CLAYDON CUSTOMER

# FARMFOCUS

The third week of August 2018 and Andrew West stands beside a crop of maize that was drilled directly into grassland which had been in stewardship for years. Despite four months of drought that saw many maize crops fail, this one was tall and even.

## FOCUS SUFFOLK

### FARM FACTS

**Farmer:** Andrew West

**Location:** Suffolk

**Area farmed:** 2500 acres

**Soil:** variable, from heavy clay to light sandy loams

**Cropping:** salad potatoes, wheat, maize, triticale, oats, oilseed rape, beans, parsley, oregano, sage and coriander

## Warren Hill Farms in Suffolk produces up to 14 crops, from herbs to maize. Despite the wide variation in seed sizes and sowing depths, all are established using just one drill whose accuracy in establishing crops is "exceptional".

"The idea of using just one drill to establish multiple crops has always appealed to me, but in the past that was difficult to achieve because of the wide range of soil types on this farm and the numerous crops that we grow," owner Andrew West states.

"The key is to achieve well-structured soil profiles and level fields, because crops such as herbs are very small seeded and must be drilled at a precise, uniform depth otherwise they will not germinate. That can be difficult to achieve using deep, inversion tillage methods and the concept has become outdated. Certainly, there are instances when a heavy cultivation is required to rectify a soil structure which has been unavoidably damaged, for example subsoiling after root crops have been harvested in adverse conditions, but nine times out of 10 the drill we use now will take out any wheelings and compaction, creating the ideal growing environment for any crop.

"Farming 2500 acres, including 2000 acres of arable, Warren Hill Farms at Oakley near Diss is situated in a valley between the Rivers Waveney and Dove. The business currently produces salad potatoes, wheat, maize, triticale, oats, oilseed rape and beans. Herbs have been a key part of the cropping for over 30 years, with 200 to 300 acres of parsley, oregano, sage and coriander now contracted to a local company for freezing or drying. The aim is to lengthen rotations as much as possible, up to eight years for potatoes and parsley.

### SEED PLACEMENT

"We used to establish herbs with a dedicated 'precision' drill but the quality of seed placement from our Claydon Hybrid T is just as good," Mr West states.

"At first glance you would not think that a large, high-output trailed drill would be able to sow very small seeds at less than 1cm deep to the high standard of accuracy we require, with such uniformity, but the quality of establishment is exceptional.

"The choice of ag-chem products for many of our crops is now very limited, so in certain situations we aim to develop a thick canopy that will out-compete weeds. Parsley is a good example and because the seed is quite cheap we use a high rate to produce lots of vegetation.

Parsley, a major crop at Warren Hill Farms, is drilled directly using a Claydon Hybrid T to ensure even establishment and development.

Where the Claydon Hybrid T was used to establish parsley directly into stubble for the first time this year, the crop was three weeks earlier to harvest and produced 25% more yield than when drilled into land which had been ploughed and power harrowed.

"We have been using the Claydon System since 2013 when we considered direct seeding concepts from several manufacturers. All had their selling points, but the Claydon had the longest track record. I particularly liked its relative simplicity and lack of wearing parts, together with its ability to operate on a wide range of soil types. The other important aspect was that I could see it had constantly evolved over the years and continues to do so.

"The 6m Hybrid M mounted drill we bought in June that year was an ex-demonstration unit. It had done very little work and was attractively priced at about the same level as the new 4m version I had been considering, which would have been adequate for our acreage.

**Following harvest, the straw was baled and a 7.5m Straw Harrow used to encourage any weed seeds and volunteers to germinate before being drilled with oilseed rape.**

**Comparison between parsley sown using a disc drill on the left of the centreline and the Claydon-drilled crop on the right.**

That drill completed four seasons before the current 6m Hybrid T trailed drill arrived in January 2017. It's now in its second year and operates behind a 360hp Fendt 936 Vario on a controlled traffic farming system with tramlines at 36m, so everything fits around that, including the 12m New Holland combine.

"The benefit of the Claydon System is that it greatly simplifies the autumn workload and saves unnecessary tillage operations at key times of the year. It reduces the time and cost of establishing crops and improves timeliness, leading to better establishment and development.

## MICROBIAL ACTIVITY

"Achieving the correct soil structure and increasing the level of microbial activity is the key. Where the soil structure is good it enables us to get on quickly in the autumn. Where necessary we subsoil following root crops to relieve the compaction caused by harvesting equipment, tractors and 18-tonne trailers running over the land. Often when we plough and use a full cultivations system the soil still feels tight afterwards; where the Claydon System is used it is in ideal condition and far better able to support following operations.

"We bale all our own straw and go over the stubbles with a 7.5m Claydon Straw Harrow at an angle to the direction of combining. This spreads any crop residues and creates a shallow tilth that encourages weed seeds and volunteers to germinate before they are sprayed off with glyphosate.

"One of the most important points about the Claydon System is that over time fields become remarkably level. This is very important for us because it allows small-seeded crops to be drilled with much greater accuracy, so they develop much more evenly and can be harvested at the optimum time. This improves quality and reduces waste.

"The output of the Claydon System is so high that we don't have to rush because it has more than enough capacity to do what we want to do, when we want to do it. The Hybrid T's big advantage over our previous 6m mounted version is its ability to apply fertiliser alongside the seed to feed the emerging crop rather than the vegetation between the rows.


**Plenty of clearance enables the drill to work effectively in all conditions.**


**Drilling oilseed rape at Warren Hill Farms in August 2018. Fertiliser was applied alongside the seed to ensure that the crop got off to a fast start.**

This technique had been so successful for herbs and oilseed rape that we are extending it to other combinable crops.

"In the spring I was very impressed how the Hybrid T handled drilling maize directly into grassland which had been in stewardship for many years. The land was dry, very compacted and had 15cm of grass on top, but the tines remained clear and never blocked once. Because moisture was not lost the maize got off to a quick start, emerged very well, put down strong roots and looked good throughout the season.

"The Claydon System has numerous benefits and our winter wheats normally average 10.3t/ha and oilseed rape 4.69t/ha. In 2018 the figures were 8.8t/ha and 4.02t/ha because we only had 4mm of rain between 13 May and 28 July, with temperatures up to 34°C. At the end of May the crops looked amazing, but it was inevitable the prolonged drought would have some impact, but not as much as I had thought. The root structures on Claydon-drilled crops were amazing and allowed them to extract every drop of soil moisture, without which it would have been much worse.

"Now that the entire farm has been mapped by SOYL we have started to use the Claydon drill's variable rate seeding facility, which is very accurate. I like the concept of cover crops. We desiccate them in the spring, mow them hard and drill several spring crops directly into the surface. We are also evaluating companion cropping as it could be especially useful to drill barley in one row and herbs in another, for example, to reduce soil erosion and create a micro-climate to encourage plant development.

The technique could also reduce our reliance on insecticides and, going forward, the key will be to find the right nurse crops that produce funguses to improve soil and plant health."


**Shouldered discs help to support the weight of the machine and keep it level, while the following tines bust out compaction and let air into the soil before seed is drilled.**