



VEHICLE
CLAYDON HYBRID M 4M

One man band

Switching to a Claydon Hybrid drill has allowed one farmer to establish his crops on his own using just one tractor. *FMJ* found out more about his new approach



Above: Opting for a 4m mounted drill means Jonathan has extra capacity should he take on additional land

Left: 'Minimalist arable farming' is how Jonathan Holland describes the Claydon System

Profile
Jonathan Holland
Location Newbury, Berkshire
Farm Arable
Crop area 1000 acres

Three years ago Jonathan Holland considered carefully the future of his farming operation, even though yields were good and the business was profitable. Despite being in a good position, he felt that the economic and legislative pressures on the farming sector would only increase, reducing profitability.

To help future-proof his business Jonathan decided to greatly simplify the system used to establish the 1000 acres of arable crops he produces around Newbury, with the aim of significantly reducing costs while maintaining yields and gross margins. That goal has been

achieved. Yields have improved, fixed costs are much lower and the labour bill is zero. Wearing metal cost just £760 last season while, at under £8000, the annual spend on diesel is a fraction of what it was before.

Good looking crops

Despite saving £60,000 per year (£60/acre) since changing to the Claydon System, 44-year-old Jonathan says his crops have never looked or performed better.

"Ten years ago, I would never have thought that I'd be establishing all the crops myself and doing all the spraying. But times

have changed and we must change with them," states Jonathan, whose family have farmed in the Newbury area for many years.

"Every UK farmer will have to look much more closely at what crops are costing them to produce"

"Previously, I used contractors for most of the work, but their charges were increasing and other inputs such as fuel were going up sharply, so the only way to reduce my costs significantly was by adopting a much more efficient system.

Given the potential revenue reductions from Brexit, every UK farmer will have to look much more closely at



Tech specs

Claydon Hybrid M 4m

Power requirement
200hp

Typical daily output
30ha

Transport width 2.9m

Weight 2.07t

Hopper capacity
1750 litres

Seeding times 13

► what crops are costing them to produce and cut their cloth accordingly. I wanted to do that sooner rather than later to give me time to adjust, rather than being forced into it."

Major changes

Jonathan says his previous system was time consuming, involved lots of labour, burned huge amounts of diesel and tore through wearing metal at a rate of knots on the flinty soils, which made it expensive, albeit

still cheaper than ploughing.

"Our rotation was focused on winter wheat, winter barley and winter oilseed rape, with a little spring barley," he explains. "There was so much work to get through in the autumn that we had to start drilling earlier than the optimum time to maximise blackgrass control. Oilseed rape was grown too often in the rotation and producing winter barley didn't help.

"After much thought, I decided that the ideal approach would be to

do everything myself and for that to happen I would have to completely change the establishment system and rotation. When I discussed what I had in mind everyone told me that I was mad, including my father.

"I visited a neighbour with a Claydon Hybrid and saw the results they were achieving. I drove to Suffolk to meet Jeff Claydon, who took me round his farm and told me about the Claydon System. When he explained about its unique tine system and how not mixing weeds



Left: Despite very dry conditions this spring, Jonathan says crops grew away quickly to provide a dense, even canopy helping to suppress weeds

Below: The Claydon System is said to create ideal conditions in which strong, vigorous root structures can develop

and volunteers throughout soil layers provides an opportunity to control them using a Claydon Straw Harrow, the whole system made a great deal of sense. "Simple, no-frills equipment appeals to me and the Claydon Hybrid drill seemed a practical solution, far less complicated and

adaptable. I ordered a 3m mounted Claydon Hybrid, but subsequently went for a 4m version to provide plenty of reserve capacity in the event of adverse weather or taking on more land.

Simple fleet

"The Claydon System allows me to do everything myself, with just a 215hp John Deere 6215R, 7.5m Claydon Straw Harrow, 4m Claydon Hybrid drill and a trailed 24m 3400-litre sprayer, which is also used to apply liquid fertilisers.

