

INCYT

Monitoring a 7,000 ha Cotton Operation From One Platform

MacIntyre Downs



GOONDIWINDI, QLD

Type Irrigation + Dryland Cropping
Crop Cotton
Size 7,000 hectares



Hamish Johnstone
Goondiwindi, QLD

"For us, just having these remote eyes on things so that we can actually be concentrating on other parts of the business or our job or whatever we're doing, and feel comfortable that it'll be okay if we don't get back to the other end there for a couple of hours. Because we can actually see what's going on there remotely, it's a huge game changer for us with the kilometres that we spend driving around."

CHALLENGE

MacIntyre Downs, also referred to as 'Mac Downs', is a 7,000-hectare cotton operation near Goondiwindi. The property is split roughly 50/50 between irrigation and dryland country, stretching around 25-kilometres end to end. Seven permanent staff run the property year-round, supported by seasonal workers through the irrigation season from October to February. Checking channels, gates and tanks across that distance has historically meant hours on the road, on a farm that runs 24-hours a day through the summer cotton

SOLUTION

Operations manager Hamish Johnstone runs a full suite of INCYT sensors across the property: channel monitors, rain gauges, fuel gauges, cameras, weather stations, soil moisture probes and Polaris engine monitors. The tech is all connected and monitored through INCYT's platform. INCYT worked with the Mac Downs team through an early trial in one of the property's toughest sections before it rolled out further.

Rather than purchasing hardware outright, Mac Downs uses [INCYT Stream](#) to access the technology and data as one subscription. Through INCYT Stream, users can automatically upgrade hardware as new versions become available, without having to purchase an entirely new product each time. It means the business can continue to adopt new technology as it evolves, without being locked into hardware purchased previously.

OUTCOME

The Mac Downs team can now check water status without the drive, staff of every age and experience level can use and understand the same data on one platform. The result is a more efficient operation, and better confidence across the team that the right decisions can be made. Whether he's tracking the farm's operations from his desktop at the office, or on his mobile over a morning coffee at home, Hamish uses a wide range of INCYT's solutions and has the ability to keep an eye on properties 300km away from the same screen.

COTTON COUNTRY ALONG THE MACINTYRE RIVER

Cotton drives the calendar at MacIntyre Downs. The property runs dryland winter cropping alongside irrigated summer cotton, with the irrigation season stretching from early October through to the end of February, the busiest and longest stretch of the year. Hamish describes what that means for the team on the ground:

“We’re doing a lot of miles in cars, and we run 24-hours a day.”

INSTALLATION & CONTINUED SUPPORT

Before committing across the whole property, the team trialled the technology in one of its more difficult sections. The INCYT team travelled to the site to install a range of devices in the area. Hamish recounts:

“We put this stuff in a trial area where we didn’t think it was going to work but INCYT was fabulous.”

That same dashboard now gives Hamish visibility of properties 300-kilometres from Mac Downs, alongside the gauges and machinery data he checks each morning before the day starts. When asked about the onboarding process from installation to support on the platform, Hamish says it’s been:

“Second to none... I can call anybody at any time and get an answer or get results or get help.”

AN EVOLVING AGTECH PLATFORM BUILT TO KEEP PACE

Every sensor on Mac Downs is ‘leased’ via INCYT Stream rather than owned outright, a deliberate choice. Hamish explains:

“All our stuff is Streamed... The tech world is moving very quickly, today’s sensor can be outdated before you get it. So to have that ability to move with the world and the next thing, to be able to swap out, that made sense.”

It’s clear that Hamish wanted not just a transaction, but a partner working behind the scenes to constantly evolve and provide the best possible AgTech solutions.

“Having backup service is the most critical thing and having people invested in it as well on the other end. The crew from INCYT; everything that I’ve done with them, they actually want to continually improve and make things better.” He continues: “If we’ve had issues or concerns, we can go and talk to somebody and it doesn’t take long for them to either do it, make a fix for it and fix it, or push it further up the chain and actually work on it to make things better. So it’s been fabulous from that part.”



KILOMETRES DOWN, PRODUCTIVITY UP

The two sensor types Hamish appreciates most is the channel level sensors and rain gauges. The channel sensors have made the biggest difference to how the irrigation team operates. Where checking a channel once meant a 20-kilometre round trip, staff, including new trainees, can now check water levels from wherever they’re working on the property. Allowing more time for higher priority work, or to get home in time for family dinner.

The same can be said for rain gauges. the organisation has a total of 9 rain gauges across the properties. Giving a comprehensive view of rain data that allows them to make more informed decisions on their next water. Rather than putting even more wear and tear on farm vehicles, trying to drive out when it’s wet or adding more hours to the timesheet for someone to check which fields have gotten rain, Hamish can refer to the INCYT app. He notes:

“The rain gauges have been wonderful because they continually work compared to others that we’ve used. So yeah, they’ve been great.”

It’s not just the time being saved for Hamish and the team either, it’s also the safety and peace of mind in odd hours of the night. He says:

“Especially in the middle of the night when we get a lot of rain and things like that. From a safety point of view for staff, we can actually set up triggers. So what we would normally do is go out there, get into vehicles and drive out there in the middle of the night thinking we might have to start pumps and pump water, but with the new sensors, we can actually be reassured sitting at home and go ‘No, we don’t have to do that.’”

This is especially helpful during peak irrigation season. You’re no longer expecting staff to work through the night and continue the next day on an hour of sleep. There’s no need to wait and watch for the water to drop. With INCYT, you can set alarms that suit your operations, meaning staff are only on-farm when they need to be.

It’s also changed who can run the operation day to day. Hamish says: “Our staff here from the youngsters who are 18 up to the guys who are 60, they can all use it and they all like it.”

In the cab of a spray rig, it’s the weather data that matters most. As Hamish puts it: “You can see wind speed, wind direction, all those things very clearly without having to sort of try and read numbers across a page.”



DRIVING FARMS FORWARD

Hamish puts emphasis on the importance on progression. Not just to better manage safety or time, but to keep the next generation of agriculture involved in what's next. Hamish Says:

"I think to continue to drive these farms forward in the long term, we've actually got to bring tools like this in to keep them interested and excited about agriculture, because agriculture is enjoyable. It's fun. But we've got to move forward from the old days."

Looking back on the switch to INCYT, Hamish sums it up simply:

"INCYT has been a great crew to work with. They really have. From the purchasing side to the installation side, to the backup support and media, it really has. So I couldn't recommend them highly enough."



Hamish Johnstone

Goondiwindi, QLD

"The channel sensors have been a game changer for us when it comes to irrigation."

GET STARTED WITH INCYT

- Remote tracking, sensing & network equipment
- A centralised platform with all your data
- Monitor & control from your phone, tablet or computer
- Lifetime warranty available
- Operational excellence through innovation
- Best-in-class, on-farm support

INCYT

