

# Chelmsford Monitor Farm Meeting Report

## Meeting 8 – CTF and precision farming

14<sup>th</sup> December 2018

Galleywood Heritage Centre

For more information, visit: [cereals.ahdb.org.uk/Chelmsford](http://cereals.ahdb.org.uk/Chelmsford)



Hew and Christy Willett,  
Chelmsford Monitor Farmers

## Meeting Summary – Key Messages

1. Precision farming can be a useful tool for increased efficiency
2. Cost savings can be calculated, but wider improved operations and management of crops also needs to be taken into account
3. Care needs to be taken on which areas are employed – more evidence is needed as to the benefits of some areas of precision farming, but the future is exciting!

## Precision farming at Thurlow Estate, Andrew Crossley

- “Precision farming gives us accuracy and reduces waste when farming at scale”
- Variable rate seed provides many advantages including allowing for consistency and a homogenous crop for PGR’s and other inputs. The team always measure what they have achieved and staff feedback is requested to improve.
- Section control and placed fertiliser is used.
- Variable rate P and K – carried out per zone, based on soil conductivity. Extremes are corrected with nutrition, such as sewage sludge and fibrophos.
- The Estate doesn’t use variable rate N as there are still too many unanswered questions
- The sprayer has new technologies including pulse width modulation, turn compensation to achieve a consistent rate/ha across the boom width when turning, controlled tramlines and field boundaries are mapped.
- Telemetry between machines and companies provides its frustrations to get them all working together.
- Data is an area that they are looking to employ more forwards, using yield mapping, gross margin mapping, profitability mapping, weather station data, spore trapping, boom cameras and machine learning and more.

## CTF – niche system for techy nerds or business no-brainer? Julian Gold

- CTF doesn’t have to be expensive to set-up and can have a positive effect on soil health, biology, carbon emissions and can make field operations more simple. But....it isn’t a religion, just a tool!
- “Virtually every farm in the country can do harvest CTF”

- Harvest CTF: Operate with combine cutting width which goes 3X into tramline width eg. 8/24 9/27 10/30 12/36. Can then open up lands down each tramline and then cut either side with auger over tramline. Grain trailers never leave tramlines.
- Establishment CTF: Operate with all machines matching combine header width and on same wheeltracks as combine (or smaller widths but which will multiply up exactly to match header width)
- The farm has reduced from 80% of the field trafficked down to 20%



- Use CTF as “low hanging fruit” to be able to achieve on-farm
- Important to consider how to manage wheelways – use a loosener?
- Important to consider trash management
- Look at N use efficiency on-farm
- Consider system with potential changes to the use of glyphosate?
- “We don’t know the right result until the season has finished” – importance of reviewing tests and methods.

## Further Information

- AHDB Machinery Costings Calculator: <https://ahdb.org.uk/machinery-costing-calculator>
- AHDB Precision Farming: <https://cereals.ahdb.org.uk/crop-management/nutrient-management/precision-farming.aspx>

For details about the Chelmsford Monitor Farm and past meeting information, please visit: [cereals.ahdb.org.uk/Chelmsford](https://cereals.ahdb.org.uk/Chelmsford).

### Winter Meeting Dates 2018 to 2019

- Friday 14 December 2018
  - Friday 11 January 2019
  - Friday 8 February 2019
- All meetings will start at 9am with a bacon roll at Galleywood Heritage Centre, The Common, Galleywood, Chelmsford, Essex, CM2 8TR.

### Contact Details

- For more information, please contact your AHDB Knowledge Exchange Manager: Teresa Meadows - [teresa.meadows@ahdb.org.uk](mailto:teresa.meadows@ahdb.org.uk) - 07387 015465
- For more details about Farmbench and benchmarking, please contact: Holly Howsam – [holly.howsam@ahdb.org.uk](mailto:holly.howsam@ahdb.org.uk) – 07767 001543