

Switching systems

FMJ visited an award-winning family business in the Scottish borders that has invested in the latest Claydon Hybrid T6 strip seed drill

WORDS AND IMAGES DAVID WYLIE

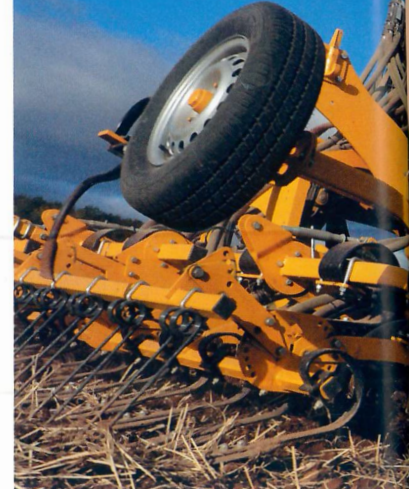
Just outside Coldstream, a town on the north bank of the River Tweed in Berwickshire and the birthplace in 1650 of the British Army's famous Coldstream Regiment, lies Coldstream Mains Farm, owned and operated by Colin McGregor and his wife Jill.

The McGregors' farming roots can be traced back to 1709 as dairy farmers in Ayrshire. In 1927 the family moved from Park Mains near Paisley to take over the Coldstream Mains tenancy, taking their herd of Ayrshire dairy cows with them, along with pigs, sheep and then starting to grow cereals and potatoes.

In 1989 - in his early 20s - Colin was given control of the farm and started to rationalise the 340ha operation to a simple cereal and potato rotation. Over the years they have successfully built up a large contract business, which has won them multiple awards, including Progressive Farmer of the Year in 2016 at the Food and Farming Industry Awards.

Today they are responsible for farming approximately 3649ha, of which 304ha is their own family arable farm, and 3345ha with 14 different contract farms and all within a relatively easy 17-mile reach from their base.

Above right: McGregor Farms have a range of establishment equipment and drills at their disposal but the Claydon Hybrid T6 offers a low disturbance option



McGregor Farms' underlying working ethos is 'attention to detail', being an early adopter of precision farming, initially with yield mapping since 1996 and GPS technology to lower costs, increase productivity and crop yields. Using SOYL, a leading precision crop production service provider in the UK, to sample the soil and produce conductivity maps allows variable applications of phosphate, potash and lime, as well as seed rates, which is said to have produced excellent results. And they carry out their own variable lime spreading when required.

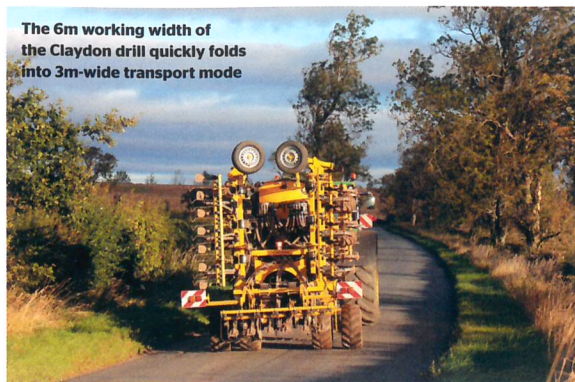
Going with guidance

State-of-the-art GPS kit fitted to all their front-line equipment allows fields to be divided electronically by putting in digital boundaries around different areas and these areas are





The 6m working width of the Claydon drill quickly folds into 3m-wide transport mode



TECH SPECS

- Claydon Hybrid T6**
- Daily output 45ha
- Minimum power requirement 300hp
- Transport width 3m
- Transport height 3.9m
- Weight 8.6-9.0t
- Depth 9.4m
- Hopper capacity 5500 litres
- Seeding tines 19
- Fan Hydraulic

managed individually to enhance their attention to detail approach. All these technologies are used to help to maintain or increase yields and increase productivity output.

McGregor Farms have a full range of crop establishment equipment to cope with different soil conditions, weather and crops. For example, in some fields they use a Case IH

“The Claydon helped produce a half-ton additional yield per acre”

Quadtrac 540 CVX to easily pull a massive 12-furrow plough used for vining peas, while in some more challenging soils they will deploy their Simba SL cultivators to establish



Below: Camera systems have been set up to keep a check on parts of the seed delivery system

Below right: The seeding tine creates more tilth and places the seed under the tilth at the chosen depth above the drainage channel

oilseed rape, which can be used along with liquid and starter fertilisers.

The latest addition to the fleet is a Claydon Hybrid T6 drill, hosted by a John Deere 8400R and trusted to operator Tony Culbertson. With a constant eye on cereals margins, new ways to increase yields, and lowering costs, both on his own farm and for contracting customers, Colin McGregor decided to have a small back-to-back field trial by one of Claydon's customers operating the latest Hybrid M4 drill.

They chose to sow spring barley, having half the field drilled by the Claydon drill and the other half drilled by a different design. The results at harvest time were impressive and the Claydon provided much lower establishment costs and its half of the field had very few weeds. When harvested it helped produce a half-ton additional yield per acre using this approach.

Converted to Claydon

Convinced this was the way forward, in the spring of 2018 Colin bought an immaculate pre-owned Hybrid T6 strip drill from Claydon. On arrival it was put to work straight away and they managed to drill some peas in late spring.

Claydon has over 16 years' development experience and has built its considerable farming experience into its products. Its

unique two-tine design Hybrid strip drills are said to be designed with the leading tine to bust out compaction, which then puts air in the soil and creates drainage and tilth for the seeding and rooting zone. The seeding tine then creates more tilth and places the seed under the tilth at your chosen depth above the drainage channel. Other features are high clearance, simplicity in set-up, ease of use, low maintenance and wearing parts, which are claimed to cost under £2 per acre.

