



## FOCUS SUFFOLK

### QUICK FACTS

Farmer  
Hugh Edgeley

Location  
Suffolk

Area Farmed  
between 526-999 acres

Soil Type  
Hanslope series clays & sandy clay loam

Average Rainfall  
Circa 600mm/yr

Cropping  
Winter wheat, winter osr , spring barley



## Strip tillage transforms family farming business

Adopting strip tillage has transformed crop establishment for award-winning family farming partnership R & H Edgeley in Suffolk, bringing a wide range of benefits. Julian Cooksley reports.

Breaking the bond with tradition is never easy, but following the challenges of the wet Autumn of 2012, followed by a wet harvest in 2013 and then looking to the possibility of a downward trend in agricultural commodity prices Richard and Hugh Edgeley decided there had to be a better, more cost-effective way of establishing crops than the conventional methods which they had used for years.

"Other farmers tell us that we are brave to take what they perceive to be a huge risk in changing from conventional methods to strip tillage," Hugh states. "Our view is that with huge uncertainty and price volatility in the agricultural sector we would have to have been brave, even foolhardy, to have carried on with what we had been doing. We felt that it was better to make that move



In 2015, R & H Edgeley won the overall Challenge Cup for farms of 526-999 acres in the South Suffolk Crops Competition, as well as first prize for oilseed rape over 40 acres.

*Top left: Hugh Edgeley says the cost savings achieved by using the Claydon System have enabled the business to invest in guidance systems which have saved more time and made field work more accurate. The same tramlines will be retained to create firm areas that better support the weight of the sprayer*

when crop prices were at reasonable levels and we had time to adapt rather than waiting until we were forced to change. Doing so has made a considerable difference to our business."

Farming in partnership from Haymarket Farm at Little Waldingfield, Hugh and his father Richard jointly manage their arable farming business. Winner of the 2015 Challenge Cup in the South Suffolk Crops Competition for farms between 526-999 acres, the business was started by Hugh's late grandfather Thomas Edgeley, who witnessed farming with horses in the early 1900s to the modern methods of the 1990s. He was always keen to adapt to new ideas and would have been fascinated with the technology available today, Hugh



Hugh Edgeley studies the soil profile in a heavy clay field where the structure has improved dramatically since the farm started Claydon drilling.



"Having given up growing sugar beet because of declining prices and the adverse impact on soil structure, the business now produces first (*Santiago*) and second (*Skyfall*) winter wheat, winter oilseed rape (*Evolution*), spring malting barley (*Propino*) and either spring beans or peas depending on markets and what contracts are available. Soils range from Hanslope series clays to sandy clay loam.

As a relatively small independent family farming business we have to be able to compete with larger producers' economies of scale and three years ago we identified three ways to help us do that," Hugh explains.

"Firstly, joining a true farmer-owned cooperative has significantly reduced our input costs. We signed up with Fram Farmers to provide us with greater buying power and independence. It has reduced our input costs, with far less time and hassle required to buy all of our ag-chemicals, seed, fertiliser, fuel and other necessities such as electricity, 'phones and building materials. We also benefit from totally independent advice from their team of product specialists, which is a real advantage when you are dealing with complex areas such as generic ag-chemicals and want sound advice with no commercial bias.

Secondly, using an independent agronomist, Andrew Blazey at Prime Agriculture, allows us to buy key inputs such as ag-chemicals through the cooperative which we have found to be cost effective.

The final piece in the jigsaw has been to adopt the Claydon System of crop establishment, which has brought dramatic benefits. Apart from reducing our costs, it has improved timeliness, resulted in higher yields and increased gross margins, while the huge time saving gives us more opportunity to manage the business and for family life."

#### **A NEW APPROACH**

Focused on producing mostly added value crops which will generate a premium at the optimum cost, Hugh adds:

"Over the years we have used various cultivation methods to establish crops, from stubble burning and chisel ploughing in the 1980s, a power harrow/drill combination for ten years, then in the 1990s, as the farm grew, a heavy disc-type drill and CultiPress. From there we went to a deep cultivator/disc packer combination to improve timeliness, combined with a wider disc-type drill.

Three years ago we reached a pivotal stage, when a number of things were happening. The pressure to get seedbeds in a short time was increasing and achieving timeliness in the autumn was becoming a real issue, even if harvest was on time and good weather followed. A series of wet autumns put pressure on timeliness, we were starting to lose the battle with blackgrass and our previous cultivation system was simply mixing blackgrass seeds within the top layer of soil and not actually dealing with the problem. Slugs were also on the increase, which was worrying because of increasing regulations over the use of Metaldehyde.

Strip tillage represented the unknown, largely because it was so different to what we had been used to, but then we realised that what we were using was not working too well. It all came to a head in 2013 when harvest was late as a result of the wet, cold growing season and we didn't start combining until the second week of August, when we should have been drilling oilseed rape. We had to get the crop in the ground quickly if it was to go in at all, so we had very few options.

"Purely for timeliness we hired in a contractor to drill our oilseed rape using a 6m Claydon Hybrid. We had seen him working on a neighbouring farm in previous years and been impressed by how well their crops looked, but also rather annoyed because they did so with so little effort. He drilled all 85 acres in a day and despite poor soil structure following the wet autumn of 2012 the crop looked good from the word go. It was so good in fact that it got us thinking about using strip seeding for wheat and, as a trial, we asked him to drill 9ha of winter wheat on heavy land with a history of blackgrass to see if and how it worked.

