Cotswold Seeds Ltd
The Cotswold Business Village
Moreton in Marsh,
Gloucestershire GL56 0JQ

FIRST HAND CASE STUDY Soil Farmer of the Year, Stuart Johnson

Farm Type: Mixed

Location: Northumberland

Size: Approx 1000 Acres

Soil Type: Mixed

Mixes Used: Legume & Herb Rich Swards

Changing an intensive system to regenerative livestock with legume and herb rich swards won Stuart Johnson the title of Soil Farmer of the Year in 2023, an award organised by Farm Carbon Toolkit which Cotswold Seeds has proudly helped champion for many years.

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‘We made the changes purely for financial reasons, to make the business more resilient and I had little interest in the benefits to the environment to begin with,’ says Stuart. ‘We were just trying to save on input costs but then you realise, financial benefits only really come with a functioning ecosystem.

‘We experimented with strip tillage and shallow plough for a few years and found that healthier soils could manage reduced inputs better, so we went full no till with the arable in 2017, inspired by Gabe Brown and Dr Alan Wiliams and Shane New of Understanding Ag.

‘The legume and herb rich sward is key. We mob-graze, moving cattle and sheep every day. The cattle graze half and trample down the other half and then we shift them off, followed by a rest period to let the plants bounce back. We are currently using a 5/2 system, with five years of mob-grazed legume and herb rich swards to increase the biological activity, which we can then utilise with a two year arable crop with little to no inputs.

‘I tell people it’s like building up a bank account for five years, then we cash a little bit out, we spend the interest but then go back to building that bank account back up again straight after.’

It’s certainly paid off in terms of inputs saved.

‘The results are staggering,’ says Stuart. ‘We have reduced arable crops synthetic fertiliser use by sixty per cent and aim to go further, alongside eradicating all synthetic fertislisers on grassland. We used to use seventy to ninety tons of bagged fertiliser; the last two years we have used less than ten, purely on the arable. We haven’t applied any bagged P and K for six seasons now and yet the soil sample indices have stabilised rather than decreasing. We have cut out all the fungicides and insecticides for the last four seasons, just using a bit of herbicides as the cash crop establishes. We used to grow 150-250 acres of arable but since we’ve changed the system we are not keeping livestock in as long, so we don’t need the straw.’ Stuart has 190 head of calving cattle,including a flying herd of heifers which are calved and sold on with calves at foot and says they are feeding a lot less grain so have cut down the home use of cereals to seventy acres. ‘We can now outwinter the

cattle. We used to bring them in in November but they stayed out until mid January last year. We bring them in to calf in February and turn out again in March. The 600 strong flock of mob-grazed sheep have also now gone two years without the need to buy any supplementary feed, utilising mob-grazed legume and herb rich swards through the winter months and in the lead up to lambing which has replaced all extra inputs.

‘In a conventional system you are very reliant on inputs which makes you reliant on price fluctuations or prices for stock. Take away that reliance on external companies and you place it all back in our hands. Resilience comes with a functioning ecosystem and healthy biodiversity. If someone told me ten years ago I’d be excited about looking in cow pats for dung beetles, I’d have laughed at them but if we have dung beetles, we know we have a functioning ecosystem and we can ride out those challenging dry or wet weather periods and come through the other side with resilient soils, a robust farming system and a strong business.’

Stuart was pleased to win Soil Farmer of the Year. ‘It’s great for stimulating discussion and it’s nice to get a pat on the back for something in which I have a real passion.’

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