66 I'm aiming to bring the soil back to life. 99

Healthy soils on the horizon

On-farm opinion

Moving into a regen farming system requires both time and patience with the drill playing a fundamental role in this transition. CPM speaks to a farmer who's aiming to reinvigorate his soils using his latest investment.

By Melanie Jenkins

Direct drilling is an integral aspect of Ben Peploe's regen approach on his family farm, and with the latest purchase of a Horizon DSX 60-25 drill with liquid fertiliser and row cleaners, this signals his commitment to continuing down this path.

Ben, the fourth generation at JHP Farming near Swindon, returned from his studies to bring the business back in-house four years ago and has since shifted operations from a previously traditional approach towards focusing on regen. "I'm still trying to find my feet with it but with all the grants, government assistance and Sustainable Farming Incentive (SFI), alongside the fact it's the right thing to be doing, it only seemed fitting to adopt it," he explains.

Ben says he didn't rush out to buy lots of machinery to make this transition, but instead works with the man who previously rented the farm and has an agreement to

use his kit by paying an area fee. "When I decided to move to direct drilling he chose to do the same and bought a Claydon drill. Because of our arrangement it means I have the option to use his tine drill if I want to."

On Ben's 486ha – 304ha of which are cropped – he largely ran a Sly Boss no till drill until moving to a Horizon this year. "We're aiming to do everything we can to keep the farm no-till and part of this is not having a set rotation. Instead, I plant what fits and can change this each year depending on conditions and the season," he explains.

Like so many others this year, Ben has found conditions to be challenging. "Between mid-September and mid-April the weather station on the farm recorded 1m of rain, so we did bring our cultivator out but only where we absolutely had to. And really, the past few autumns have made life pretty difficult, so by reducing our soil movement I'm hoping this will help us to cope with changeable weather conditions."

Wider windows

And so far, he's noticed his working windows appear to be getting wider, rather than shrinking, despite the tough weather conditions. "I was able to drill during the frosts in January using the Sly Boss and now have a cracking crop of wheat. But admittedly, you do get one shot with direct drilling and you have to get it right the first time, which is why it's important to spend the time setting the drill up right."

Blackgrass poses a challenge on the farm and Ben has been working to combat it. "I feel like we're making strides although

there have been a few back pedals, one of which has been with oilseed rape. I'm probably going to drop it and bring in other break and cover crops instead."

With a variety of soils on the farm ranging from chalky clay loam to silt, Ben wanted a single machine that could be versatile and work across the spectrum, which is one of the reasons he's invested in Horizon's DSX. "With the DSX I've opted for 25cm row spacings and row cleaners because I'm aiming to chop more straw on the farm. I know we'll likely have to manage the slugs



Farmer, Ben Peploe, has made the transition to regen farming on his home farm with direct drilling playing a significant role in the process.



The parallelogram on the front of the Horzion DSX mounts onto the frame, has 32cm of individual travel per row unit and hydraulic downforce of up to 300kg if required.

but it should help prevent the weeds from breaking through."

According to Horizon's Rhodri Davies, the row cleaners operate off the tractor's pneumatic system which can be controlled via the cab. "These can run about 1cm above the soil so they're just into the stubble, moving a band of around 80% of the residue over slightly to help avoid hair pinning in the slot when shallow seeding."

The two different angled discs of the DSX had caught Ben's attention due to their ability to work in hard ground. "I looked at other drills before buying the Horizon but these had straight discs and I didn't think they'd be as suited to working my hard ground, which can put a lot of strain on a machine."

His first outing with the DSX saw him plant a cover consisting of clovers and serradella (common bird's foot). "The crop went into pretty hard ground but it was very successful," he notes.

Kit advancements

One of the main benefits of the machine is the row unit whereby the parallelogram on the front which mounts onto the frame, has 32cm of individual travel

per row unit and hydraulic downforce of up to 300kg if required, explains Rhodri. "The disc, which has a 10° undercut and is 7° off the x-axis, works similarly to a plough in the way it pulls itself through the ground without much downforce."

One aspect of the drill Ben was keen to change was to have the depth control and closing wheel separate. "On the Sly Boss the pressure on both the discs and the closing wheel was the same as these were positioned together, so in some cases you're firming the seed into the slot far too much and there wasn't a way around this. But with the DSX there's a Güttler seed slot shutter wheel and this works far better for me."

