yield. Find out the final results at the November winter meeting:

MF MEAD AND SON - NUTRIENT ANALYSIS

NUTRIENT	CRITICAL VALUES	TISSUE TESTING ANALYSIS								
		FARM STANDARD			TRACE ELEMENTS			BIOSTIM & FARM STANDARD		
		T1	T2	GRAIN	BEFORE T1	T2	GRAIN	BEFORE T1	T2	GRAIN
N	3	4.04	4.82		4.15	4.63		4.18	4.56	
P	0.3	0.3	0.33		0.31	0.32		0.31	0.31	
K	3.5	2.54	2.52		2.59	2.53		2.53	2.44	
Ca	0.4	0.4	0.41		0.39	0.49		0.44	0.48	
Mg	0.12	0.07	0.11		0.07	0.11		0.07	0.1	
S	0.25	0.33	0.35		0.34	0.36		0.35	0.33	
B	6	4.7	5.5		4.5	5.8		4.8	5.6	
Cu	7	5.5	6.6		5.4	7.4		5.6	7.5	
IRON	50	69	70		65	70		66	65	
Mn	35	76.1	62.4		71.8	58		82.1	65.4	
Mo	0.1	0.6	0.45		0.54	0.44		0.64	0.61	
Zn	25	15.4	21.8		24.6	25.4		17.8	23.4	

Strategic Cereal Farm East – Brian Barker

- Aim is to showcase research ideas/outputs on a more commercial scale – what can we do on-farm to increase net margin?
- Baseline work included assessments of: earthworms, soil analysis, biomass assessments, weather and more
- Demonstrations are looking at managing varieties with lower input programmes; cover crops; boosting early crop biomass and monitoring pests and natural enemies
- Information and details on demonstrations for harvest 2019 and harvest 2020 can all be found here: <https://cereals.ahdb.org.uk/get-involved/strategic-farms/strategicfarmeast.aspx>



Example section of MF Mead and Son Farm Information Map

Countryside Stewardship – Paul Hill, AHDB

- Look at what you have got on the farm that you can use? Eg. watercourses, hedges, margins
- Use Catchment Sensitive Farming and Magic map tools to look at features
- Think about what you would like for your business?
- Think about options on a landscape scale and how they connect – best agreements are not completed in isolation
- Encourage beneficial insects by using pollen and nectar mixes (for pollinators) and grasses (for arachnids). Research has shown that beneficials will only predate about 50m into the field
- Look at Countryside Stewardship as a long-term investment
- Think about how an agreement can assist with compliance with regulations eg. water quality, Clean Air Act, 25 Year Environment Plan, LERAP's, NVZ's
- Public perception is key – can these agreements enhance this in the future?
- Aim for diversity of options

Group Discussion

The group looked at options for Tom Mead to enter into a Mid Tier Countryside Stewardship agreement for the farm. The suggestions from the group included:

- First work out under-performing areas
- Use AB1 and AB9 + supplementary feeding
- Buffer and protect river/watercourses – SW1, AB8 around every field; SW3 where risk of soil erosion?
- Make big areas of options – sprayer width multiples
- Use simple and fewer options
- Straighten up fields and edges – use AB8, all-rounder (grasses and pollinators)
- Flower-rich, not grass margins – think about management, collect cuttings
- Think about aspect of options – grass on northern aspects, SW1
- Think about footpaths and not having bird friendly options in these locations
- Use winter bird seed mix on out-lying fields
- Rotate – AB9, legume rich – consider black-grass; 5 years (long term control)
- Grasses – good for birds/sediment/P/beetles
- Have a balance of options between permanent and rotational
- Consider ELMS for whole farm vs cropping?
- What do you want to put the effort into?
- Think about impact on fixed costs
- Consider that you are adding one extra crop to manage with each option used

Further Information

Nutrient Management Guide: www.ahdb.org.uk/rb209

Countryside Stewardship: <https://www.gov.uk/government/collections/countryside-stewardship-get-paid-for-environmental-land-management>

Meetings and Contact Information

Join us for our winter meetings 2019 – 20 at Fowlmere Village Hall from November to February

For more information about the Duxford Monitor Farm, contact: Teresa Meadows

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To find out more about Farmbench, AHDB's benchmarking tool, contact: Holly Howsam

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