



What is Innovative Farmers?

Innovative Farmers is a not-for-profit network, managed by Soil Association, that connects farmers and growers with researchers to conduct on-farm trials known as field labs.

hen Innovative Farmers was launched in 2012, it was on the back of one idea – that many of the best ideas in farming come from farmers. Each field lab allows the participants to collect robust data which is relevant to the farming environment and easily transferable to their businesses.

Each field lab is given up to £10k to help cover the costs of a researcher's time and any other equipment or analysis required. We also link participants up with others who wish to trial the same thing. This takes some of the risk out of innovation and gives farmers and growers the confidence to test ideas that otherwise would have remained on the drawing board.

Our network extends across the UK – from trialling bale grazing in Aberdeenshire to compost management in Cornwall. The programme is open to anyone who farms or grows commercially; whether in dairy, arable, horticulture, livestock, on a small-holding or an estate. Innovative Farmers exists to support farmer-led research that is not top-down but bottom-out, with the results freely available so everyone can benefit.

Farming is facing mounting pressures as the climate, nature and health crises demand more from producers and land managers. We must find solutions today to some of the greatest problems facing agriculture. By supporting farmers to test the ideas they have on-farm, we can speed up the adoption of innovative practices. Field labs can help to transform food production by reducing inputs, improving livestock health, enhancing biodiversity, and reducing greenhouse gas emissions.

None of this would have been possible without the generosity of the farmers and growers who have made trials happen on their farms. The research community and wider industry have also provided countless hours of support to help nurture ideas and guide the strategic direction of Innovative Farmers through the programme's steering group, chaired by Professor Tim Benton.

Our generous core funders at The Prince of Wales's Charitable Fund have sponsored us from the very beginning, alongside our supporters Waitrose & Partners. Thank you also to all our other funders, coordinators, contributors and the Organic Research Centre, Innovation for Agriculture and LEAF for their support as partners in the programme.

Innovative Farmers is grateful to its funders for their support of the programme:















Innovative Farmers is delivered in partnership with:









What is a field lab?



From an existing discussion group, project or network, a group of farmers or growers come together around an idea. Alternatively, the Innovative Farmers team can help match farmers and growers that share similar challenges and research interests.

2 RESEARCH QUESTION

Supported by a coordinator, the group establishes a topic or challenge they'd like to explore through on-farm trials. Innovative Farmers matches the group with a researcher to develop a simple research question to be answered through the field lab. Collectively, they decide what data to record and monitor, ensuring the trial is both scientifically robust and practical for a working farm.





3 FUNDING

The group can apply to the Innovative Farmers Research Fund to help with trial costs such as researcher time, lab costs, equipment, and trial seed.

4 RESULTS

The group meet regularly over the course of the field lab. The results are shared with the group who jointly evaluate the findings and discuss what they have discovered over the duration of the field lab.

5 FINDINGS

The findings are shared with the farming community though events, online and in the media so everyone can benefit. The farmers in the group practically apply what they have learnt.

What have we achieved?



£620,000

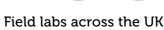
Of funding has been awarded in small grants to assist field lab groups to research the issues that matter to them





We have launched over

150





We've worked with

40

different research organisations...

...and had over

750

triallists working together to share knowledge, farmer-to-farmer.

New farming knowledge from our field labs is freely available and open to all



Social media has helped us create

4.1 million



impressions sharing the results

Farmer-led research makes a difference



From a survey of our network:

1/2

of the farmers surveyed said that they had made changes to their farming practices because of field labs. 4,000+

people receive our newsletter and field labs are read about in the farming press over

438,505

times every month

Our website is viewed:

1,000 times a week

From a survey of our network:

