



FOCUS DEVON

FARM FACTS

Farmer / contractor: Brian Adams

Location: Church Town Farm, Fairy Cross near Bideford, Devon

Soil: Wide ranging - heavy to light, stony

Cropping: Herbal leys, overseeding, spring cereals, forage rape, winter wheat, maize

Direct strip seeding now first choice for many farms in the Southwest

Direct strip seeding is attracting a rapidly growing following amongst farmers in the South West of England as a means of establishing a wide range of crops because of its advantages over the traditional plough and power harrow-based approach.

Brian Adams is a farmer and contractor based at Church Town Farm, Fairy Cross near Bideford. He provides soil testing and crop establishment services to arable and livestock farms throughout the region. Brian says that the profound economic and staffing changes taking place in the farming industry, combined with a growing awareness of soil health, are driving more widespread adoption of this innovative technique.

“Over the years I became very aware that the plough and power harrow are terrible for the structure and health of soils, which often become completely anaerobic and lifeless. Erosion following heavy rain was also an increasing concern. The problem was compounded by the fact that most cereal straw in this area is baled for bedding or feed, so not enough organic matter was returned to the land. The issue was evident throughout this area, even on Exmoor’s light soils.

“When developing my contracting business in 2005 I began looking for an alternative method of establishing crops. The average annual rainfall in this area is 1220mm. This ruled out disc-type drills because in wet conditions seed would simply become waterlogged and rot in the row, so whatever I purchased had to be tine-based. The drill which caught my eye early on was the Claydon V-Drill, which had been launched a couple of years earlier.”

Following a conversation with the drill’s designer, Jeff Claydon, Brian and his agronomist visited the Claydon family’s farm in Suffolk to find out more. There he learned more about the Opti-Till® System, a holistic approach to crop establishment which delivers consistent, high yielding crops at low cost for maximum profitability.

“Jeff took me on a tour of his farm, and I was impressed by just how well structured and free draining the soils were; that sold me on the Opti-Till® System. Even at that time, Jeff had done a tremendous amount to promote soil health and it made me realise how beneficial that approach could be to improve the structure of soils, reduce erosion and increase worm populations on farms in Devon.”

The V-Drill, which Brian subsequently purchased was the first example that Claydon sold in the South West and for seven years it established thousands of acres of game cover crops on farms throughout the area.

TAKING A NEW APPROACH

Brian’s traditional customers were small-scale dairy farms, but subsequently his client base expanded to larger livestock enterprises and arable units throughout North and mid-Devon. To cope with the growing scale and diversity of the business, in 2012 he traded the V-Drill in against one of Claydon’s latest Hybrid models which had been launched in 2009.

“I needed a drill which was very versatile and would operate reliably in any situation. Although others worked well in certain locations or conditions, many were unnecessarily complex, heavy and would not reliably cope with the wide range of soils and conditions found in this region.”

The Claydon Hybrid stood out because of its leading tine design which eliminates compaction and promotes good drainage, the absence of press wheels and a simple, practical configuration.



Brian Adams in an AB 9 mix, drilled with his Claydon Hybrid drill equipped with the Twin-Tine set-up.

Although designed to drill direct into stubble it can also be used in plough and min-till scenarios, works equally well on heavy clay and light sandy soils, and in baked out ground or wetter soils.

Brian's original 4.8m mounted Claydon Hybrid drill proved ideal for operating in the often small, steeply sloping fields which are characteristic of the area and for coping with the heavy land situations. In 2021, with work increasing and a wider range of clients coming on board, Brian invested in a second drill of the same make and type. Purchased through the Torrington branch of Claydon dealer Hamblys, it had one key difference.

"Grassland farmers were asking me to do their reseedling work, but my existing Hybrid was not suitable because of its leading tine configuration. The new one has Claydon's Twin Tine kit, which is ideal for drilling into grass leys with minimal disturbance as well as stubbles, cover crops and cultivated land."

One of several options available to extend the versatility of Claydon Hybrid mounted and trailed drills, the Claydon "LD" lower disturbance set-up can be specified on new machines or ordered as a retrofit. Replacing the standard seeding tine, it can be used either with Claydon's standard leading tine

or in combination with double cutting discs which minimise soil disturbance and reduce the power requirement.

The two 44mm x 12mm hardened steel tines in the twin-tine unit are four times stronger than normal 30mm x 10mm tines. Fitted with 15mm points, they feature unique double-leaf helper springs which maintain a consistent seeding depth even in very dry, hard, heavy soil conditions, yet permit enough lateral movement to displace surface trash and prevent blockages.

Providing a more traditional finish than band seeding, the seeded rows from the twin tine set-up are spaced 150mm apart but the brackets which hold the tines in place can be moved in by 50mm. This allows the width of the seeded band to be reduced to 100mm, providing more space for a Claydon TerraBlade inter-row hoe to take out any weeds growing between the rows.

