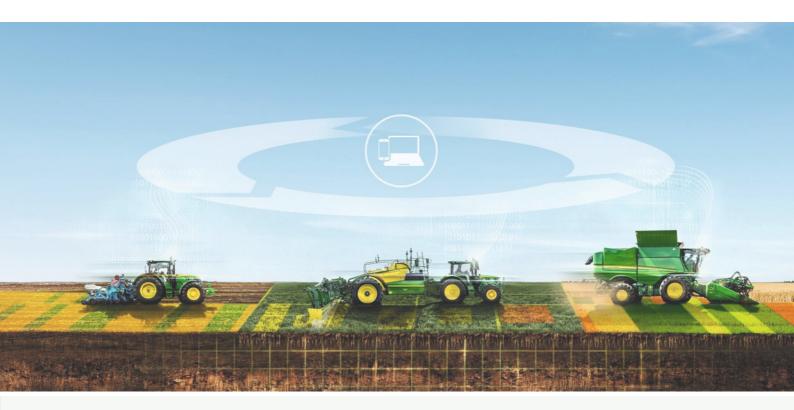


Ben Burgess Connected News

News, offers and updates.



Profit From Insight

Farming in 2023 with Precision Ag



'where service still counts'



2023: Part II

What a summer...

This summer has been quite different from the last, harvest has been longer and we have been faced with more challenging weather conditions. However, this has given us the perfect opportunity to put the X9 to the test. Across the area, it has taken on the challenges of high moisture, flattened crops and long hours and still achieved fantastic results.

On the technology side, this harvest and the beginning of the drilling season have highlighted the importance of having your client, farm and fields set up, and your boundaries right. The customers we helped before harvest with data cleansing and John Deere Operations Center organisation have not only noticed significantly better data generated by their combines, and have found harvest reports to be more accurate. Over the winter we are hosting Operations Center training days so keep an eye out for dates if this is something you could use some support with.

I also want to encourage you to get in contact with us over this winter on the Precision Ag helpline. Through this number you'll reach a member of the team who will be happy to help you with any Precision Ag queries or support. If you ask the questions now, and get your Operations Center in a good place, you'll be well set up for spring operations and harvest 2024.



Carl PitelenPrecision Ag and Harvesting Manager

FOR PRECISION AG AND MACHINE OPTIMISATION SUPPORT

07828 577784

In this issue...

Autonomous 8R

NUE Trials

We update you on the current trials we're doing on nitrogen use efficiency using HarvestLab™ data6

Here's the Drill

Keeping your Tech Safe



Precision Ag: Connected Support

The Precision Ag Team

Group Precision Ag Managers:



Carl Pitelen (East) carlpitelen@benburgess.co.uk



Paul Moss (West)
paulmoss@benburgess.co.uk

EAST



Joe Howard

Aylsham
joehoward@benburgess.co.uk



Andy Webb
Kings Lynn & Holbeach
andywebb@benburgess.co.uk



Jamie Fuller

Norwich
jamiefuller@benburgess.co.uk



Barry Johnson

Beeston
barryjohnson@benburgess.co.uk



Matthew Wilkinson
Swineshead & Old Leake
matthewwilkinson@benburgess.co.uk

VEST



Peter Roffe
Coates
peterroffe@benburgess.co.uk



Ellington jordanratford@benburgess.co.uk



Oakham johnlane@benburgess.co.uk



Ed Coppen
Newmarket
edcoppen@benburgess.co.uk



Cameron Francis

Newmarket
cameronfrancis@benburgess.co.uk

ExpertConnect™

Introducing John Deere **ExpertConnect™**, a one-touch platform designed to get your problem resolved as quickly as possible. **With one text, call or WhatsApp**, we can get you to the right person within our Precision Ag team.

Text, call or WhatsApp 07828 577784 or get the App using instructions below:

How to use the ExpertConnect™ App:

- 1) Search for **JohnDeere ExpertConnect** in your app store. The app is available for FREE via Apple App Store and Google Play. Download the App. Register for a free customer account
- 2) Select **Ben Burgess** from the directory as your preferred dealer and then we will be added to your contacts list.
- 3) When you need to use it click on **Ben Burgess** and it will give you an option to phone or text to submit a support ticket. This notifies the **Ben Burgess Precision Ag team** that you, our customer need assistance. We can then connect live with you via voice, text or a live video session.



