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TECH FARMER

TECH MAGAZINE

TECHNOLOGY FOR FARMING

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THE 5% THAT WORKS

By Chris Fellows

In the last issue, I wrote about where agtech is really headed. The short version: not towards autonomous farms, not towards replacing farmers, but towards practical, connected tools that make decisions faster and better. The evidence for that argument has only strengthened since.

This issue, the theme running through the Tech Farmer section is the same one that keeps surfacing wherever farmers and technologists meet: the gap between what gets funded and what actually works on the ground. From San Francisco to Groundswell, from a Somerset peat field to a Lincolnshire digital technology farm, the same tension is visible. The technology is often impressive. The question is always whether it delivers a return this season, on this farm, in these conditions.

Patrick Honcoop's report from World Agri-Tech in San Francisco captures the mood of the global investment community at what may be an inflection point. The hype cycle that burned through billions of dollars in agrifood-climate tech has done its damage, and the survivors are the companies that built towards profitability rather than the next funding round. Physical AI, the embedding of intelligence into field equipment rather than dashboards, is the emerging thesis. Whether it tracks genuine agricultural value or simply becomes the next thing investors chase is the question Honcoop asks honestly and does not pretend to answer.

Closer to home, the Cereals 2026 coverage of Agrii's Smart Connected Farm launch makes a quieter but equally important point. Jonathan Trotter's team has evaluated over 60 agritech solutions in 18 months and found that 95 per cent do not hit the mark. The ones that do, like the combined drone and satellite imagery approach that delivered £136 per hectare on a Lincolnshire farm, work because they are connected to existing systems, not bolted on top of them. The integration between Contour and TELUS, removing duplicate data entry across 1.4 million hectares of Agrii-advised land, is the

kind of unglamorous infrastructure that actually changes how farms run.

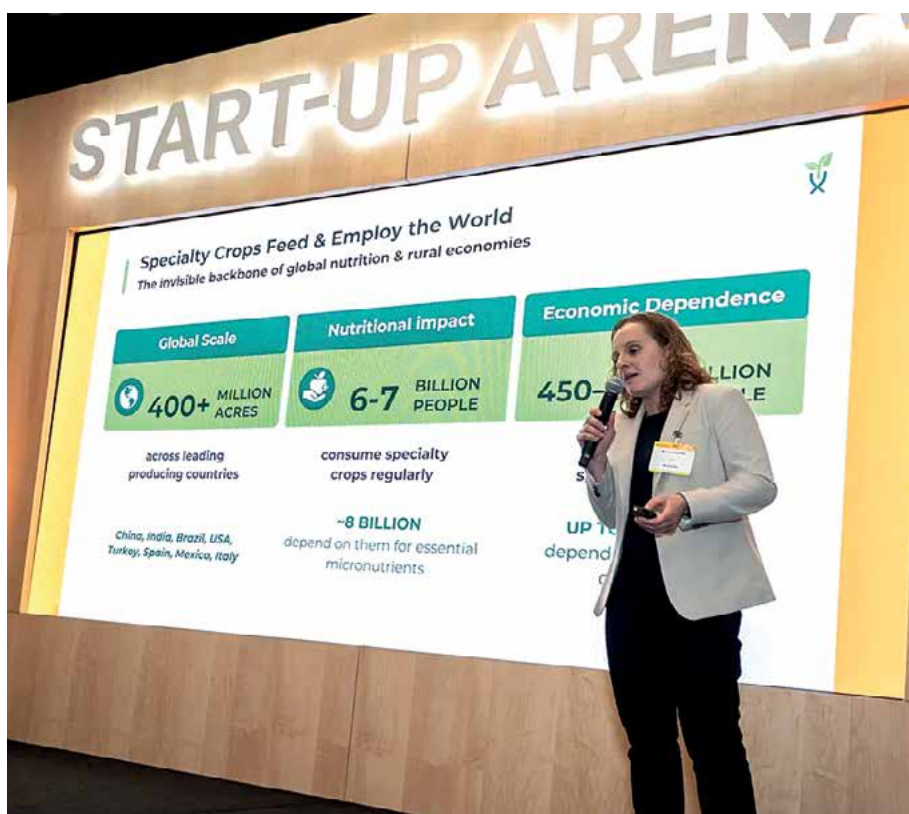
The farmer-led innovation piece, based on a live Farm Gate podcast recording at Groundswell, adds a different dimension. Thomas Slattery, Matt Smee and Katherine Lewis make the case that the best agricultural research does not start with a technology looking for a farm to test it; it starts with a farmer's problem and works backwards. The ADOPT programme now has hundreds of live farmer-led trials running, and the evidence from Ag.Impact suggests that UK research funding is still not well aligned with the challenges farming actually faces over the next 30 years.

