

# FARMFOCUS



## FOCUS NORFOLK



Astley Farms' 4.8m Claydon drill establishes a range of organic crops on the North Norfolk estate.

**Farmer:** Luke Rodway

**Location:** Fakenham, North Norfolk

**Area farmed:** 1,400 acres

**Soil:** Primarily light

**Cropping:** Winter wheat, spring barley, rye, spring oats, cover crops, clover leys

## Direct drilling transformational for North Norfolk organic farm

The combination of direct drilling and inter-row hoeing has been transformational for Astley Farms. The Claydon Opti-Till® System delivers benefits which would have been difficult to achieve using other approaches. Timeliness has improved dramatically and instead of five full-time staff there are now three. Just two tractors are needed instead of four and diesel use has plummeted by 60 per cent. Soil structure has also improved significantly.

An all-organic enterprise, Astley Farms comprises the 1400-acre in-hand portion of the Astley Estate near Fakenham in Norfolk.

Owned by Delaval Astley, Lord Hastings, it has been farmed organically for over 20 years and received awards for its conservation work. Farm Manager Luke Rodway has been with the business since 2018 having previously worked for one of the estate's tenanted farms. He states:

"This is a true East Anglian estate where the owner has a strong interest in regenerative farming. The crops we produce are either for seed or go into organic pig and poultry rations. Yields from crops grown on our primarily light soils will never be as high as those on better quality land. They are 50% to 60% of what might be expected from a non-organic system under similar conditions.

However, the organic premium compensates for that shortfall and, with much lower costs, gross margins are comparable to those of crops produced conventionally.



Luke Rodway, Manager of Astley Farms, pictured in a Claydon-drilled field at the beginning of February.



**Diesel use has plummeted by 60 per cent since changing to Claydon Opti-Till®, says Luke Rodway, pictured with George Gill (left) who carries out most of the drilling using the 270hp New Holland T7.270.**

“Our previous plough-based establishment system was slow and expensive. Cultivations took one man most of the winter and drilling a further six weeks.

“Claydon Opti-Till® really has revolutionised the way we farm because now one man can do virtually everything in two and a half weeks. It is a cheap, simple system which is highly effective, works well and delivers excellent results.

“Timeliness is a key factor here, even though the soil is mostly light and rainfall averages 650mm per year, but the last two autumns and springs have been wet.

“Had conventional methods still been used to establish crops we would not have been able to complete all our planned drilling because the results from fields sown in adverse conditions would not have been good enough to justify the investment.”

### MAJOR CHANGES

When Luke joined the business in 2018 it also employed two full time staff on the livestock side and two men on the arable team, who were aged 65 and 70. Whilst the system worked, the onset of the pandemic in March 2020 and subsequent lockdown resulted in the elder member of the arable team going into isolation, while the other employee decided to retire. Things had to change, so during what was an extremely challenging period Luke decided to review the farm’s entire system and consider how it could operate more efficiently and reliably.

“Like everyone else we were looking to reduce our cost base and improve our soils so that we could get on earlier and benefit from improved timeliness. One of the biggest difficulties in moving away from a system where 400 acres were ploughed and pressed each year was

finding a drill which would successfully sow crops directly into min-tilled land that could not be sprayed off with glyphosate because of our organic approach, and which would work on ploughed land equally well.

“Simplicity was one of the Claydon’s key advantages compared with other drills I looked at. Some were too expensive, others too complicated, while some seemed likely to block even in slightly damp conditions. What we needed was a drill which was well priced, simple, practical and reliable, yet could cope with a wide range of soil types, conditions, and crops.”

Having seen a Claydon Hybrid drill cereals directly into sprayed-off grassland Luke was certain it would work well at Barney. In 2020, when the opportunity arose to purchase a lightly used 4.8m model, he decided to move forward with his plan to reconfigure the business.

Now, where previously 400 acres were ploughed and pressed each year using the farm’s own equipment and labour, that figure has been reduced to just 100 acres of two-year leys and the job is done by a contractor. This is part of a raft of changes which has reduced the number of full-time staff from five to just three. In addition to dramatic savings in labour costs, the number of tractors has been reduced from four to two.

“We used to operate two tractors on the arable side of the business, a 210hp New Holland T7.210 and 165hp New Holland T6.180, plus two smaller livestock tractors. I part-exchanged the T7.210 against a new 270hp new Holland T7.270 which works alongside the T6.180, so now both tractors are fully utilised throughout the year,” Luke outlines.