FOR PRECISION AG AND MACHINE OPTIMISATION

07828 577784



Precision Ag: Connected Support Meet the team: Get to know three members of the team



Location: West Main Depot: Newmarket

Time at Ben Burgess: 5 Years

Best tip or trick: Always buy green 😊

Most underused technology in the JD stack: Headland Turn

How can customers make more use of it: Start to use it on tillage applications to

make your ins and outs even.

Outside of work, you'll find me: Shooting



Location: West Main Depot: Oakham

Time at Ben Burgess: 3 Years

Best tip or trick: Turn it off, unplug it, plug it back in - turn it back on again!

Most underused technology in the JD stack: Automation features on tractors e.g.

Autotrac turn automation

How can customers make more use of it: Each feature comes with a 15hrs demo period on each tractor, so it is easy to have a play and see if it works for you.

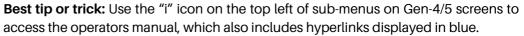
Ask me about: The nitty-gritty of John Deere Operations Center™.

Outside of work, you'll find me: Helping out on the family farm



Location: East Main Depot: Norwich

Time at Ben Burgess: 2 Years



Most underused technology in the stack: Boundaries!

Why should customers use it: They enable Autotrac Turn Automation and Section Control, and prevent overlaps and misses. You can record once using RTK and share across the fleet.

Ask me about: Command Pro™ set up enabling iTec™, Kramers and min till kit

Outside of work, you'll find me: Playing Bass Guitar with my band across East

Anglia, volunteering at a Beer Festival, or doing both at the same time.

What we learned at Langar



Our Precision Ag team went to John Deere UK headquarters, at Langar for the Precision Ag summit. Here, we were joined by members of the John Deere team and Precision Ag specialists from other UK and Irish dealers.

Here are our key takeaways:

- 1. We learned that 93% of the technology is already in base, so chances are if you want something you've already got it!
- 2. Gate Keeper, mySOYL and Omnia are all set up to work alongside your Operations Center.
- 3. The two keynote speakers had both embraced precision ag tech and saw it as an investment rather than a cost.



Keeping your technology safe



The NFU Rural Crime Report, released in August outlines that rural crime was up 22% in 2022 compared to 2021. In the East this was an even higher with a 28.5% increase. Lincolnshire came in at the most affected county in the UK for rural crime, followed by Cambridgeshire in 2nd and Norfolk at 7th.

The cost of GPS theft was valued at £1.8 million in 2022. In the report Hannah Binns wrote that in the first quarter of 2023 these costs had doubled to over half a million pounds.

So what can you do to keep your technology safe?

- Make sure you activate PIN security on Starfires and apply the 'PIN Proctected' sticker. If you need one of these stickers, contact us via Expert Connect.
- Make your tech unsaleable, cover it with engravings listing the farm name and postcode. This also means that if
 you do have something stolen, the rural crime team can get it back to you if found. On this note: keep a record of
 serial numbers.
- Out of sight, out of mind. Keep machines and equipment out of sight and preferably locked away. Store screens and starfires indoors when possible.
- Stay vigilant; if you see something suspicious, report it to the police.







NFU's Proactive Measures to Protect Farms. Read more here: www.nfumutual.co.uk/farming/rural-crime/

We are now stocking receiver steps to allow you to remove your Starfire receiver from your machine more easily. Contact the precision ag line if you're interested in a set for your large frame 6 series tractor - 6155 to a 6250R. More sizes coming soon!



The autonomous 8R

'The next giant leap in Ag Technology'

The Autonomous 8R was revealed by John Deere at CES in 2022. It's not available in the UK yet, but it does give an idea what we might see in the future so make sure you're ready...



This tractor has everything it needs to be driven by an operator, but it also has the technology to run autonomously. It uses familiar hardware, software and systems, like the Starfire, John Deere Operations Center and AutoTrac which you'd find on your own farm. But, there are additional innovations to enable automation:

- Six pairs of 360 degree vision cameras detect obstacles and determine distances.
- · High speed processors classify each pixel in the photos taken in milliseconds.
- Artificial intelligence decides if the machine moves or stops.
- Position sensing relative to a geofence to enable <1 inch accuracy.

Watch the John
John
Deere
video on
the 8R

To use the autonomous feature the machine has to be moved into a field, where it can then be configured and started using John Deere Operations Center. Even out of the field, the machine can be monitored using live video, images and data, allowing you to make any adjustments to optimise performance. Any issues trigger an automatic alert.