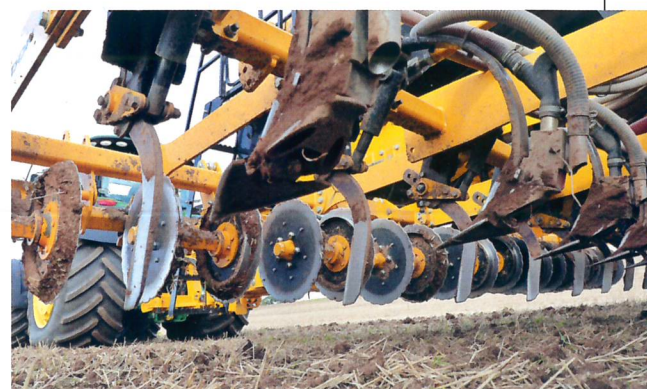
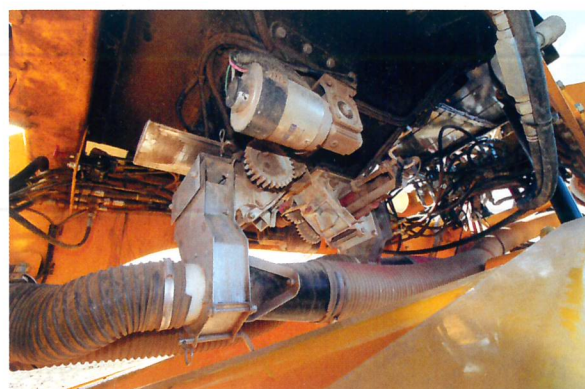
The Claydon Hybrid T6 unit is also claimed to help retain moisture in the soil and is another benefit to aid effective seed germination, typically resulting in seeing the first shoots in seven to 10 days.

Tony Culbertson explained that in this particular field a straw harrow would normally be used to encourage volunteers and weeds to germinate, which are then sprayed. However, they decided to use Claydon's TerraStar low disturbance cultivator before drilling, which has been designed to create tilth and

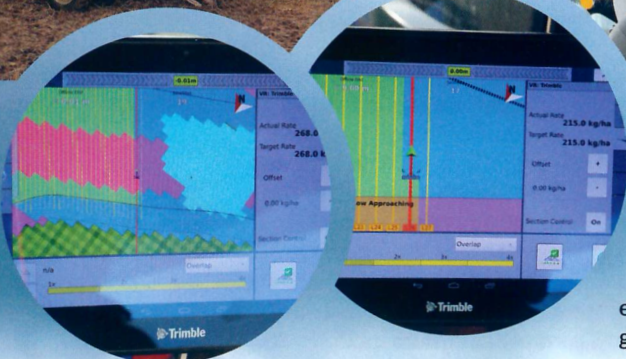


Top: Operator Tony Culbertson has been impressed with the drill behind his John Deere 8400R

Above: (L-R) Colin McGregor, Jill McGregor and arable manager David Fuller



The Claydon T6 holds approximately 5500 litres of seed or a 60:40 split of seed and fertiliser



► drainage with low soil disturbance and complements the Hybrid T6 strip drill. That said, the crops can also be established in a one-pass approach straight behind the combine.

Tony indicated he can easily cover over 100 acres per day and regularly hits 120 acres per day with the Claydon drill, commenting: "The Claydon strip drill is very operator friendly and easy to set up. It is cleverly designed to be a simple and effective drill that covers the ground quickly with a one-pass approach. This simplifies the process and helps deliver significant reduction in establishment costs."

With the fields extensively mapped for soil condition, Tony has a Trimble GPS system with a large and bright LCD screen that is used in conjunction with the field mapping systems for targeted drilling and auto-steering the tractor.

The Claydon drill can also be plugged into the standard John Deere ISObus screen, but it was decided to have a dedicated screen from Artemis to display drill performance and set-up, showing forward and fan speeds, seed consumption, and so on, which Tony finds to be a



Inset above and above right: The fields are extensively mapped for soil condition, allowing targeted drilling. The purple band is drilled at 268kg/ha while less heavy soil is drilled at 215kg/ha

Inset below: Drill performance and set-up are carried out using this screen, which also displays forward speed, fan speeds and seed consumption

very operator-friendly system.

With a mix of hardwired and Bluetooth screens Tony can also keep a close eye on the drill's operational activity, with several cameras to cover the rear view, seed tank levels, and to help keep a check on parts of the mechanical seed delivery system.

Space for seed

The Claydon T6 has a massive 5000-litre tank for seed or a 60:40 split of seed and fertiliser, which means fewer pit stops and more productive time drilling. Access to the top cover of the tank is via a good set of steps and a catwalk that can easily be extended with a hinged rear section that flips down to cover the full length of the tank. The tank is mounted on its own chassis to help ensure it does not compromise the seeding depth with

Above: 8400R operator Tony Culbertson lets the GPS take care of steering the tractor so he can focus on the drilling operation

no weight transfer as the tank empties.

While most of the fields we encountered were fairly flat with some gentle inclines, one field during our visit had some steep sections. To cope with this, and for high productivity, the farm operates some high horsepower conventional and articulated tractors, and their John Deere 8400R has more than enough grunt from its 400hp engine to cope with the steepest of slopes and the drill.

"I really like this big 8400R tractor as it is an extremely nice place to spend a long day drilling and working, and with modern auto-steer systems it's a lot more relaxing as I've got plenty of other things I need to concentrate on throughout the drilling process," says Tony.

"To date we have found the Claydon Hybrid T6 drill to be meeting our expectations and offers us another drill option for our own and our customers' needs. We expect to benefit from reduced running costs with this Claydon Hybrid drill over the next few years," Colin concludes.

"The Claydon strip drill is very operator friendly and easy to set up"