84%

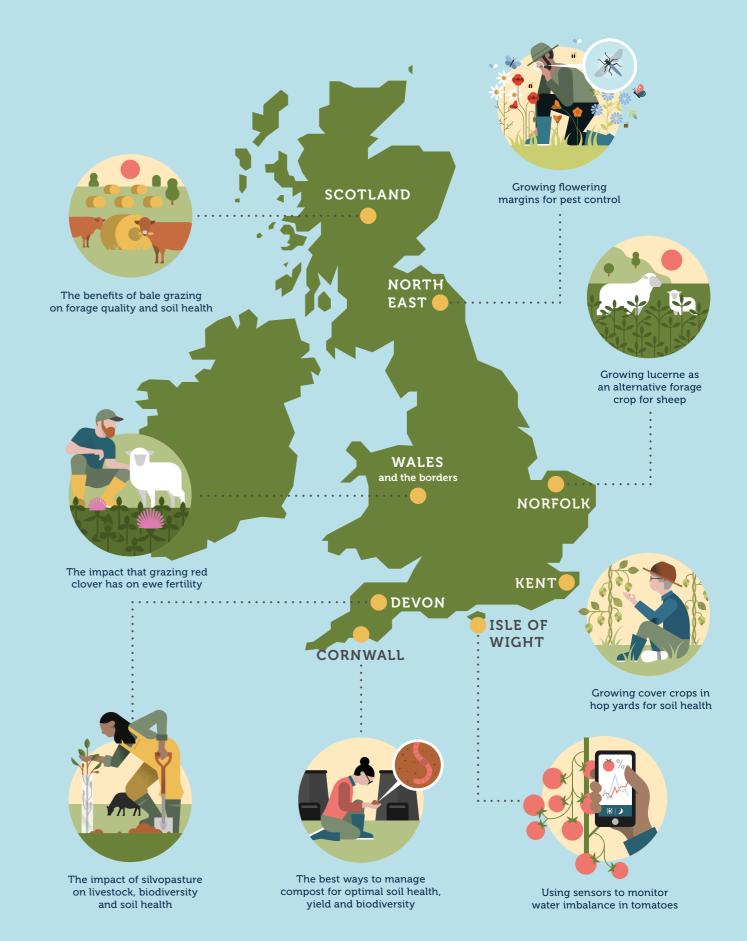
said they had learned something new and

99%

would recommend Innovative Farmers

Field labs across the UK





A farmer's perspective

Tom Gregory from Home Farm, Dorset



Situated on the Dorset-Devon border, Tom Gregory farms 360 organic grazing cows at Home Farm with his wife, Sophie. Several years ago, the couple began to question the way they were approaching soil health on-farm and approached Innovative Farmers about running a trial on mob grazing in dairy.

"We started having an interest in a more biological approach. Mob grazing was one of the things that interested us as a tool to improve soil health and increase grass production to then increase profitability. But we came up against really high costs for biological soil testing and there wasn't much data on mob grazing dairy cows. Innovative Farmers could offer us financial support with the testing, bring in experts and act as the connectors so that we could concentrate on farming while doing the trials," Tom said.

Six farms are involved in the ongoing mob grazing trial. Each farm has split a field in half; half control (routine grazing practice) and half mob grazing. Researchers visited to take baseline soil samples and in two to three years more soil sampling will follow to see if there has been a change in the soil structure, biology and grass and milk production from those fields. They can then make an informed decision on whether mob grazing can achieve comparable

or better milk yields whilst also increasing grass production and improving soil health.

"Innovative Farmers could offer us financial support with the testing, bring in experts and act as the connectors so that we could concentrate on farming while doing the trials."

"Farming is an art, as much as a science. You've got to feel art and you've got to feel farming – you can't just do it from a mathematical or scientific approach. You've got to experience it. Real-life trials performed by informed farmers are important to get good data but also enable you to easily share that data with others," Tom said. "The research will open you up to views and opinions that you didn't even know existed because they may not have been fully explored or discovered yet – it's a great thing to be involved in."



A researcher's perspective Henny Lowth from Organic Research Centre



Henny Lowth is senior crops researcher at Organic Research Centre. As a researcher on both the living mulches field lab and the organic hops field lab, Henny has been involved in farmer-led trials that have enabled farmers to make science-led changes to their farming system.

