CLAYDON CUSTOMER

FARMFOCUS

Northamptonshire farmer Toby Saunders: Claydon customer since 2009.

FOCUS NORTHAMPTONSHIRE

Northamptonshire farmer still reaping the benefits of Claydon-drilling a decade on

Until 2009 Northamptonshire farmer Toby Saunders used traditional plough-based and min-till methods to establish combinable crops, but they were slow, expensive and inefficient. Since adopting the Claydon Opti-Till® System in 2009, Mr Saunders has never looked back – it has transformed the way he farms.

"The amount of time, fuel and expense involved in establishing crops before we changed to the Claydon System was just ridiculous," Toby Saunders states. "We were operating a full cultivation system based around ploughing, but it was slow, costly, overworked the soil and produced inconsistent crop development under certain conditions. Establishment costs are such a major part of our overall production costs that we had to find a cheaper, more efficient method.

"The other reasons for changing were that our existing disc drill was very costly to run, getting old and mechanically complex, so would have been prohibitively expensive to refurbish in relation to its value. At that time, we operated five ageing tractors up to 180hp, but they needed to be replaced. With a number of staff also coming up to retirement it was a good opportunity to review our entire approach."

Mr Saunders carefully evaluated several crop establishment options before deciding on a way forward. Impressed by the Claydon System, he visited the Claydon farm and factory in Suffolk, decided that it was the only one that ticked all the boxes, ordered a 4m SR drill and never looked back.

FARM FACTS

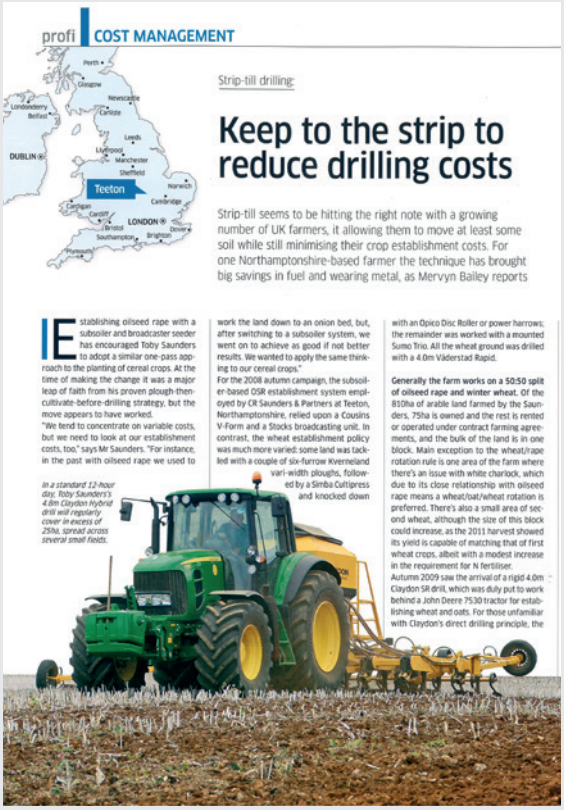
Farmer: Toby Saunders

Location: Northamptonshire

Area farmed: 2,000 acres

Soil: variable, from light sand to heavy clay

Cropping: wheat, oilseed rape, barley, oats, beans, peas



profi COST MANAGEMENT

Strip-till drilling:

Keep to the strip to reduce drilling costs

Strip-till seems to be hitting the right note with a growing number of UK farmers, it allowing them to move at least some soil while still minimising their crop establishment costs. For one Northamptonshire-based farmer the technique has brought big savings in fuel and wearing metal, as Mervyn Bailey reports

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Turning back the clock to 2009

"By direct drilling OSR and wheat we have managed to save 30,000 litres of diesel over 810ha and I have a feeling we have probably saved £20,000 in repairs, wearing metal and other costs too without suffering any loss in yield or increase in weed pressure. The savings allowed me to update my tractor fleet."
Toby Saunders

"In the first year that drill saved us 30,000 litres of fuel compared with our previous system," Mr Saunders states. "At 70 pence per litre that alone represented a saving of £21,000, but there were numerous other immediate benefits in terms of timeliness, time saving, better crops and much lower costs. Over time, we have also seen significant improvements in soil quality."

"There is a learning curve involved with anything new and adopting the Claydon System was no different. During the first season there was one time we kept drilling when the ground was wet and that taught us a lesson: to be patient and wait for the right conditions. You can do that because the drill covers ground so quickly in one operation, so there's no need to rush; we've had no issues since."

"The other thing about the Claydon, which would apply to any other direct drill, is that the land won't appear as tidy as that which has been ploughed, so you'll be looking at stubble until the emerging crop grows through. That's a minor point which you soon forget about and is inconsequential compared with the significant benefits."

