



Will Gilman evaluated all types of crop establishment methods, from ploughing and min-till to no-till direct drilling, but now relies on Claydon Opti-Till® direct strip till.



## FOCUS LINCOLNSHIRE

### FARM FACTS

Farmer: Will Gilman

Location: Grange Farm, nr Stamford

Area farmed: 1800 acres of arable land

Soil: Mix of thin limestone brash and heavy clay

Cropping: Winter wheat, oilseed rape, winter and spring beans, spring barley, environmental schemes

## Lincolnshire farmer finds direct strip seeding most effective method of establishing crops.

When it comes to crop establishment, Lincolnshire farmer Will Gilman has been on the whole journey, from traditional, full cultivations involving ploughing and min-till right across to the other extreme, true direct drilling with zero cultivations. Now all crops are direct strip seeded using the Claydon Opti-Till® System, which he feels best suits the requirements of his family's business.

Farming 1800 acres of arable land, part of it owned, part on FBTs and part contracted, H. P. Gilman & Partners is based at Grange Farm, Pickworth near Stamford. Formerly part of the Burghley Estate, it had been tenanted by three generations of the Gilman family since 1904 and when it came up for sale in 2009 they decided to grasp the opportunity.

Will operates what he describes as a 'tight rotation' simply because it is difficult to find alternative crops which suit the thin limestone brash soils that make up half of the farmed area, the remainder being heavy clay. "We are very limited as to what we can grow, so our approach is very commercial, and we keep things as simple as possible," Will comments.

"For ten years feed wheat and oilseed rape were the only crops grown here and although we have added others they generate the highest margins and remain the mainstay. Output and margins drive everything that we do, so it is a fairly high input system and there is no skimping when it comes to inputs such as fertilisers or ag-chems."

For the 2022 harvest, the business grew 320ha of winter wheat, comprising the soft Group 4 LG Skyscraper, together with the hard Group 4 varieties Gleam, from Syngenta, and a newcomer to the Recommended List, KWS Dawsum.

The cropping also included 200ha of winter oilseed rape, all conventional varieties produced from farm-saved seed, plus 150ha of winter and spring beans, a little spring barley, with various environmental schemes accounting for the balance. The enterprise encompasses two diversification projects, livery for 35 horses and Rutland Simulated Game, a simulated game shoot which has proved extremely popular.

In addition to their own land the Gilman family also contract-farm land for two



Strip seeded rows are clearly visible in this crop of LG Skyscraper winter wheat just before the 2022 harvest. The space between rows is kept clear of weeds using a 6m Claydon TerraBlade inter-row hoe.

neighbours, all of it falling within a ring fence and being connected by 4km of tracks.

**SOIL IMPROVES**

“Until 2010 we operated a full cultivations system, with part of the land ploughed and part min tilled using a Horsch Terrano, then drilled with a Vaderstad Rapid,” Will outlines. The drawbacks were significant, in terms of timeliness, cost and labour.

“We had an ageing workforce with two staff due to retire, so that was a significant concern and led me to review our approach. I also wanted to trim costs and minimise soil disturbance to reduce weather risk, a major advantage of strip seeding as it avoids having large areas of cultivated soil exposed and being caught out by heavy rain.

“I looked at two alternatives. One was the Claydon Opti-Till® System, the other the John Deere 750A, a true direct drill. In my eyes, the full direct drill approach was too risky, so I bought a 6m Claydon Hybrid mounted drill and used it very successfully for two seasons. Much of our land has stone underlying the topsoil - we even have a quarry on the farm which supplies stone used on buildings such as the Houses of Parliament – so I decided to change it for the same model, but with stone release instead of the normal shear-bolt protected tines.

“After operating the Claydon Hybrid for five years I felt that our soils had improved sufficiently to allow true direct drilling and in 2017 we bought a Weaving GD trailed direct drill. With hindsight that was a mistake. Yields dropped by 15%, we were forced to drill earlier to make it work, nitrogen mineralisation was much reduced, and blackgrass seemed to grow more strongly throughout the winter.

The other major issue was that there was no way to relieve the compaction caused by a heavy trailed direct drill if the weather turned wet. This was particularly evident on headlands and caused significant issues.

That was important, because even though our average field size is 15ha, headlands account for a significant area of the farm.

“I concluded that although pure direct drilling is a concept which sounds good in theory, in practice it does not work well enough or consistently enough over the longer term. I missed the tine concept and experience had shown yields from the Claydon Opti-Till® System were significantly higher, so in 2020 I sold the Weaving and bought a new 6m Claydon Hybrid.

“Last year we also purchased a 6m Claydon TerraBlade inter-row hoe to take out weeds growing between the rows. That approach has brought yields back up to their former levels and allowed us to drill later to help combat blackgrass.”

**SIMPLE AND EFFECTIVE**

“The Claydon is used to drill all our oilseed rape in August straight behind the combine,” Will states. “The leading tines are run as shallow as possible to avoid bring up any of the underlying clay and we keep an eye on levels to ensure that the seed goes in at an even depth. The eldest of my three sons is 15 and drills all the oilseed rape, while my 13-year-old helps with harvest.”

The Gilman's 6m Claydon Hybrid mounted drill is pulled by a 300hp Case IH Optum 300 CVX, which works alongside the farm's other tractor, a 175hp Case IH Puma 175, both supplied by local Case IH and Claydon dealer Sharmans Agricultural Ltd in Stamford. The Optum has an excellent power-to-weight ratio and could easily operate much faster than the 9 – 10 km/h which Will prefers to minimise soil disturbance.

“The aim is to leave 25cm stubble behind our 12m Claas Lexion 770 combine, then drill at an angle to the tramlines to help keep fields level. We sow winter wheat about 50mm deep using a seed rate which varies from 180/m<sup>2</sup> in mid-September to 220/m<sup>2</sup> at the end of October.

“I have found that certain varieties suit the Claydon System better than others. Gleam, for example, tillers like crazy and helps to crowd out blackgrass, which, along with cow parsley and cleavers, can be an issue in places. I like the fact that now we can hoe between the rows with our 6m Claydon TerraBlade on the front linkage of the Puma 175, so it is very much an add-on to our system which enhances the effect of ag-chems rather than trying to replace them.

“We use the TerraBlade as early as possible in the spring, usually February to take out any weeds growing between the rows before they have too much opportunity to develop and become difficult to control. The blades also break up any capping that has developed over winter and aerate the soil.

“Buying the farm increased our overheads considerably so we must focus on keeping costs in check and growing crops which produce the highest gross margin. Attention to detail is essential to get the most out of them on this hungry ground, so as part of that we apply chicken manure from local poultry farms at 7t/ha and Severn Trent treated sewage sludge at 22t/ha, often drilling crops directly through that using the Claydon Hybrid. Our winter wheats averaged 10t/ha last year and we hedge risk by forward selling some of our production, with commitments already in place for November 2023.

**IMPROVED CROPS**

“Since switching from conventional direct drilling to direct strip seeding with the Claydon Opti-Till® System the performance of our crops has vastly improved, particularly on headlands. The key is to understand the concept and how to get the best from it.

All Claydon products are simple, easy to maintain and inexpensive to operate. Apart from a broken weld on the steps of the drill we have had no issues and the back-up from Claydon, through Sharmans, has been really good.”



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**The undulating land at Grange Farm includes a wide range of soil types, from limestone brash to heavy clay.**