

Spring Update from CHCx3 Fieldwork at FarmED



Spring and Summer Update from CHCx3 Fieldwork at FarmED

Visitors to FarmED are often curious to see scientists around the fields, armed with spades and various sampling and measuring tools, digging holes in the soil. They are part of the Centre for High Carbon Capture Cropping research project (CHCx3 for short). Reducing greenhouse gas emissions and improving resilience to extreme weather, are global challenges for farming and land management that have been particularly front-of-mind during the heat waves and drought this summer. The CHCx3 scientists are researching crops and farming systems that may increase carbon capture and could help farming and associated industries address climate change.



*FarmED and Cotswold Seeds are proud to be associated with this vital project and every quarter we will share an update from CHCx3 soil scientist, **Jed Soleiman**.*

'It's been a very busy and productive spring and summer at FarmED and we've completed our round of spring fieldwork. We were joined by a fantastic group of field assistants and over the course of one week we collected data which will help us understand the impact of different densities of vegetation in herbal leys and how this affects biomass above and below ground. We looked at roots, worm populations and soil properties. Samples were sent to the GEOLABs at the School of Geography and Environment, University of Oxford and are currently being analysed to produce figures that will clearly explain the changes we've been seeing.

This new data will also show how results are affected by the changing seasons and we will be able to compare between the same seasons across different years to gain a real understanding of the impact of the weather on the growth of herbal leys.'

There's a notable increase in interest in regenerative agriculture and it's been a busy quarter for knowledge exchange with many events and activities. We have led and participated in many farm walks at FarmED, including the Leaders in the Field forum, Vegans Supporting Farmers and many Friday Farm Walks. A 'station' has been created by the CHCx3 plots, where I have been able to explain the project, including the plots at FarmED and what we are aiming to achieve.

I have been kindly invited to by various organisations to talk about the project and our findings so far. These included: the Mycorrhizal Ecology Lab at the Royal Botanic Gardens, Kew; The Public Policy Exchange; Healthy Ecosystems Restoration Oxfordshire (HERO); and the University of Oxford's - Environmental Change Institute's, Ecosystems Lab.

The AGRIIH (Agricultural Resilience Impact and Innovation Hub) Network has been set up at the University of Oxford, bringing together researchers who are working on agricultural research and solutions. This wide-ranging group includes ecologists, plant breeders, social scientists and food

product developers who bring multiple perspectives and collaborate to develop solutions. We also attended the British Ecological Society's Nature, Farming, and Food Symposium where we spoke to various researchers, policy makers, and stakeholders, explaining our work and finding future collaborations.

Excitingly, I was also invited to join a panel at Groundswell 2025, discussing practical solutions for on-farm problems. This was a great opportunity to share the CHCx3 project with a wider audience and encourage others to adopt more sustainable and resilient practices.

Next quarter should be equally rewarding. We aim to complete the data analysis and will be preparing for our next round of fieldwork in October.'

CHCx3 Website

Date Posted: 15th September 2025