



JOE SOMERVILLE

## NEIL WHITE GREENKNOWE FARM, BERWICKSHIRE

### WINNING WAYS

- Excellent looking crops and attention to detail
- A good communicator and inspires others
- Open-minded and willing to try new innovations
- Achieving a lot on his own
- Profitable system without subsidy

In an area where ploughs and power harrows dominate, Neil White made the bold move to ditch his and adopt a strip-till system as he strives to be “profitable without subsidy”.

Although the plough power harrow system wasn't broken, he was spending too much time and diesel moving soil and wanted to move his farm on. Today, yields are higher and soils are healthier.

### The business

The family farm saw the last of the livestock in 1999 and focused on growing more quality arable crops. Neil does all the farmwork himself, except for the corn carting, high-clearance spraying and baling.

However, being on his own, he was struggling to cope with the workload at key times, such as autumn drilling, and changes had to be made. The challenge was to produce top-quality crops without the plough.

In 2014, he had a demo strip-till drill establishing winter wheat after OSR and it proved so successful that the following year, he invested in a 3m Mzuri and drilled 20% of his area.

He took a gradual approach to ensure soils were ready for the change and this season was the first when everything was strip-tilled.

While he grows top-quality feed wheat, he adds value to the rest of his crops with winter brewing and spring malting barley, oats for Quaker, premium-earning high-erucic acid rapeseed and tic beans, which are bagged on

farm for racing pigeons. He has focused on reducing costs and is making use of technology such as variable-rate seeding, slug pelleting and liming.

### Achievements

Yields have increased and last harvest, his wheat averaged over 10.5t/ha, with a nitrogen rate of 175kg/ha. He is now using one-third of the fuel – 14 litres/ha – to establish wheat in one-third of the time.

Soils are healthier, with better workability, and organic matter percentages are in the 4s instead of 3s. Headlands are improving with less compaction, and better soil biology means chopped straw has all broken down and gone by spring.

For wheat, variable plus fixed costs are £155/t, spray costs £185/ha and labour costs are an impressive £14/ha. This year, he cut a fungicide spray by opting for wheat varieties with high untreated yields – Dawsum, Champion and Extase.

Using less diesel, along with using OSR straw in a biomass boiler, has helped reduce his carbon footprint, which stands at 0.33kg of carbon dioxide equivalents/kg of produce.

The environment has also benefited, with the addition of grass margins, beetle banks, species-rich grassland and companion cropping in the OSR. No insecticides are used on pulses, and he is successfully using cover crops, despite the later harvests in Scotland.

### The future

Neil has seen a great improvement in the biodiversity and crop health on his farm without sacrificing output. He has demonstrated that it's possible to grow top-quality cereals in the Scottish Borders without the plough and power harrow. He has become the go-to strip-till expert in the area and is spreading the word. ■

### FARM FACTS

- Area: 238ha of cropping, of which 150ha owned
- Cropping: Winter feed wheat, winter brewing barley, high erucic acid oilseed rape, milling oats, tic beans and spring malting barley
- Establishment: Based on 3m Mzuri strip-till drill.
- Soils: Variable, from sandy loam to clay loam
- Staff: Neil plus harvest help

### A WORD FROM OUR INDEPENDENT JUDGE

“Neil's passion and enthusiasm for arable farming, and regenerative practices in particular, were very impressive. His crops were a shining example of their potential. But it was his advocacy for sustainable food production that put him in the top spot.”

**Damian McAuley, AICC agronomist**

### FINALISTS

**Emma and James Loder-Symonds**  
Nonington Farms,  
Kent

**James Alexander**  
Litchfield Farm,  
Oxfordshire