For ultra-low-disturbance drilling of soils which are in excellent condition, the Hybrid's standard leading tine can be replaced with twin 330mm diameter front cutting discs, either a plain design or the 330mm fluted 'Spiradisk', both of which have an integral scraper to keep them running cleanly.

The great benefits of the 'swap-in, swap-out' design are the ease and speed of changing from a standard direct strip till set-up to the LD option. The standard A-Share can be replaced with the twin tine set-up simply by undoing three bolts and changing them over, while the standard leading tine can be replaced with the double disc unit by removing one pin.

EXPANDING TO MEET GROWING DEMAND

"My two Claydon Hybrid drills are very versatile and that means we can drill any crop that can be air sown in a wide range of conditions," Brian states. "With leading discs to cut through trash the Twin Tine is ideal for small seeds, while the tines break up any smearing left by the discs and allow water to get away; this is essential because much of the land around here is heavy, and we are in a high rainfall area.

"Last year was our first with the Twin-Tine system, which we used mostly to drill short-term leys after maize, finishing on 4 October. The concept has also become extremely popular for drilling herbal leys into existing pasture and overseeding.

"We drill a limited amount of spring cereals and once barley has been harvested move on to establishing stewardship schemes.



Autumn is our peak workload, starting with forage rape and going through until the beginning of November establishing wheat after maize. We drill up to 1,500 acres a year, two-thirds of which is cereals, the remainder stewardship and reseeding projects.”

The two drills are owned by Brian but operated through Cann’s Contractors by staff members Tim, who has used Claydon drills since Brian bought his first V-Drill, and son Will, using Fendt 724 and John Deere 6R 215 tractors. Forage rape is drilled at a forward speed of about 15km/h, covering around 4ha per hour, while cereals go in at up to 13km/h, with outputs of 2.75ha – 3ha per hour, the exact figures depending on field size and conditions.

“It’s not just a case of doing a job then forgetting about it until the next season” Brian adds. “We work closely with Oliver Seeds, as they are particularly good when it comes to grass mixtures, and never drill anything that we do not think will emerge and be successful. I monitor the progress of every crop throughout the season to ensure that we achieve the best possible outcomes for our customers.

“Slurry or digestate is hugely beneficial to achieve the best results as the seed germinates best when in close contact with a nutrient-rich growing medium which allows the crop to get away quickly. Last September we drilled sixty acres of long-term grass in a field which had been cut for silage and digestate had been

applied; the germination was as good as I have ever seen.”

“Customers notice a significant and progressive improvement in their soils where crops are established using the Claydon Hybrid and they have us back to do more. It is rewarding to see how this approach benefits them and the difference it makes to their results.”

VERY VARIABLE WEATHER

This season has been very variable in the area which Brian covers. In November 2022 he recorded 250mm of rain, in March 2023 132mm fell compared with 51mm the previous year; he has never known it to be so wet at the beginning of May nor so dry at the end of the month. From then until the start of July just 12mm of rain fell.



4.8m Claydon Hybrid operating on one of Brian Adams’ customers’ farms in the South West



The Claydon Hybrid drill features a unique leading tine which moves the optimum amount of soil, but only where needed, namely in the seeding and rooting zone. It creates tilth and drainage, aerating the soil, alleviating compaction and providing the perfect environment for rapid seed germination. Soil between the seeded bands is left undisturbed, helping to conserve moisture for the plants to tap into, while the undisturbed banks of soil support the weight of farm traffic, minimising the damage caused by wheelings and compaction.

“Many farmers had to turn stock out early this year because they were short of forage due to last year’s exceptionally dry conditions, but the very wet weather then resulted in grassland becoming badly poached and many areas need to be reseeded.

“The problem was made worse because many farms are using much larger trailers and slurry tankers which cause significant compaction, but the Claydon’s leading tines are ideal for taking that out. Being in a livestock area many farms spread slurry in

the spring and the Claydon-drilled fields are much better able to support the weight of machinery.”

Used to establish a wide range of crops, from wheat and barley to grass, maize and stewardship schemes, with excellent results, Brian’s two Claydon Hybrid drills have been very reliable. The only change to the standard specification has been to foam fill the tyres which were prone to punctures on certain very stony soils, while the latest Claydon Hybrid has seed blockage sensors. Because the drills are used for a significant area of overseeding and stewardship schemes he fits new wheel bearings at the start of each season to avoid downtime during busy periods. But that’s it.

“Farmers are always looking for ways to operate more efficiently, so I am not surprised that even traditionalists are coming around to the idea of using strip seeding to reduce their costs and improve soil structure.

“My two Claydon Hybrid drills make for an exceptionally versatile system which can be tailored to suit customers’ exact requirements, but I am currently considering a Claydon Straw Harrow and Claydon TerraStar light rotary cultivator to provide a complete crop establishment service.”



The low disturbance kit on a Hybrid drill. When conditions are not so favourable it is easy to swap back to the leading tine standard set up.