### NUMEROUS BENEFITS

In excellent condition, the Claydon Hybrid had previously covered just 2500 acres on a farm in Cambridgeshire and came with a stack of wearing metal. Since then, it has completed over 1000 acres in three seasons, although annual use will increase to around 500 to 600 acres when 200 acres of formerly tenanted land are taken back in hand.

Fully organic, Astley Farms operates a five-year rotation. It comprises three years of arable crops followed by a clover ley which is then ploughed down after two years, the Claydon being capable of drilling into land which has been inverted.

Cropping includes winter wheat, spring barley in the form of the old but dependable variety Westminster, together with rye. The farm also grows spring oats, split 50/50 between the well-proven varieties Canyon from Saaten-Union and WPB Elyann. These are both for seed because seldom is the farm able to achieve milling quality from any cereal crop.

“All will be drilled with the Claydon Hybrid, which is simple to use and maintain,” says Luke. “In addition to our own drilling we have used it for some contract work, mainly sowing beans for neighbouring farmers. They like the Claydon because it means that they only need to spray off any green material and then we direct drill the beans 3” deep. With no cultivations required, it is a simple, fast and inexpensive way to establish crops.”

“Compared with the much more complex Horsch Sprinter which I used in the past the Claydon is a very different proposition, simple to calibrate and easy to use,” says George

Gill, who does most of the drilling using the farm’s 270hp New Holland T7.270. Equipped with RTK guidance, the tractor would pull the drill much faster than the normal 9 to 12 km/h, but forward speed is maintained at this level to achieve optimum consistency and accuracy. The following harrow leaves weeds on the surface where they are left to dry out for a few days before rolling.

Last year was the first in which Astley Farms grew winter milling wheat, 25 hectares of KWS Zyatt. The variety was chosen largely because staff at KWS UK’s head office were so helpful in answering the questions which Luke had about growing the crop under an organic system.

“With much less labour now available the aim was to further spread the workload and produce a tall crop which would help to smother weeds,” Luke adds. “It developed strongly and looked so good throughout the season that it was impossible to tell it was organic. The variety yielded very well and produced an excellent gross margin.



All crops produced by Astley Farms are organic for seed or used in organic pig and poultry rations.



Using Claydon Opti-Till® has seen a dramatic increase in worm numbers.

“Last harvest we started combining during the first week of August and finished by the end of the month. A student who helped at harvest drilled as much of the spring crop area as possible with stubble turnips, forage rape and various cover crops to provide feed for our 500 ewes and lambs through the winter, which also improved the soil structure.

**INTER-ROW HOE WORKS WELL**

The benefits of the Claydon drill have since been enhanced with the purchase of a new 4.8m Claydon TerraBlade inter-row hoe in 2021 from TNS at Fakenham. Two passes through the winter wheat are carried out during the autumn, followed by a further three in the spring, starting as soon as conditions allowed.

“Previously we used an Einböck weeder, which was effective in taking out small weeds, but we had to stop

using it when the crop reached GS30,” says Luke. “Charlock is our main problem and once it went beyond the cotyledon stage the Einböck didn’t do the job we wanted.

“The farm has a naturally high weed burden, a legacy of the previous plough-based system. Every year for decades weeds had been buried by inverting the soil and then mixed in throughout the soil profile by following cultivations, so they kept germinating and causing problems. The goal now is to keep weed seeds in the top layer of soil so that they can be reduced progressively.

“Timeliness is critical to allow the TerraBlade to be used as often as possible throughout the season and prevent weeds from developing. We use it on the front linkage of the New Holland T7.270, which might sound like overkill in terms of horsepower, but as the tractor would not be doing anything

at that time it means that we are making more efficient use of it. The tractor has RTK guidance and, despite its weight and large tyres, the crops always recover.

“Last year, we began using the TerraBlade just as the first leaves of the crop were poking through the surface and kept going through it until the wheat was at growth stage 37. Some moisture is required for the blades to penetrate the soil and we set them just deep enough to cut through the weeds. These are left to die off on the surface, then we do a following pass when the next flush begins to emerge. The TerraBlade has been highly effective and covered about 1200 acres last season.

“There is no question that direct drilling and inter-row hoeing with the Claydon Opti-Till® System has revolutionised the way we farm, and the benefits are increasingly evident the more that we use it.”



The benefits of the Claydon drill are enhanced by Astley Farms’ 4.8m Claydon TerraBlade inter-row hoe.



The Claydon TerraBlade is used as often as possible to prevent weeds from developing and takes out those growing between crop rows.