Which brings me to something I can now share. Since the last issue, we have been awarded two ADOPT grants. Both are testing new technical solutions on farm, and both grew

directly from conversations with farmers about problems that existing tools are not solving well. I will have more detail in the next issue, but if you are interested in joining either trial over the winter, watch this space. We will be looking for farmers to take part.

Will Barnard's BioFlow trial on the Somerset Levels is a good illustration of what that model looks like in practice. Biochar conduits beneath peat soils, regulating water movement while locking carbon into the ground, is not the kind of idea that would have come from a research institution working in isolation. It came from a farmer thinking about what the next generation would inherit.

That is the thread connecting everything in this section. The technology that matters is the technology that solves a real problem, on a real farm, for a real farmer.



SOMERSET FARM TRIAL EXPLORES INNOVATIVE WATER MANAGEMENT SOLUTION FOR PEAT SOILS

A pioneering on-farm trial in Pawlett, Somerset is exploring whether biochar-based underground drainage systems could help protect peat soils, improve water management and reduce carbon emissions from farming.

The BioFlow Phase 2 project, led by second-generation farmer Will Barnard, is testing whether conduits of biochar installed beneath peat soils can regulate water movement while locking carbon into the ground long term. The project is being funded through the ADOPT programme, a Defra-backed initiative delivered by Innovate UK to fund farmer-led innovation projects.

Based on the Somerset Levels and Moors, the trial focuses on one of the UK's most environmentally sensitive agricultural landscapes. Peat soils are naturally waterlogged and rich in stored carbon, but when drained they begin to decompose, releasing significant quantities of carbon dioxide into the atmosphere.

BioFlow Phase 2 aims to investigate whether biochar, a stable form of charcoal, could provide a practical alternative to conventional drainage methods by allowing water to move

through the soil without accelerating peat degradation.

Will, who farms on the Somerset Levels, said the project grew from concerns about the long-term resilience of both farming and the landscape itself.

"I wanted to make sure the next generation would still have the opportunities I had growing up farming here. Looking at the way the landscape was changing, it became clear we needed to think more holistically about how we manage water, soils and farming systems if we want them to remain viable for hundreds of years to come.

"The Somerset Levels are incredibly special, but once peat soils dry out, they stop holding water and the soil erodes away. BioFlow started with a simple question: could we create a system that helps manage water while protecting the peat itself?"

The project follows an earlier phase which demonstrated that the mole draining biochar works and that water could successfully move through underground charcoal channels. The second phase is now assessing performance in greater detail, including practical installation methods and longer-term impacts on soil function and water retention.

The farmer-led structure and focus on innovation excited Will about the ADOPT funding.

"What appealed to me about ADOPT was that it recognised farmers as innovators. Farmers spend their lives solving practical problems, but we don't always see ourselves as being part of research and development.

"ADOPT created the space to take an idea from the farm gate and test it properly, while still keeping the work grounded in real farming conditions."

ADOPT, which stands for



The ADOPT funded trial is part of a wider programme of work on Will's farm to develop farming systems that stay productive on peat soil at higher water tables, while reducing soil loss and emissions. Image credit: Will Barnard



Will Barnard is testing whether conduits of biochar installed beneath peat soils can regulate water movement. Image credit: Will Barnard

Accelerating Development of Practices and Technologies, supports practical farmer-led trials designed to improve productivity, sustainability and resilience across the agricultural sector. Grants for projects costing £50,000 to £100,000 are available for collaborative projects involving farmers, growers and foresters, alongside free support through the ADOPT Support Hub.

BioFlow Phase 2 is one of a growing number of projects exploring innovative approaches to sustainable land management and climate resilience through farmer-led research. Explore these and more ADOPT-funded trials at <https://farmpep.net/adopt/live-projects>.