"This research is focused on real-world problems from farmers' own experiences — it's not researchers dictating to farmers what they should or shouldn't be looking at. It's collaborative," Henny commented, "If you have a farming cluster with a question that you want answered or a problem that you want to investigate, Innovative Farmers provides amazing opportunities for funding but also for facilitation."

Henny has found that for researchers, field labs provide a space for short-to-mediumterm funding that is vital to get projects off the ground. Additionally, as Organic Research Centre doesn't have any of its own land, the participatory, farmer-led approach has enabled her to be actively involved in on-farm trials: "From a researcher's perspective, that's one of the best ways to carry out scientific research going forward," Henny commented.

Traditionally, the research world is quite publication-driven but Henny has found that

one of the most rewarding aspects of being involved in Innovative Farmers is the chance to see the direct impact of her work. She commented, "While I believe that publications are important for sharing new findings, being involved in farmer-led trials helps me get a wider perspective on the impact of our research."

"Innovative Farmers spans such a range of projects — whatever system you're working in and whatever you're wanting to investigate, there will be a field lab for everybody."

The organic hops field lab is still ongoing and has provided Henny with a chance to get involved in an area of research she was not previously familiar with: "I didn't have a lot of experience in hops beforehand but I'm now in amazing networks and have met many interesting farmers who have also been part of a sector that I wouldn't have otherwise been involved in." She added, "Innovative Farmers spans such a range of projects – whatever system you're working in and whatever you're wanting to investigate, there will be a field lab for everybody".

The benefits of field labs

His Majesty, then the Prince of Wales, in a speech to mark the 10th anniversary of Innovative Farmers in 2022 said:

It's been fascinating to see the result of these field labs – I've learnt quite a lot. I'm particularly interested in living mulches, which is the next interesting and very critical area that I shall be very fascinated to see."





Year to year farmers only have a limited time – most farmers only have 60 seasons in which to learn and make all of their mistakes. The quicker we can maximize farmers doing their research and seeing what's working on their farms, the better."

Sarah Whaley, FWAG, diverse fodder field lab



The great thing about field labs is that they help farmers to find solutions. Innovative Farmers has given farmers the confidence to go out there and try things for themselves and empowered them to work with researchers as co-creators."

John Pawsey, Shimpling Park Farm, various field labs



If it's left to the market to deliver on, then you only get innovation in the things that the market identifies that it can make a significant profit from, and that leaves aside some of the many issues that we're interested in, in terms of increasing the sustainability and resilience of farming systems. Innovative Farmers came along and democratised agricultural research. It has provided a non-market mechanism for helping farmers innovate to their benefit, rather than the benefit of the market player up stream."

Professor Tim Benton,



Learning from others



We started with four or so farmers and now we've probably got half the industry dipping their toe in the water and everybody's interested in what we're doing. The benefit of the field lab is that we're able to learn from each other in real time and that's really important."

Ali Capper, various field labs



Field labs are helping us to change the way we farm. After trialling cover crops on four hectares in our field lab, we are now going to put 60 hectares of them across the farm. In ten years I'd really like to be doing it across the whole farm once we've learned a bit more."

Matthew Izod, WNW Izod Ltd, no till and cover crops field lab



The Innovative Farmers concept is fantastic.
Farmer-led research is a must because farmers love learning from farmers. By having farmers actively engaged in trials with that experience and knowledge means they can pass on their learning to other farmers and the wider agricultural industry – it's just a win, win."

Paul Hill, formerly AHDB, living mulch field lab

Changing farming practices



There are two main reasons why farmerled research is vital. The first is that it's practical. It's not an academic or theoretical exercise. The second reason is that farmers will listen to other farmers so if it's been validated by real farmers on a farm, you will get acceptance and traction for the ideas because people know it's got to work. And that's what has made this programme so special."

