

10 m CTF grain system at Hendred Estate

Julian Gold

Hendred Estate, UK



*Famer's son. Graduated from Harper Adams Agricultural College in 1986 and has since managed several farms and Estates. Presently managing approx. 1000Ha of mainly arable land in South Oxfordshire, England
BASIS and FACTS registered agronomist and has a particular interest in soil management and operating a sustainable but profitable farming system.*

Hendred Estate

- Approx., 1000Ha farmed, silty clay loams over chalk .Alkaline soils. Average rainfall around (although much higher in 2012 at)
- Robust 5year rotation of OSR: Winter Wheat: Spring Beans: Winter Wheat: 2nd Cereal(w. wheat, w barley or spring barley).
- Crop residues incorporated where possible.

Reasons for CTF

- Main driver was need for shallow cultivations for soil health reasons (trying to raise soil OM levels and encourage soil Biota to thrive).
- Other drivers were : Continuing rising fuel prices, large machine gross weights making it impossible to reduce compaction by tyre equipment alone, possible future income if carbon credits introduced, satellite guidance equipment becoming reliable and affordable.

CTF System

- Wanted no compromise system which would be as wide as possible and simple to operate.
- Opted for 10m system (made possible by purchase of pre-production Lexion combine harvester with 4x 1 unloading auger which delivers 10m for centre line of header)
- Narrow bodied combine harvest on 2.6m centres. All other machines moved from 1.8m to 2m centres to minimize width of composite wheelings. –
- Using 10m cultivation /drill which is used as cultivator as well as drill, thereby saving cost of 2 machines.
- One main 340HP tractor plus one implement carrying out bulk of field operations.

Advantage of CTF System

- 2012 First year of new system therefore too early to identify any yield effects
- Big savings of fuel and time through working shallower and wider .
- System worked well in record wet autumn in the UK in 2012.
- Once set up CTF System requires less management than previous system.

Potential Problems Identified with new CTF System

- Need to learn correct way to deal with the permanent traffic lanes (especially the 30m tramlines used for spray and fertiliser applications)
- Will need to build special 'wheel wagon conditioning machine'.
- Have already noticed trash management issues when changing from angled working to all passes in the same direction.
- Possible build-up of 'ridge and furrow' effects after a number of years of CTF?