WORLD AGRI-TECH SAN FRANCISCO 2026 HAS THE CYCLE FINALLY TURNED?

Written by Patrick Honcoop, founding member of the AgTech Advisory Collective

Last week, I attended the **World Agri-Tech** summit in San Francisco, one of my favourite conferences of the year. Part of what makes it special is knowing that many of the people I enjoy most in this industry will be there: clients, business partners, fellow entrepreneurs and friends I've built relationships with over the years. There's a certain energy that comes from being in a room where the conversations pick up where they left off.

But beyond the personal side, World Agri-Tech is also one of the few events on the AgTech calendar that genuinely centres investment and partnering. It's not primarily a tradeshow floor; it's where you get a real sense of where capital is flowing, how investors are thinking, and what the broader mood of the industry actually is. That combination of community and market intelligence is what keeps bringing me back.

This year's edition did not disappoint on either front. Here are my reflections.

A quieter room, better conversations

Attendance was lower than in previous editions, a trend I've now seen across multiple events this cycle. But fewer attendees didn't mean less value. If anything, the conversations felt more honest and more meaningful. Less performative optimism, more candid assessments of where the market actually stands.

The dominant sentiment was that we may have reached the bottom of the cycle. I've been hesitant to call this too soon, but the signals are becoming increasingly difficult to ignore. Farm fundamentals show modest improvement, and more AgTech scale-ups are achieving real commercial traction. There's a growing sense that

the painful recalibration of the past two years has done its job.

The investment picture: Limited powder now, but more on the way

The investment dynamic deserves close attention because it shapes what happens across the rest of the ecosystem.

A striking number of the funds I spoke with are currently at the end of their fund lifecycle and in the process of raising their next vehicle. That creates an awkward gap: the appetite is there, but the dry powder to deploy is limited right now. Several managers were candid that fundraising took considerably longer than expected, a reflection of LP caution in a period when AgTech returns have been hard to demonstrate.

The practical implication for startups is real: don't expect a surge of fresh capital in the next few months. But the outlook for 2027 looks meaningfully different, as new funds close and managers return to active deployment mode. For AgTech companies with strong fundamentals, patience remains the right posture.

What was also notable is how some funds are rethinking their model entirely. Rather than operating as traditional AgTech venture funds, a few are repositioning towards a more strategic, corporate-adjacent role, closer to scouting and ecosystem building than pure financial return. Whether this model will prove durable is an open question, but it reflects a broader recognition that the traditional VC playbook has not always translated well into agriculture's long adoption cycles.

Corporate activity told a similar story. Their presence at the summit was visibly reduced, and those who attended were largely in listening mode rather than deal mode. Managing spend and protecting core business appear to be the

dominant priorities for most corporates right now. Strategic partnerships and corporate venture activity have slowed accordingly.

From agentic AI to physical intelligence

Agentic AI was arguably the hottest topic at the summit, which, depending on your perspective, is either exciting or a familiar pattern. But alongside the software-centric conversation, a more grounded framing was gaining traction: physical AI.

Physical AI refers to the integration of artificial intelligence into physical systems – robots, sensors, equipment – rather than treating AI purely as a software or decision-support layer. In practice, this means AI that doesn't just advise but acts: guiding a robot through a crop canopy, adjusting implement behaviour in real time, or coordinating an autonomous fleet across a field. It's a meaningful distinction, and one that resonates with what I've argued in my autonomy series: the real value of AI in agriculture will come not from dashboards or recommendations, but from AI embedded in the physical workflow of farming.

The two framings, agentic AI and physical AI, are not mutually exclusive, but they point to different investment theses and different development timelines. Agentic AI in digital platforms can move quickly; physical AI in field equipment takes years to validate at scale. The most interesting companies are likely those building at the intersection: software intelligence that directly drives physical action.

That said, my reaction to the broader AI conversation was mixed. The technology is genuinely interesting, but the energy around it had a familiar feel.

We've been here before with digital ag, with drones, with carbon platforms. The question is whether the enthusiasm is tracking real agricultural value or simply chasing the next investment hype.

That concern wasn't mine alone. Several investors I spoke with openly flagged it; some worried that AI could displace products in their own portfolio, particularly in the digital agriculture space. I also spoke with a founder of a digital ag platform who was candid that this question is shaping their strategic thinking right now: if AI can perform the core task their product was built to do, what is the long-term defensibility of the business? It's a hard question, and I respect that they're asking it honestly rather than dismissing it. Founders in digital ag should be thinking hard about this.