Sir Ian Cheshire, Chair of The Prince of Wales's Charitable Fund



The power of on-farm research is that it provides the data needed to quantify what we believe is happening. This empowers farmers to make onfarm changes with confidence. We know that it's much easier to reach for a tub of chemicals off the shelf than it is to put in the work of finding the right species mix for your farm and the beneficial insects you are trying to encourage - but when farmers see the positive impact of their actions and the data to back it up, they're on board."

Frances Standen, Birkdale Farm, flower power field lab



While I may not have ended up using compost tea after researching it through a field lab, the results and discussions along the way led me to make compost on my farm. I decided to buy animals and a special machine to make compost with as I concluded that I would rather do that than buy a sprayer for the tea because it offers so much more for the farm."

Sophie Alexander, Hemsworth farm, compost tea field lab

Five reasons why

Farmer-led research matters



Working together gives better results



No two farms are the same. By connecting farmers and building networks, farmer-led research allows farmers and growers to find the practice that is right for their environment while simultaneously encouraging knowledge exchange with other farms.

Field labs are practical, real-life science



At the end of each trial, the research is put into practice, rather than sitting in a weighty journal – this is why many of the UK's top agri-research organisations have been involved in field labs and more are keen to join every year.

Taking the risk away from innovation



Innovation doesn't need to cost a lot of money. Field labs provide funding to subsidise the cost of equipment, seeds or technology and link farmers up with researchers and supply chain experts to make sure that they have the latest technical advice.

Research support gives farmers the confidence to take risks on their farm



Trials don't always end with the results that were expected; finding out what doesn't work is almost as important as finding out what does. By helping record robust data throughout the trial, researchers help build strong evidence for on-farm changes.

Agriculture needs to adapt to face the challenges ahead



As we face climate and market turbulence, farmers need to stay ahead of the curve by being the drivers of innovation. Field labs provide the network of support to enable farmers to be at the cutting edge of nature-friendly farming.



What's next for Innovative Farmers?

Rebecca Swinn, Innovative Farmers Manager

Since it was launched over a decade ago, Innovative Farmers continues to fill a critical gap in agricultural research and development. We still provide a vital nonmarket approach to agricultural research – enabling a network of farmers to test whether solutions addressing climatic, welfare and ecological concerns work on a practical level, and stack up financially.

Innovative Farmers has provided critical support for sectors, such as hemp, where farmers could not access government funding to investigate the environmental impact of growing it. Elsewhere, the independent nature of the programme has allowed farmers to successfully challenge conventional advice - for example, showing that including red clover in diverse swards does not harm ewe fertility, but in fact improves it. An estimated half of hop growers have now put down cover crops since a field lab began investigating the best way of establishing and terminating them and the impact on soil health. None of this would have happened without support for on-farm research and the drive and inquisitiveness of groups of pioneering farmers and growers.

The practices explored in field labs help provide public goods such as better biodiversity and climate change resilience, reduced peat and antibiotic use and improved animal welfare. These improve the market value of agricultural products. It makes sense, then, that farmer-led innovation should receive significant public and industry funding. When comparing farmer-led innovation programmes in the UK to some of those in mainland Europe, it is clear we still have a long way to go. Frustratingly, many Defra funded innovation projects remain out of reach for all but the biggest agribusinesses.

A significant and growing number of producers are keen to innovate and explore practices like intercropping, soy-free feed, integrated pest management and reduced tillage methods, to name a few, but are held back because of risk. The possibility for crop failure or adverse livestock welfare means it is difficult for some to break the status quo, slowing the transition that is possible in the sector. We know it will be impossible to achieve change at pace without farms being properly financed to de-risk innovation and experimentation.

Time and again I meet farmers, researchers and agronomists who are convinced that the Innovative Farmers model is critical if we are to ever halt the decline in wildlife populations by 2030, reduce nutrient pollution by 40% by 2038 and reach net zero by 2050. Retailers have told us that if Innovative Farmers didn't exist, they'd need to create it. There is a clear need for an upscaled support service for farmer-led innovation and research. Innovative Farmers will continue to be an example of how it can be done, and enable farmers to find solutions that support nature-friendly farming.







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