



# Strategic Cereal Farm Scotland



## *Introduction*

The Strategic Cereal Farm Scotland provides the opportunity to bring research and practical farming together, to work towards farming with both economic and environmental resilience. David Aglen, Farms Manager at Balbirnie Home Farms, is hosting the Strategic Cereal Farm from September 2020 to September 2026.

The 1,200 hectare mixed farm, comprises 800 hectares of arable crops and 200 suckler cows. The diverse rotation includes oats, spring barley, winter wheat, spring beans as well as potatoes and brassica vegetables.

The Strategic Cereal Farm is supported by a Steering Group, made up of local farmers, agronomists, researchers, and advisors. The Group will direct the work on the Strategic Farm to ensure trials are relevant to the farm business and to the wider industry.

The priorities for the next six years include reducing artificial inputs, improving plant and soil health, offsetting carbon and improving harvest efficiency.

Strategic Cereal Farm Scotland is taking a collaborative approach to draw on intelligence from industry to ground-truth novel management decisions. By using data to support decisions, the aim is to determine viable options for a profitable and sustainable business.

The vision for the Strategic Cereal Farm is for it to be inclusive, independent and transparent in testing research outputs in a diverse business setting to help give other farmers confidence in making changes in their own businesses.

## Harvest 2021

Strategic Cereal Farm Scotland's first year will focus on baselining to provide metrics to measure change on-farm throughout the six-year project.

### *Soil health baselining*

Soil properties will be assessed on eight fields using the soil health scorecard, developed as part of the [Soil Biology and Soil Health Partnership](#). Assessments will include soil nutrient analysis, earthworm assessments, visual evaluation of soil structure (VESS) and infiltration rates. The baselining assessments will be repeated in the same positions later on in the six-year Strategic Farm project to see if management practices have had any impact on soil biology, chemistry and physics.

### *Pests, pollinators and natural enemies baselining*

Assessments of key pests, their natural enemies and pollinators will be done in the spring and into the summer. Five fields will be assessed to gain an understanding of what key species are present and where they are located in fields and across the farm.

### *Plant health baselining*

Plant health baselining will assess cereal crops across five fields from the soil baselining group to examine the interplay between soil health and plant health. Plant health will be baselined by measuring and tracking crop biomass, tissue testing and diseases assessments throughout the season.

### *Nutrition trial*

The aim of the first tramline trial at Strategic Cereal Farm Scotland is to determine whether amending crop nutrition in response to live crop monitoring will have an economic benefit on crop health, yield and grain quality. A wheat crop will be monitored throughout the season, with regular brix meter testing. When the brix meter value falls below the threshold value, immediate tissue testing will follow. The nutrition applied will be determined by the result of the tissue test. Plant health and yield will be compared to untreated and farm standard tramlines in the same field.

## Contact us

If you would like more information about Strategic Cereal Farm Scotland, please get in touch or visit the AHDB website [ahdb.org.uk/farm-excellence/strategic-cereal-farm-scotland](https://ahdb.org.uk/farm-excellence/strategic-cereal-farm-scotland)

For information on the research, trials, demonstrations and findings:

- David Aglen, Strategic Cereal Farm Scotland host: [@DavidAglen](#)
- Fiona Geary, AHDB [Fiona.Geary@ahdb.org.uk](mailto:Fiona.Geary@ahdb.org.uk)

For information on events, resources or visiting the Strategic Cereal Farm Scotland:

- Chris Leslie, AHDB [Chris.Leslie@ahdb.org.uk](mailto:Chris.Leslie@ahdb.org.uk)