Startups worth watching

Two companies I encountered at the summit stood out for different reasons, both reflecting the broader theme of physical intelligence moving from concept to application.

Beagle Technology Inc caught my attention with its focus on making implements smarter. Rather than building another autonomous power unit, they are developing intelligent implement solutions for pruning and harvesting in speciality crops, currently part of the Reservoir portfolio. This is precisely the gap I have argued is one of the most underestimated bottlenecks in autonomous farming: you can build an autonomous tractor, but if the implement still requires human supervision, you haven't removed the operator; you've just moved them.

The second company is Winterleap, a Norwegian startup taking a genuinely novel approach to weed and pathogen management. They use microwave technology applied to frozen soil during winter to eliminate weed seed banks, deep-rooted weeds and soil-borne pathogens before the growing season begins. The concept is chemical-free, avoids soil compaction, and makes use of a time window – the winter months – which is typically underutilised in field operations.

I still have open questions. How selective is the treatment? Does it harm

beneficial soil organisms alongside the pathogens it targets? And clearly, the approach is geographically constrained to regions with reliably cold winters. But the core idea is interesting: using the winter season as a treatment window rather than a dormant one. In a category, alternative weeding, that is attracting significant innovation across laser, mechanical, and chemical approaches, an approach this differentiated is worth keeping an eye on.

The maturing of AgTech scale-ups

The most encouraging signal from San Francisco was the visible maturation of a cohort of AgTech scale-ups. A growing number of companies are moving beyond the pilot stage, demonstrating consistent deployment numbers, repeat customers and increasingly credible unit economics.

What's changed in the conversation



is the framing. A year or two ago, many companies were still optimising for capital raise: telling the story investors wanted to hear, chasing the next valuation milestone. That dynamic has shifted noticeably. More founders are now explicitly focused on building towards break-even, on sustainable business models, on proving that the company can operate without perpetual external subsidy.

One investor perspective that stuck with me: the most interesting investments right now are not about funding technology development, but about funding commercial scaling. The technology has been proven; the

question is whether the commercial and operational infrastructure can keep pace. That shift in investor thinking, from supporting ideas to supporting execution, is a healthy sign that the category is maturing.

The part that matters most

Beyond the panels and the tradeshow, the most valuable part of any conference like this is the one that doesn't show up on the agenda: the people.

For me personally, this summit was a chance to reconnect with clients, business partners and entrepreneurs across the scene – the kind of conversations that move faster in person than they ever do over email or video. There's a quality of exchange you only get when you're in the same room, and San Francisco delivered that.

What made this one particularly meaningful was the opportunity to meet in person with several of my colleagues from the AgTech Advisory Collective. We're a distributed group, spread across different countries and time zones, which means that when we do manage to be in the same place, it carries real weight. Those conversations were some of the most honest of the week: about where the industry is heading, what the Collective should stand for, and how we each think about our own work in this space. I'm grateful for them.

It's a reminder that conferences are never really just about the content. They're about the relationships that make this industry worth being part of.



What this really signals

Taken together, World Agri-Tech 2026 painted the picture of an industry at an inflection point, not yet in full recovery, but clearly past the worst of the downturn.

The investment gap is real but might improve. Corporate caution is understandable, but it creates an opportunity for the startups willing to build through the cycle. The AI discussion, both agentic and physical, will separate genuine value creation from hype over the next 12 to 18 months. And the founders who are building towards profitability rather than the next round are the ones having the best conversations right now.

For AgTech companies, the message aligns with what I've been emphasising for some time: focus on the problem, demonstrate the value, develop a commercial model and build a business that doesn't rely on the next funding round to survive.

Looking ahead

The farm economy remains under pressure, and I don't expect that to change overnight. But I came away from San Francisco feeling something I haven't felt as strongly in a while: genuine optimism about the direction of this industry.

Not the artificial optimism of a funding boom where enthusiasm outpaces reality and valuations disconnect from commercial substance. Something more grounded than that. The companies I spoke with are working towards real milestones, break-even points, repeat customers and predictable unit economics. Investors are asking tougher questions and writing more thoughtful cheques that reflect what the business currently is, not what it might be in the best-case scenario. That recalibration is healthy. It makes the entire ecosystem feel more honest.