"I tend to operate the Claydon at a forward speed of 9kph, which is much less than its full potential of

"The Claydon System allows me to do everything myself, with just a 215hp John Deere 6215R"

12kph, but that's ideal on this land, much of which contains large stones and flints, as it maximises the quality of the work. Even so, I can drill 500 acres of winter wheat, roll it and apply a pre-em in under a week, so there's no need to rush and I can focus on achieving optimum results.

"The new rotation is 350 acres of winter wheat, 350 acres of oilseed rape, 300 acres of spring barley, together with spring and winter beans. Having more spring crops help to spread the workload and I am far more selective about where oilseed rape is grown.

"Establishing oilseed rape immediately behind the combine takes three to four days, and I can do it myself because a contractor does the harvesting and carts the grain to our 2500-tonne on-floor store. I straw harrow then ring-roll the stubble, then drill.

"I set the leading tine on the Claydon Hybrid so that it is about 125mm deep, with the A-Share just skimming the surface at 5-10mm deep and the batter boards and following harrow set at exactly the right angle to

produce perfect results."

Cereals are drilled 35-50mm deep so that they are unaffected by the pre-em, while spring barley goes in no more than 25mm so that it gets away quickly. Establishing the 380 acres of Propino spring barley takes six days, as Jonathan simply sprays off



Left: Jonathan takes great care when setting up the rear batter boards and following harrow to ensure a perfect finish

Right: Oilseed rape that was drilled directly into barley stubble

Far right: Barley emerging on the stony brash soils



► weeds and volunteers with glyphosate, then drills, rolls and applies a pre-em.

Flat and level

"The Claydon Hybrid is very simple to use and I am amazed how it will level and drill even uneven fields, with no need to subsoil – careful set-up is the key to making it work really well," Jonathan points out. "Every time I fill it with seed I use a spirit level to ensure that the drill remains completely flat, longitudinally and laterally.

"The key point with the Claydon drill is that rather than just seeing the batter boards and following harrow as ancillary, they are vital to the overall result and need to be set up carefully to leave a level surface and maximise the effectiveness of the pre-em.

"I aim to drill when 90 per cent of the field is ready rather than always waiting for perfect conditions, to reduce the risk of the weather turning, and although I don't use variable rate seeding I do vary the rate manually by up to 20 per cent if conditions require it. I start drilling wheat about 20 September using 170kg/ha and have increased that to 190kg/ha in October, but this autumn I will increase that to 220kg/ha.

"This year, I drilled all the spring barley by 24 March and although it had not rained for some time the seed went into moist soil. That meant it germinated quickly and grew away

Above: Leading tines on the Claydon Hybrid can run up to 150mm deep, lifting and aerating the soil ahead of the seeding line

"I don't even have a cultivator, so there's no chance to cover up any mistakes"

evenly. The opposite happened last year, when persistent heavy rain meant that fields that had been ploughed or min-tilled stayed wet for weeks and delayed both drilling and

subsequent operations.

"With the Claydon System crops burst into life much earlier in the spring, so the trick is not to let them get hungry and in February I apply 40kgN/ha in liquid form. Sewage sludge works well with the Claydon System and Thames Water spread it in the spring and summer, before drilling.

"Having sold all of my other equipment two years ago I don't even have a cultivator, so there's no chance to cover up any mistakes. The big advantage of the Claydon System is that a sensible, sprayer-sized tractor can still pull a 4m version and cover

70-80 acres a day, so you can wait until the ideal time and conditions. You then have much more time to check the crop and spend with the family.

"Like everyone else, I am looking to expand, and could easily take on more land with the same machinery, but the key thing is not to do so for vanity's sake but in a controlled way which is profitable.

"Other farmers are seeing that the Claydon System offers a viable way to significantly reduce their costs without sacrificing yields and therefore improve margins. I get much more excited about growing crops using a minimum of inputs than I ever did with a full-blown cultivations system. There's a real kick to be had from only needing one tractor on 1000 acres – I describe what I do as 'minimalist arable farming.'"

FMAJ