The DSX also has an airbag on the back and closing is pneumatically controlled from the cab with up to 90kg of downforce available, explains Rhodri. "In instances where ground is particularly dry and has baked out, users have the option to put pressure on closing the slot."

Ben also feels the DSX will be more user-friendly for operators as the fan is at the front and distribution heads are at the rear, allowing for a better view, unlike his previous drill

EVANS & PEARCE ® EST 1968

DEPENDABLE PEDESTAL VENTILATION (PV) SYSTEMS

PV Fans Built to Last

- Cast Aluminium Case.
- Pressed Steel Impeller.
- Thermal Overload.
- Class leading air flow.
- Fans used worldwide for over 50 years.

Options

- Differential Temperature Control.
- Grain Fan Assist Wireless for full
 store automation.



Robust, Tough Pedestal Ventilation

- Vertical, adaptable crop cooling and conditioning system.
- Draw heat from floor stored crops. Maintain crop quality and price.
- Cost effective, flexible ventilation to ensure crops stay mould and insect free.



Tel: 01935 850750 **F** X www.evansandpearce.com





Stronger by Design

- For Oil Seed Rape & Linseed.
- No additional filter needed for small seeds.
- Louvred slots less likely to block. Equal air distribution is maintained.



On-farm opinion

which was set up the other way around.

Ben regularly goes out into his fields with a spade to examine how his soils look at depth. "I've seen the worms come back and roots stretching between the rows. By not cultivating, all the fibrous material is staying underground and this then helps with drainage – and some of my fields have never been known to drain so well as they do now.

"I've always been told that you'll get to a point in this process where your ground is healthy enough that it'll forgive you for what you do to it. But we're still early into the transition and we're continuing to try and increase the fibrous activity in the soils."

When drilling, Ben also dribbles soluble microbes and phosphate mixed with molasses as a food source alongside his home-saved seed. "This is the reason I opted for the liquid element on the DSX – I'm not looking to put harder fertilisers on with it, but the option is there if I did want to."

When Ben took receipt of the DSX it arrived with the liquid fertiliser system mounted on the rear of the drill, but he decided he wanted it on the front of tractor instead, explains Rhodri. "It's a 1500-litre liquid system, but it was only a case of removing four bolts, some pipe and cable and we were able to mount it onto the tractor within about an hour."

Cover cropping

Ben's DSX has 4700-litre pressurised tanks split into three hoppers (50:10:40), which means he can buy cover crops as straights and plant three seeds at once. "The drill has the capacity to lock up individual coulters and if you blocked off distribution heads, this would allow you to drill at even wider spacings."

Another attribute he likes is the modularity of the drill. "I could decide to take the drill from 6m up to 7.5m on the same chassis, and if I decided 25cm row spacings no longer worked for me, Horizon would add more row units rather than sell me a new drill."

His only reservation was that some of his fields are inclined and he was concerned that despite the low draft of the drill, his 180hp New Holland T7 225 would struggle to pull the weight up the hills. "However, it manages absolutely fine and so far actually appears to pull a lot easier than my old drill."

Although Ben's Sly Boss had large tyres, these were slightly domed and so exerted



The DSX has an airbag on the back and closing is pneumatically controlled from the cab with up to 90kg of downforce available, explains Horizon's Rhodri Davies.

more pressure in the centre than the outside. "The large tyres on the DSX are a lot flatter meaning the weight is distributed more evenly which is better for the soil."

And protecting the soil is all part of Ben's long-term goals for the farm. "I'm aiming to bring the soil back to life and I'm hoping my land will respond to what I'm doing."

Options & Specification:

Category 3 and 4 linkage headstock X2 Depth adjustable track eradicator tine brackets

Hydraulic seed depth control Grange tines to accept Bourgault coulters (single, 19mm or 4" paired row & fertiliser) spaced at 250mm centers Optimum trash management over 4 rows of tines

X2 center pivoting wings that are capable of 5 degrees +/- contour with ground conditions to maintain consistent seed depth

X2 Seed only or Seed & Fertiliser option X2 Double rear harrow frames height, depth & pitch adjustable over x3 different positions fitted with a 'Z' tine harrow system X1 LED Road Lighting Kit

Optional Extras:

Avadex or Slug Pellet applicator & seed outlet brackets Access Platform and seeder mounting brackets



GRANGE

TINE DRILL TOOLBAR (TDT)