The Autonomous 8R highlights how much can be done on John Deere Operations Center - which is a **FREE** resource!

At a basic level: It can be used as a tracking tool for your connected machines, whether that's to see how close the grain trailer is when the combine grain tankis at 90% or to work out where your tractor with the drill on is for seed drops.

At a more advanced level: It can be used to generate maps showing fuel consumption, productivity, yield, applied rates and more. You can see the total area, working time and during harvest you can see total yield, moisture and throughput.

We recently heard from a contractor who shares reports straight from his Operations Center account to his customer once they have finished in the field. The report contains accurate data on working time, fuel usage and total amount of chemical applied. The customer then knows exactly what they're paying for.

If you want the Operations Center quick reference guide, or help getting to this advanced level, call us on:

07828 577784





John Deere tools you didn't know you needed but already have...

Remote Display Access:

 We can remotely connect to your machine to assist with set up, optimisation and troubleshooting.

Expert Alerts:

 Remote monitoring and performance checks allow us to proactively identify machine issues.

Maintenance Alerts:

 Our service advisers monitor machine operating hours, and can schedule in machine maintenance.

Service Advisor Remote:

 Remote diagnostics tracking, over-the-air updates and preventative maintenance and quick problem resolutions.

Machine Analyser:

 Analyses equipment across your fleet to compare performance (e.g. idle, working, transport time).

Work Planner:

 Plan and wirelessly transfer work to machines. Include field and guidance information, applied products and application rates.

1-Click-Go:

 Fields are detected, assigned work plans are automatically populated and the operator can accept them in one-click.

Data Sync:

• information is constantly synchronised, so all machines have the same information: field names, boundaries, guidance lines, flags and products.

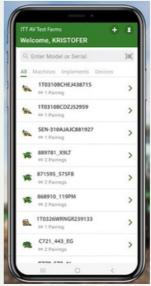
Variety Locator:

 Allows planning, documentation and analysis by variety zones or application rate. This information can be viewed on Operations Center and on the harvester.

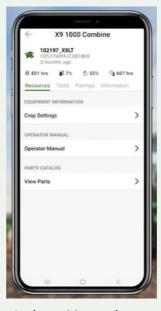


There's an app for that: **Equipment Mobile**

Find Equipment Mobile on the App store on Apple or Android to get more in depth machine information.



You can seach by model or serial number, or scan the serial number on the machine to get the information for it.



In the pairings tab you see the connected JD Modem and displays. From here you can see resources, tools, pairings and more information about each item.

After logging in with your Operations Center login, you will see a list of machines, implements and devices registered to your account.



If you select the machine, you will be able to access the operators manual or click on 'View Parts' to find the parts for your machine specifically.





Nitrogen use efficiency: Combine grain sensing trials

We asked: Can grain protein information from harvest be used to make fertility decisions?

We tested: Different nitrogen rates were applied among the field to compare grain protein and revenue.

We used: \$785i combine, Harvest Lab 3000 grain sensing

All prescriptions were applied using the Agronomy Analyzer and ISG Technology Suite.





Using the HarvestLab™ 3000 Grain Sensing allowed this grower to know which level of fertility is needed to maintain the grain quality of his wheat crop. Results also demonstrated which application results in higher profits.

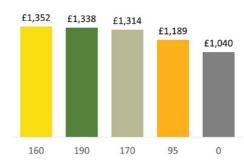
Imagery ©2023 Airbus, CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies

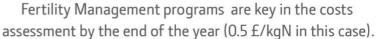
We applied nitrogen at the following rates: 0kg/ha, 95kg/ha, 160kg/ha and 190 kg/ha across the field. Then we used a Harvest Lab while combining to collect data on crude protein percent.

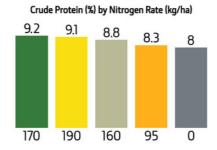
As shown in the graph below, the highest percentage of crude protein was recorded when 170/ha nitrogen was applied. The revenue per hectare, however, was greater with both the 160kg/ha and 190kg/ha Nitrogen treatments.











Higher rates of nitrogen application demonstrated increase in the quality of the grain.



Strip It!

What is strip till?

Strip till is a minimum (low-disturbance) tillage practice. Only the 'strips' where you are going to plant are cultivated, leaving large bands of uncultivated soil and retained crop residues. Strip till offers the benefits of tillage: warmed seedbed and loosened soil for root development, while leaving a significant amount of land unaffected by machinery.

