



Third generation farmer Phil Redfearn

Switch to Claydon strip seeding saves Yorkshire farmers time and money and generates additional income.

Phil and Simon Redfearn are third-generation farmers whose family have lived at Park House Farm, Birkin near Knottingley for almost 100 years. Phil and Simon farm 170 hectares, the majority of which is owned. In 2017, their predominantly medium loam soils cropped with 70 ha of Skyfall and Leeds winter wheat, 20 ha of Harper and Envigour oilseed rape, 17 ha of Mulika spring milling wheat, together with 33 ha of Fanfare spring beans for human consumption and 30 ha of grass.

While spring barley has become somewhat fashionable during the last couple of years, the Redfearns have been growing the crop for 11 years to widen the rotation and spread the workload, although it has now been switched to spring wheat to help with storage. They also introduced spring beans into the rotation well before the three-crop rule came into being; in 2014 the crop produced the highest gross margin.

Outlining the background to their current system Phil states: "Traditionally, we used a full cultivations programme. Straight behind the combine we went in with a Flat-Lift subsoiler fitted with a tine toolbar, then left the land to green over before spraying it off

FARM FACTS

Farmer: Phil Redfearn

Location: Yorkshire

Area farmed: 170 ha + 840 ha contract

Soil: medium loam

Cropping: winter wheat, oilseed rape, spring milling wheat, spring beans, grass



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and then drilled with a 3m combination unit. This is still the standard approach in this area. It worked, but the big drawback was that the output was only 10–12 ha per day, which made it slow and expensive.

"We began looking at alternatives in 2010, specifically methods that would move less soil, create a better soil structure with increased organic matter, could deal with chopped straw and were faster and cheaper to operate. We were particularly keen to move away from PTO-driven equipment because of the additional wear and tear on the tractors which this type of equipment causes. It is a hidden cost that most farms do not think about or account for, but one which is a real consideration in terms of increasing maintenance costs.

WELL-PROVEN SYSTEM

"The Claydon System was an obvious contender: it was well-proven and we had heard good reports from other farmers. When we visited the Claydon farm we saw just how good the soil structure could be, even on heavy clay, and visited several other

farms using the Claydon System on the same land as ours. What impressed us was how well the crops looked, the farmers' enthusiasm for the technique and the benefits they were achieving. At the time Claydon didn't have a dealer network in our area and not many people knew much about them, so it was something new and different.

"Our main concern was power availability. At the time, we operated two 125hp 6620 John Deere tractors. We didn't want to buy a new drill only to find that we needed a larger tractor as the additional expenditure would have negated any cost saving, so the 3m Claydon Hybrid was the obvious choice. Although it was the same width as our power harrow/drill combination the output is much greater. Last year one 6620 was upgraded to a 50kph 6930 Premium, so either tractor can be used with the drill.

"We first used the Claydon Hybrid in spring 2012 to drill spring barley into land where manure from our livery stables had been spread. With lots of straw to deal with it was a tough test of any drill, but we were pleasantly surprised at how well the Claydon



3m Hybrid establishes crops "in half the time and with much better timeliness"



In spring, Claydon crops “romp away and establishment is much more even”

Hybrid performed, even with 20cm of stubble. We drilled the headland first and then the main part of the field. Our John Deere 6620 pulled the drill easily, with the front tine set at 10-15cm, the A-share at 2.5-4cm and the rear batter boards levelling the ground. The crop emerged looking better than we could have ever hoped for.

“Despite the very wet autumn in 2012 we got everything in the ground, apart from one small area which had flooded. But as soon as it dried out, that area was drilled and the crop all emerged well. It was too wet to roll, which did prompt us to buy a following harrow for the back of the drill to assist seed coverage and level the field. That has made a big difference and allows us to fine-tune the soil finish, leaving a lovely level surface and ideal conditions for the ag-chemicals to work.

SIMPLE TO USE

“The Claydon Hybrid is very easy and straightforward to set up and a minimum of moving parts makes it much less expensive to own and operate than a combi-drill. The metering system is easy to calibrate and accurate, while the depth control is simple to adjust and maintains an even sowing depth, so it doesn’t need much adjustment. The Hybrid is a very functional and highly adaptable drill which works well and delivers very good results.

“After just one season we noticed much greater worm activity and even where manures had been applied the previous autumn there was nothing much left on the surface in the spring as it had all been taken down into the soil. This has helped to bring about a progressive improvement in soil condition; fields are much more level and in the last four years we have not needed to subsoil because the drill’s leading tine continually removes any surface compaction.

“The beauty of the Claydon Hybrid is that you can set it to move as much or as little soil as you like. The output is so great that establishing crops is done in half the time and with much better timeliness, so they go in under optimum conditions. The other components of our Claydon System are a 7.5m Claydon Straw Harrow and 12m Claydon Rolls.

After the crop has been combined and the straw chopped to 2.5-5.0cm we go into it with the Straw Harrow at 30° to the combine wheelings. This operation ensures that the weed seeds and volunteers chit well and minimises carry over. If a second pass is required we operate at 30° in the opposite direction so that fields are constantly levelled.

“In the past we had to start drilling winter cereals in mid-September because our old system was slow and we couldn’t run the risk of the land turning wet. Last autumn we started in mid-October, which has helped to reduce weed populations.

“The Claydon System generates a time saving of at least 50 per cent, which combined with all the other benefits makes a significant difference to our bottom line. Yields averaged over 10 t/ha in 2014 and 2015, about

10%-15% higher than our previous establishment system.

“You need patience to get the best out of the Claydon System - the increased output of the Hybrid drill compared to conventional methods allows you to drill at the optimum time and conditions. We can drill 50-60 acres per day of oilseed rape, 35-45 of cereals and 30-40 of beans, so there’s no need to rush. When it comes to establishing beans, I don’t think there is a better tool than the Claydon Hybrid. Our best year was 2014 when the crop averaged over 6.8t/ha and since then they have done 6.25 – 6.5 t/ha.

“Band sowing has significant advantages and there are visible differences between the Claydon System and traditional methods. We have noticed that Claydon-drilled crops are not the quickest out of the blocks, often because they have been drilled later as the output allows us to do that. But you learn not to be concerned because in the spring they seem to romp away and the establishment is much more even.

“Perhaps the most extreme test was in 2013 when I drilled a winter wheat into 12" high volunteer oilseed rape, which was then sprayed off. It left a wonderful crop, despite not using any slug pellets because the Claydon Straw harrow had done such a good job of killing the adults and destroying eggs. In 2016, we hardly used any slug pellets at all.

“Since changing to the Claydon System the hours that our tractors clock up have been substantially reduced and the fuel bill has dropped to less than half what it was. With the time saved we do work outside of the farm. Simon works on neighbouring farms from mid-September to November and I do contract Avadex spreading, which helps to bring in extra revenue.

“All things considered, adopting the Claydon System has proved to be a great success.”



5 years’ Claydon drilling means “fields are much more level”