AgTech is maturing. The progress is becoming clear, not just in press releases but in conversations with founders who are cautious rather than euphoric, and investors who are focused rather than scattered. There is something more authentic about this moment than there was two or three years ago, and I believe that matters more than the headline funding numbers.

The farm economy will recover. It always does. And when it does, I believe it will meet an AgTech industry that is meaningfully better prepared to deliver real value than the one it met in the last upcycle.

That, more than anything, is what makes me optimistic about this space.

Patrick Honcoop is an AgTech expert delivering global market insights and empowering AgTech companies to scale and expand internationally.



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FARMER-LED INNOVATION COMES OF AGE

Written by ffynlo Costain – Chief Editor of 8point9.com.

This article first appeared on 8point9.com

This article is based on a conversation recorded live in the Sustainable Food Trust tent at Groundswell 2026. I sat down with Thomas Slattery of the ADOPT Support Hub, Matthew Smee of Agricology, and Katherine Lewis of Ag.Impact | Certified B Corp.

ARE farmers innovators? Matt Smee from Agricology doesn't hesitate: farmers are constantly adapting to conditions that never stay still, whether that's livestock, arable, horticulture or mixed systems. Thomas Slattery agrees, and 18 months into ADOPT's life, the point has been proved, with hundreds of live farmer-led research projects now running.

Katherine Lewis, from Ag.Impact, traces her own involvement in farmer-led research back around 10 years, to the Innovative Farmers project she worked on at the Soil Association alongside Innovation for Agriculture and LEAF. Over its lifetime, the project supported more than a hundred farmer-led field labs with modest grants of around £10,000 that let farmers test their own ideas with proper rigour.

It is a debt Slattery is quick to acknowledge: without that decade of evidence-gathering, there would have been no case to put to Defra that farmer-led innovation was worth funding at scale.

Research from the ground up

The farmer-led model starts with a farmer's challenge and works backwards. Smee, who ran a field lab himself years ago on buckwheat as an allelopathic weed suppressant before joining Agricology, describes discovering not just a method but a community: people wrestling with the same problems, building peer support that farming can otherwise lack. Rigour still matters, Lewis notes, but field labs were never about publishing academic papers. Instead, the structure and comparability they bring means one farmer's result can genuinely inform another's decision.

If ADOPT and Agricology sit closer to the farm gate, Ag.Impact is working



a layer further upstream.

Lewis describes convening the Agricultural Universities Council, as well as funders of agricultural research, and chairing the farmer-led innovation network. Ag.Impact's flagship project this year is an attempt to map, for the first time, where UK research and innovation funding actually goes: how much lands on crops versus livestock, basic science versus applied, robotics versus regenerative systems. At present, nobody has the full picture. Individual funders know their own portfolios; nobody has stitched them together or set that against what farmers and researchers actually think the priorities should be.

Impact, in this context, means something specific: a research system whose priorities line up with the challenges farming actually faces, and with what's plausible both on farm and in the lab.

Traditionally, the panel notes, farmers have often experienced research as something done to them rather than with them, but Smee is

careful not to single out universities; strong and weak practice exists across every type of institution. There can be a challenge, however, with large consortia, he suggests. Research at scale, which draws in so many partners, can overpower the researchers who are genuinely skilled at holistic, farmer-relevant work, leaving more of the output shaped by process than by practical insight. Knowledge exchange, he adds bluntly, is not always an academic strength, as many researchers would admit themselves.

I raised one counterpoint: the EU Horizon-funded PATHWAYS project, where Pasture for Life and other farmer organisations from across Europe were embedded as practice hubs helping shape the research design from the outset; a rare case of farmers influencing the science from the beginning.

What actually shifts research from paper to field, in Smee's experience, is unglamorous: farmer-to-farmer conversations, meeting people where they are, without needing a polished

video or a lecture theatre.

Valuing farmers' time and knowledge

Both Lewis and Slattery point to a quieter cultural shift running alongside the funding one. Smee recalls a time, not so long ago, when farmers taking part in trials would openly ask why they were the only person in the room not being paid. ADOPT's approach to properly remunerating farmers' time and covering their costs is changing that, though Slattery notes the change has had to run in both directions. Farmers accustomed to filling 17 roles on their own holding, from vet to mechanic to, increasingly, data scientist, haven't always thought of themselves as professionals whose time should be costed and paid for. Getting that shift to land has taken real work.