Benefits of strip till

Moving less soil has huge benefits, both financial and environmental:

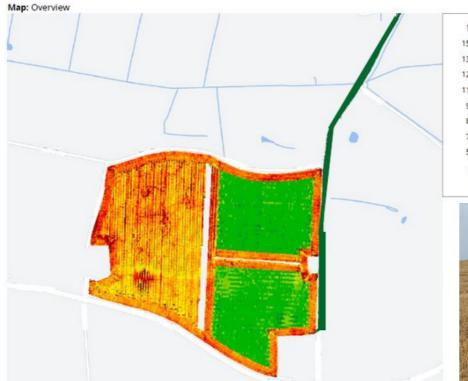
- · Saving money on fuel
- · Healthier, more resilient soil
- Retained organic matter
- · Reduced weed growth
- · Saves time



3 %

10%

On a customer's farm in Norfolk, we tested a strip-till Kuhn Striger against conventional tillage to see the fuel savings. Using John Deere Operations Center™., we could see a saving in between 8 and 11litres of fuel a hectare. With red diesel at 90p a litre, this could save you up to £10/hectare.



The map to the left shows fuel use per hour. The field on the left and headlands were done with a conventional cultivator. The inside of the two fields on the right was done with the Kuhn Striger.





Here's the Drill

First question: What drill do you have? Is it a trusty 750A that you use for zero till, or do you have one with seed sensors in every pipe? If you use an ISOBUS drill, the connectivity allows you to run the guidance map on your John Deere display. If you have an extended monitor, even better - you can have guidance on one screen and machine info on the other.



Did you know that you can control the exact number of seeds per square meter and monitor blockages without getting out of the cab:

- Kuhn offer an intelligent tramlining valve called **VISTAFLOW** which you can fit onto your drill to monitor seed passage within tubes so that you can count seeds as they leave the drill.
- Vädestad **SeedEye** also uses a sensor to count and monitor seeds in each seed tube. SeedEye also notifies you when the hopper runs out of seed.

Jamie's top tips for drilling:

Use boundaries!

Boundaries make drilling so much easier, just make sure they're right! If you use RTK boundaries, try out Boundary Fill which automatically generates guidance lines around the field. You'll have neat dovetails in the field corners that will make your neighbour jealous.

Are you getting the most out of your drill?

If you have access to prescription maps, a drill and a GPS system, you can use section control and variable rate drilling. **Section control** allows for automatic shut off and switch on when entering and leaving headlands, thus preventing large overlaps and eliminating misses. Shutting off individual coulters for different drill row widths is still something the operator will have to do manually, be it from the cab, or outside on the drill, depending on the model and system. **Variable rate drilling** will allow you to drill more or fewer seeds/square meter to cater for in field variability. Get in touch with the Precision Ag team to find out how to start precision drilling.

Document what you have seeded for reporting and comparisons within John Deere Operations Center™.

Newsletter guests

David Purdy

Territory Business Manager | John Deere

David has been in the agricultural machinery industry for over 35 years, 28 of which with John Deere. He is currently undertaking a PhD on soil and plant interactions at Nottingham University.



The 750A "improves accuracy of seed placement across a wide range of soil-types and conditions. One of the reasons for that is that the depth control wheel is positioned next to the coulter."

"The seed, then, can be placed precisely at the set depth and is less influenced by stones or clods compared to systems where the wheel is mounted before or after the coulter. The opener disc; angled at seven degrees, and the press wheel provide good slot closure and the vital seed-to-soil contact needed for uniform emergence"

David recently featured in an article in The Furrow on the efficiency and versatility of the 750A drill. In the article, three 750A owners speak about the benefits they have seen, including:

- Improved grain productivity
- · Better establishment
- Ability to drill in every condition
- · Consistent slot depth when placing seed
- Excellent seed-to-soil contact
- Accurate seed placement

Read more here: 750A Furrow Article





Stephen Curtis

Course Manager | Wensum Valley Golf & Country Club

We spoke to Stephen at Wensum Valley Golf Club. In May last year, Stephen bought Autotrac™, a Starfire™ and a display, which he said was a big investment but 'would recommend to anyone'. Initially, he struggled with the screen but said that with use he has become very confident with the technology.



