

ARABLE

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

Crop establishment change is a turning point for family farm

Breaking 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, father and son 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.

Hugh Edgeley says: "Other farmers tell us we are brave to take what they perceive to be a huge risk in changing from conventional methods to strip tillage."

"Our view is 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 it was better to make that move when crop prices

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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, near Sudbury, Mr Edgeley and his father jointly manage their arable farming business. Winners of the 2015 Challenge Cup in the South Suffolk Crops Competition for farms between 213-405 hectares (526-999 acres), the business was started by Mr Edgeley's late grandfather Thomas.

New ideas

"He was always keen to adapt to new ideas and would have been fascinated with the technology available today," Mr Edgeley says.

"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," Mr Edgeley 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



Hugh Edgeley jointly manages Haymarket Farm, near Sudbury, with his father. PICTURES: Julian Cooksley

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."

Added value crops

Focused on producing mostly added value crops which will generate a premium at optimum cost, Mr Edgeley says over the years the farm has used various cultivation methods to establish crops, from stubble burning and chisel ploughing in the 1980s, a power harrow/drill combination for 10 years, then in the 1990s, as the business expanded, 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," he says.

"Three years ago we reached a pivotal stage, when a number of things were happening. The pressure to get seedbeds com-

pleted in a short time was increasing and achieving timeliness in 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 black-grass and our previous cultivation system was simply mixing black-grass 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 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

Managing costs

HOW the Edgeleys have changed their business:

- Joined a farmer-owned cooperative

- Independent agronomy advice
- Adopted strip tillage for crop establishment



When compared to what the Edgeleys would have spent on glyphosate and slug pellets, it quickly justified the cost of buying the larger 15-metre Claydon straw harrow in autumn last year.



Skyfall (pictured in December 2015) was drilled October 5, 2015, using the strip tillage approach.

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 six-metre 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, 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 black-grass 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 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 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 had seen the benefits on our own farm that marked the turning point.”

In November 2013 the Edgeleys had a demonstration of a 3m Hybrid and used it on their own tractor to drill 16ha (40 acres) of winter wheat on some light land in continuous wheat and spread across several small fields, which were both difficult and time consuming to establish.

“Despite initial concerns we were using it too late in the season, and outside of the optimum drilling window, it quickly became apparent establishment was vastly superior to what we had been achieving. That made up our minds,” says Mr Edgeley.

Straw harrow

In 2014 the business invested in a 7.5m straw harrow to operate immediately behind the combine and a 3m Hybrid, which is fitted with most of the available options.

Initially the aim was to use the new kit solely to establish oilseed rape and first wheat, but after good results from the first harvest, the Edgeleys decided to use it across the rotation.

The straw harrow is essential to the system, adds Mr Edgeley.

“Last autumn we had one field where the combination of wet weather and clay soil meant there were so many slugs on the oilseed rape stubble 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.

“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 black-grass early, giving us the opportunity to kill one- and two-leaf plants with a second harrow pass, thereby considerably reducing glyphosate use,

Farm facts

- R. and H. Edgeley, Haymarket Farm, Little Waldingfield, Suffolk
- Soil types - Hanslope series clay to sandy clay loam
- **Cropping**
- Gave up growing sugar beet because of declining prices and the adverse impact on soil structure
- Now grow first wheat (KWS Santiago) and second wheat (Skyfall), winter oilseed rape (Evolution), spring malting barley (Propino) and either spring beans or peas depending on markets and what contracts are available

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/hour 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,” says Mr Edgeley.

“During the last two seasons we have been amazed at the much wider drilling window which strip tillage gives us,” he adds.

And the switch has helped limit the risk associated with conventional cultivations of conditions either being too dry or too wet.

“We know we can wait until conditions are just right for drilling and still get the crop in at the ideal time, in the ideal conditions,” he says.



This three-metre Claydon Hybrid drill has brought numerous benefits for Hugh and Richard Edgeley.



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



The 15m Claydon straw harrow has twice the output of the Edgeleys' previous 7.5m machine.

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