The flip side is farmers undervaluing their own tacit knowledge – the accumulated, embodied understanding of a specific piece of land built up over years – which Slattery has researched directly and still finds remarkably underrated by the system around it.

Building the infrastructure a local food system needs

Slattery's recent work on place-based finance surfaces a bigger structural question: farm-level innovation can only go so far without the processing, markets and infrastructure to support it.

He points to Tom McVeigh, a farmer in Suffolk growing hazelnuts, who travelled to Italy and Turkey to understand the crop, discovered the UK climate is well suited to production, and is now trying to build a market from scratch as Turkish supply comes under pressure from its own changing climate. Infrastructure can be led from the farm outwards as well as built for farmers in advance.

Lewis offers a parallel from the Transforming UK Food Systems programme: a project called BeanMeals, which linked a bean grower, a hard-to-find local processor and a school, teaching children to grow, cook and eat the crop alongside their parents. It's a small, specific intervention, but one that models what food system change looks like

when it's rooted in one place and one community, before anyone asks how to scale it.

Slattery is careful to frame this as recent rather than radical. The centralised food system farmers now operate within is, in historical terms, only two or three generations old, a product of post-war consolidation rather than any deeper tradition. Nobody on the panel is arguing against a centralised system entirely, but there's broad agreement that rebalancing towards local and regional infrastructure, and building the unglamorous governance and finance structures that make it viable, is as important as any farm-level innovation.

AI, automation and the return to the land

The discussion turns to technology, and to a conversation I had earlier in the day about whether young people should be looking to farming as automation reshapes other careers. Slattery sees a real, if ironic, opportunity: as AI displaces more conventional office and professional roles, interest in hands-on rural work may grow, echoing arguments made by Tim Lang in Feeding Britain about the need to get more people back on the land. The constraint, he says, isn't appetite but access to land itself, and organisations like the Ecological Land Cooperative are working directly on that problem.

On data, Lewis notes that farmers already generate more information than they can process through apps and sensors, and the real test for AI in farming is whether it can turn that volume into something genuinely usable, without farmers losing ownership or control of their own information. She points to the Wales Data Cube, a publicly available geospatial dataset covering soils and water across Wales, as a model of how that data might be opened up responsibly.

Slattery adds a note on automation more broadly, recalling Harper Adams University's Hands Free Farm project, and its unlikely echo in an episode of Clarkson's Farm where automated machinery freed up time for the more rewarding parts of the job. The best use of the technology, he suggests, isn't replacing farmers but removing

the boring, dangerous and repetitive tasks so people can get back to the parts of farming – working with animals, being outdoors – that drew them to it in the first place.

What's still missing

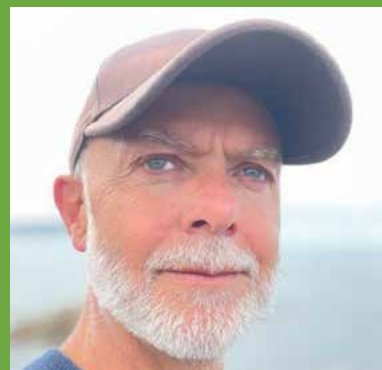
Closing the conversation, each guest names the gap they most want to see closed. Smee wants AI-assisted mechanical weeding to become affordable enough to make organic and lower-input systems genuinely viable at scale, something he believes is a matter of when rather than if.

Slattery is preoccupied with reaching the roughly 80 per cent of farmers who aren't yet showing up at events like Groundswell or using the language of innovation, but are, in his view, just as creative and capable as those who are. He frames it as a communications challenge as much as a funding one.

Lewis, mindful of Ag.Impact's forthcoming state-of-the-sector report, stays deliberately neutral, but relays what she's hearing from across the system: a call for genuine strategic research priorities that look 20 to 30 years ahead, built around interdisciplinary teams and, crucially, a proper seat at the table for farmers themselves.