Stephen said that the main benefits are:

- · Savings on input costs and time
- Flexibility to drive where you want and reducing compaction
- Accurate record keeping
- Ease of use for other operators
- · Using on other machines in the fleet.

Stephen's journey with Precision Ag started with boundary mapping which he did with a trolley and on foot. This immediately revealed that instead of 2ha (a figure they used for applications), the total hectarage was in fact 1.6ha. Knowing the exact hectarage has saved input costs. Using the calculator function on his display he worked out that this would've saved him £4,500 in spray costs per year. Spraying weekly with foliar feed, wetting agents, seaweed among other things, the savings quickly add up especially when fungicides can cost up to £695/ha!

The saving in input costs alone gives a short return on investment. That's before you factor in the labour saving costs. With 36 holes to spray, he worked out that using technology saves him an hour every time he goes out spraying. While Stephen can use blob markers to mark out sprayer paths on the fairways, they are too harsh on the fine greens grass. He had been using a second person to mark out where to spray but with this technology he no

longer needs a second person!

Using section control, Stephen can now drive where he wants at any angle and 'flitter about' the fairways in any order with full confidence that: he can fill the tank when convenient, will be applying the right amount of product, won't be overspraying, and reduce compaction. A ProGator with up to 750l of liquid is heavy: to reduce compaction further, Stephen has started using the shift boundaries feature. He shifts the guidance line by a set distance and continues his task. He now avoids driving over the cups without over or under applying.



The Operations Center keeps an accurate record of what he applies wirelessly, so he never has to worry about manually filling out a sheet. He has also marked out water zones with a 3m buffer to adhere to his LERAPS. Using section control, he can drive near these buffers with full confidence that the chemicals won't go into the buffer zone.

There are two other spray operators, who can 'easily' pick up spray jobs when he is not there. They find the tank mix from the display which shows them the products and volumes. Once they have filled up with the right tank mix, and the right volume, they can drive where they want to start, select the field on the display, press new work and it sets it all up for them.



As he has gained confidence in the technology, Stephen has started to move the Starfire™ and display onto other machines. All he has to do is adjust the implement width. He saw a huge benefit when attaching the receiver onto the aerator. He could accurately spike the whole field, and flag the 'pop-up' irrigators on his John Deere Operations CenterTM. This saves a hefty £700 each time the tines don't spike through an irrigator because they can't be seen! He also put both on his tractor and seeder, so he could accurately plant seed. When he was doing this manually his row spacing was up to 40cm out, and worse when visibility was poor such as early in the morning or when foggy. Now he doesn't have to worry about early work, or the fog because he's got the guidance lines.



Tom Wyles

Parts and Marketing | Väderstad

E-Services for TopDown and Opus



The TopDown and Opus cultivators enter a new generation, with the introduction of the iPad-based control system Väderstad E-Control, as well as the possibility to apply prescription map tillage via ISOBUS Task Control.

Whether it's adjusting individual working depths, fine-tuning the intensity of discs, tines, levellers, or packers, or even storing different machine configurations for specific field requirements, this system simplifies the complexities of modern farming. With four pre-set buttons, operators can seamlessly switch between various modes, streamlining their workflow and boosting productivity.



One of the standout features of Väderstad E-Services is its integration of prescription maps, a game-changer for precision agriculture. By operating these maps, farmers can automatically calibrate machine settings based on real-time field conditions, such as soil type and topography. This level of adaptability not only optimises agronomy and working results but also contributes to significant savings, reduced environmental impact, and improved soil health.

Väderstad TopDown 400-700 and Opus 400-700 can be ordered with E-Services as an option starting from October 2023

Next Edition: Winter

Sprayer Focus

The winter edition of Connected News will have a sprayer focus. We talk to sprayer specialists to discuss the technology on your sprayer, and we'll cover the benefits of variable rate application and how to start using it.

Agritechnica Overview

We will do a feature on what we learned at Agritechnica, the world's leading exhibition for agricultural machinery and equipment which takes place in Hannover, Germany next month.

Events and Training Calendar

A calendar of the events and training we are offering to customers in the new year will be published next time. Keep an eye out for things you think would benefit you, and/or your operators.

We want to hear from you...



With the re-introduction of this newsletter, we want to hear from you. Do you have a question, an answer, a comment? Would you like to give your opinion on how technology has helped you? Scan the QR Code to fill in the form

FOR PRECISION AG AND MACHINE OPTIMISATION SUPPORT 07828 577784