We were amazed at how quickly the crop emerged and how well it looked throughout the season. The oilseed rape and wheat which were drilled with the Claydon System fully surpassed our expectations in terms of overall yield and made us increasingly interested in adopting the concept across the whole farm.

Looking back, I realised that our attitude towards strip tillage had been due to a lack of understanding of how it should and could work. Once we had got our heads around the idea of not inverting the soil and seen the benefits on our own farm that marked the turning point.

### KNOWLEDGE IS THE KEY

In November 2013 we had a demonstration of a 3m Hybrid from Claydon and used it on our own tractor to drill 40 acres of winter wheat on some off hand light land that was in continuous wheat and spread across several small fields that were both difficult and time consuming to establish. Despite initial concerns that we were using it too late in the season, and outside of the optimum drilling window, it quickly became apparent that establishment was vastly superior to what we had been achieving. That made up our minds.

In 2014 we invested in our own 7.5m Claydon Straw Harrow to operate immediately behind the combine to create a fine tilth which would encourage weeds to chit, as well as killing slugs and destroying their eggs. We also bought a 3m Claydon Hybrid, which is fitted with most of the available options.

The reason why the Claydon Hybrid drill works so well is that it is very simple in terms of its design. The leading cultivator tine is separate to the seeding share, so that the cultivation depth can be set according to the soil conditions without compromising the seeding depth.

The result of this flexibility is a strip till drill that can work in varying conditions with the simplest of adjustments. In wet conditions, for example, the leading tine can be set fleet to minimise soil plugging but still make for good drainage in the seeding zone. When sowing a deep rooted crop such as oilseed rape the leading tine can be set at up to 150mm deep if necessary, but the seeding share can still be operated at 10mm.

Initially we intended to use the Claydon System solely to establish oilseed rape and first wheat, but were so impressed by the results of that first harvest that we decided to use it for everything.

The key in using the system successfully is to understand how it should be used. If you take the time to do that then you become much more aware of your soils and how they work, of the importance of good drainage, of what good soil structure should look like and of the importance of worms and organic matter.

One of the factors which we came to understand, having spoken to Jeff Claydon who developed the system, is that the system works best where the straw has been finely chopped and evenly spread, so now, for example, we sharpen the static knife on the combine chopper every other day to achieve the best results.

### KEY ADVANTAGES

The Claydon Straw Harrow is, in our opinion, essential to the system. This autumn we had one field where the combination of wet weather and clay soil meant that there were so many slugs on the oil seed rape stubble that we feared for the following crop of winter wheat, but two passes with the straw harrow, one day apart, produced much better control than slug pellets.

Since using the Straw Harrow routinely we have used fewer slug pellets than ever before and seen the least number of slugs post drilling, so it absolutely makes sense. It also improves timeliness because we can start to chit blackgrass early giving us the opportunity to kill one- and two-leaf plants with a second harrow pass thereby



The 15m Claydon Straw Harrow is used behind the farm's 220hp Claas Axion 820 at up to 14km/h to create a fine tilth that allows weeds, including blackgrass, to germinate quickly and kills slugs.

considerably reducing glyphosate use, which helps to tackle the issue of possible future resistance and is much cheaper.

"In autumn 2015 we tried a wider 15m Claydon Straw Harrow, which was heavier, slightly more aggressive on the soil and had twice the output of our existing 7.5m unit. We used it behind our own 220hp Claas Axion 820 and were able to get around all of our winter wheat land in two days, in ideal conditions, at the optimum forward speed of 14km/h and with much better results. When we compared what we would have spent on glyphosate and slug pellets it quickly justified the cost of buying the larger Straw Harrow, which is very cheap to operate, simple and will have a very long working life.

"During the last two seasons we have been amazed at the much wider drilling window that strip tillage gives us. And whereas using conventional cultivations presents significant risk from the weather, either too dry or too wet, because the Claydon System is so efficient we know that we can wait until conditions are just right for drilling and still get the crop in at the ideal time, in the ideal conditions."



**Strip tillage has dramatically increased the worm count, leading to much better drainage and structure.**

**"When we compared what we would have spent on glyphosate and slug pellets it quickly justified the cost of buying the larger Straw Harrow"**



This is the field that prompted Hugh and Richard Edgeley to buy their 15m Claydon Straw Harrow. Following a wet harvest, the sticky clay soil was covered in a deep mat of chopped OSR straw. According to Hugh, slug numbers were 'biblical' and the worst thing he could have done would have been to plough them in. Instead, two passes with the Straw Harrow reduced the population to manageable levels and *Santiago* winter wheat was drilled on 28 September 2015 at 165kg/ha. This is how the crop looked just before Christmas, but had it been established conventionally things could have been very different.



This crop of *Skyfall* winter wheat, pictured in December 2015, was drilled on 5 October using a seed rate of 175kg/ha by the farm's 3m Claydon Hybrid, after just one pass with the 15m Straw Harrow. It followed the previous crop of *Santiago*, which yielded 11.11t/ha and produced a high volume of straw.