Listen to the podcast yourself here: [www://podcasts.apple.com/us/podcast/day-9-farmer-led-innovation-the-engine-behind-regen/id1490590788?i=1000776346759](https://www.podcasts.apple.com/us/podcast/day-9-farmer-led-innovation-the-engine-behind-regen/id1490590788?i=1000776346759)

Farm Gate podcast / Co-founder, Conference on Food and National Security: foodandnationalsecurity.org / TEDx speaker: We can't solve the climate crisis without cows



THE SMART CONNECTED FARM

MAKING SENSE OF AGRITECH AT CEREALS 2026

Written by Chris Fellows

At Cereals 2026, held this year at Diddly Squat Farm, Agrii presented their vision for the future of agronomy. The press launch of their Smart Connected Farm concept was not about unveiling a single new gadget or another isolated software platform. Instead, it was a practical demonstration of how existing and emerging technologies can be integrated to support agronomists and farmers in making better, more profitable decisions.

Will Charlton, from Seeded Marketing, the PR agency working with Agrii, opened the event by introducing the second volume of their Insight Report series, Tools and Insights for Tomorrow's Decisions. The core message was clear: technology must serve the relationship between the farmer and the agronomist, not replace it. The human interface remains the foundation of crop management.

Rachel Watling, National Marketing Manager, guided attendees through five distinct stations, each highlighting a different facet of this connected approach. She emphasised that farmers are increasingly concerned about rising costs, unpredictable weather and shrinking margins. In this climate, the ability to make evidence-based decisions is critical. The Smart Connected Farm is designed to support businesses regardless of where they are on their digital journey, integrating tools like variable

rate nitrogen, drone imagery and soil sensors into a coherent system.

Station 1: The agronomist at the centre

Kathryn Styan, an Agrii agronomist and technical advisor, underscored that people are the cornerstone of the business. While artificial intelligence and digital tools are becoming massive topics of conversation, they are viewed as enablers rather than replacements.

"It's about relationships in our company and those relationships that we have with the farmers," Styan explained. "The Smart Connected Farm is all about getting that data that we have on farm... and using it to optimise what we do each and every day."

Styan highlighted how drone technology is already changing her daily routine. By using drones for field scouting, she can quickly identify problem areas across large or undulating fields, saving significant time that would otherwise be spent walking blindly. This efficiency allows her to spend more time analysing data and having strategic discussions with farmers.

Station 2: Grounded in science, proven on farm

Dr Ruth Mann, Head of R&D, detailed the extensive screening process that underpins Agrii's recommendations. With 31 trial farms across the UK and a bespoke glasshouse facility, the company conducts around 450 trials annually, encompassing 55,000 plots.

This rigorous approach is applied not just to crop protection products

and biologicals, but also to digital technologies. Jonathan Trotter, Technology Manager for Agri-Tech, explained that his team has evaluated over 60 different tech solutions in the past 18 months, ranging from drones and robotics to new software platforms.

The reality of agritech is sobering. "In all honesty, 95 per cent of things do not hit the mark that we need it to," Trotter admitted. Technologies often fail due to poor return on investment, operational unreliability or simply not surviving real-world farm conditions.

However, when technology does work, the benefits are tangible. Trotter cited work from a Digital Technology Farm in Lincolnshire where the combined use of drones and satellite imagery delivered a £136 per hectare benefit compared to standard farm practices, even after accounting for the cost of the technology.

Station 3: Seed quality and variety selection

The third station focused on the foundation of any crop: the seed. John Miles and Rob Stuart discussed how the MasterSeeds brand relies on extensive trial data to understand variety performance across different regions and disease pressures.

Miles explained that their work goes beyond the standard Recommended List, adding an extra layer of value by looking at specific attributes, like nitrogen use efficiency (NUE) and blackgrass competition. They are also utilising drone technology, specifically "drone in a box" systems, to map spring vigour differences between varieties on a weekly basis





– a frequency impossible to achieve manually.

The team is also responding to changes in farming practices. With a wide array of drill types now on the market and a shift towards reduced tillage, Agrii has commissioned bespoke trial drills from manufacturers

like Claydon to test how different row spacings and coulter types affect yield and weed competition in replicated, commercial-scale trials.

Station 4: Smarter nutrition

Tom Perrott addressed the critical and often contentious issue of fertiliser inputs. With businesses exposed to volatile commodity markets and increasing pressure to reduce carbon footprints, farming smarter is essential.