"With our previous system, ploughed land would not dry uniformly and that led to uneven germination. With the Claydon System, seed is always drilled into moist soil which has been fully aerated by the Hybrid's leading tines. This means that germination and establishment are consistent whatever the conditions, making it much easier to time spray applications and produce better results. Yields are also higher and more consistent, particularly on headlands, which are the last areas to be drilled so that any compaction is removed."

IMPROVED EFFICIENCY

The Claydon SR was so efficient in terms of the speed of crop establishment that it enabled Mr Saunders to reduce his tractor fleet from five to three, which brought further significant cost savings.

The only downside of the original SR drill was that its rigid chassis meant that when moving between farms it had to be taken off the tractor and transported on a trailer.

Toby now operates just three tractors, including a 290hp John Deere 7290R.

Toby farms 2,000 acres in Northamptonshire, mostly rented or on stubble-to-stubble contracts. All the land has been conductivity-tested by SOYL. To help control grassweeds he is experimenting with variable-rate seeding, as well as choosing vigorous-growing varieties such as Edgar, KWS Montana and Belepi to increase crop competition. The strategy is working well, and the farm has no major weed issues.

When the hydraulically-folding Claydon Hybrid mounted drill was introduced in 2010 Mr Saunders purchased a 4.8m version which completed 12,000 acres.

In 2017, when Claydon introduced the Hybrid T trailed drill, Mr Saunders had a demonstration and ordered a 4.8m version. The second ever produced, it fits in well with his 24m tramline system and the separate seeding chassis ensures highly accurate depth control.

The other factor influencing the decision to change was that diammonium phosphate (DAP) fertiliser had been drilled with oilseed rape for some time, but Mr Saunders wanted to use triple superphosphate (TSP) when drilling to get cereals and beans off to a better start and save a pass with the fertiliser spreader in the spring. A split-hopper drill with a micro-granule applicator was therefore required to sow clover as a companion crop with the oilseed rape. As the 4.8m Hybrid T drill has four metering channels slug pellets could also be applied at the same time.

The combination of shouldered front discs and chassis support wheels contributes to more even depth control. The amount of weight carried on the tractor is much less than with a mounted drill, therefore the amount of front-end weight can be reduced, so compaction is reduced. The only slight downside of the trailed version is that it can drift slightly when working across very steep side slopes, but that is rare and easily counteracted.

Across 2,000 acres of rolling Northamptonshire countryside, where soil types range from light sand to tough clay, often in the same field, the business produces first wheats, winter barley, winter oats, oilseed rape, beans and peas. Mr Saunders aims to drill as much as possible in the autumn when conditions are favourable; he says that having crops in the ground over winter keeps the soil in much better shape.

Approximately 40% of the farmed area is into first wheats which normally average 10t/ha and even achieved 9.25t/ha in 2018 despite the prolonged drought. A further 30% of the land produces oilseed rape which averages 4.3t/ha. The remainder is split equally between winter barley, oats and beans.

"Spring weather has not been favourable for the last two or three years and conditions at that time of year can be very challenging," Mr Saunders states. "That was certainly the case in 2018 and I was very relieved that everything had been established in the autumn. Our Claydon-drilled crops have always looked good, but this year they were exceptional, which I believe is a benefit of applying fertiliser at the time of drilling."

Because weight is not transferred to the tractor's rear axle when the T4.8 trailed drill is lifted the pressure on the ground is kept to a minimum.

"When drilling we use GPS guidance, even on the headlands, and with the Claydon System all crops put down lovely deep root structures. We never create any ruts in the fields because the soil structure is now so supportive even the tramlines are invisible on the yield map because there's no difference between those areas and the rest of the field."

"We bale a high percentage of the straw but chop if we need to put back nutrients into the soil. The 2018 harvest finished on 18 August and nearly all the straw was sold in the swath because the price was good, and it made sense to do that."

"We aim to leave 15cm to 20cm of stubble behind our John Deere S685i Hillmaster and most of the land then receives up to three passes with a 7.5m Claydon Straw Harrow to encourage weeds and volunteers to germinate."

"If the soil is hard and the harrow doesn't move quite enough soil we run over the land with a set of shallow discs, roll, then let the land green over. We then go over it with the Straw Harrow, which is fast and cheap to operate. It creates about 25mm of tilth, which is just enough to get weeds and volunteers germinating quickly, kill the slugs and destroy their eggs."

"The new Hybrid T arrived in September 2017; we drilled 2,000 acres that autumn, comfortably and without ever approaching its limits, so there's plenty of capacity in reserve to take on contract work. I like the fact that it works well for all crops, in all soils and all conditions, unlike some ultra-low-disturbance units which I feel would only operate well in certain situations and are therefore too much of a risk even to consider."

The Claydon drill's leading tine reduces compaction and aerates the soil before the following tine places seed at the right depth.