Perrott advocated for the use of NDVI maps and drone technology to assess canopy coverage and crop establishment, moving away from manual tiller counts. This data feeds into the Rhiza platform, allowing for variable rate applications of phosphorus and potassium.

"We're looking at lower volumes of macronutrition but increasing what we're doing in terms of micronutrition applied at the same time," Perrott noted. The goal is to create bespoke packages that allow growers to achieve more in a single pass,

ultimately making businesses more resilient and less exposed to market fluctuations.

Station 5: The Rhiza digital hub and TELUS integration

The final station brought all these elements together at the digital hub. Jonny Kerley, product manager for the Contour platform, explained that a truly smart connected farm requires holistic decision-making across the entire crop lifecycle, supported by connected data.

"It's no good having a system to make your seed decision, a separate system that doesn't talk to that to make another decision about CP or nutrition," Kerley stated. Contour aims to integrate this siloed data, providing digital decision support tools to improve profitability.

Crucially, Agrii recognises it cannot build everything itself. This is where their partnership with TELUS Agriculture & Consumer Goods comes in. Ben Hatton from TELUS outlined how their systems handle

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"What appealed to me about ADOPT was that it recognised farmers as innovators. ADOPT created the space to take an idea from the farm gate and test it properly, while keeping the work grounded in real farming conditions."

Will Barnard, Keward Farm, Somerset

the complex farm management and compliance auditing requirements.

The significant news for users is the upcoming integration between Contour and the TELUS Crop Management system, scheduled to go live in August. This integration will eliminate double data entry, allowing core data like field boundaries and cropping plans to be shared seamlessly between the two platforms.

Agronomists will be able to build recommendations in Contour's new crop protection module, which will then be audited by TELUS's CDMS system and pushed to the growers' farm management software.

"It should mean we've got two very clean tools working off the same core data in the background to create a simpler experience for our growers and a better advice tool for our agronomists," Jonny Kerley explained.

Importantly, both Kerley and Hatton confirmed that the grower always retains ownership of their data, with full control over permissions and sharing. Furthermore, there will be no



extra charge for connecting the two platforms.

Conclusion

The press launch at Cereals 2026 demonstrated that the Smart Connected Farm is not a futuristic concept, but a practical reality being implemented today. By filtering out unreliable technology and integrating

proven tools with expert agronomic advice, Agrii is aiming to provide a system that drives profitability, ensures compliance and ultimately supports the long-term resilience of UK farming businesses. As the integration with TELUS goes live this August, the promise of a truly unified digital agronomy experience is closer than ever.

The Smart Connected Farm: Tools and Insights for Tomorrow's Decisions

Key points:

- Agrii's latest Insight Report introduces the concept of the Smart Connected Farm, its vision for the future of agronomy.
- The integration between Agrii's Contour platform and TELUS Crop Management is two systems, eliminating duplicate data entry and making more information available for better decision-making.
- After the integration, Agrii's 200 agronomists, advising on 1.4 million hectares, will begin using a new crop protection module in Contour to make recommendations. This will utilise information from the TELUS Label Database.
- Farmers remain in control of their data and will be able to withdraw it from either system at any time if they wish.

Agrii's 2026 Insight Report, *The Smart Connected Farm: Tools and Insights for Tomorrow's Decisions*, sets out how digital tools can help farmers make better decisions in a period of tight margins, volatile input costs, changing regulation and increasing pressure on sustainability. The central argument is that technology delivers most value when it is connected rather than used in isolation.

The report brings together evidence from Agrii's trials network, digital technology farms and agronomy teams to show how tools such as satellite imagery, drones, sensors, precision fertiliser systems and digital record-keeping can support more accurate and practical decision-making. It also stresses that these technologies are only useful when combined with agronomic expertise and tested under real UK farm conditions.

A major theme is integration. Agrii argues that the future lies in linking agronomy advice, farm data and management software so that growers can reduce duplication, improve compliance, target inputs more effectively and strengthen profitability. The report also makes clear that not every farm needs the same level of technology. Instead, it encourages growers to start with clear business goals, reliable records and useful data, then adopt connected tools in ways that suit their own scale, system and priorities.

Read the full report yourself by scanning the QR code or visit this link www.agrii.co.uk/insights/smart-connected-farms/



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