**CHALLENGE**

Warwick and Di Holding were searching for a system they could use to keep accurate records for their farming operation without creating a large additional burden of work. They also wanted to be able to see accurate financial cropping results for their operation, Pontara Grain, in order to guide them in making more profitable decisions in the future.

**SOLUTION**

When Di found out their consultants and agronomists, Greg and Kirrily Condon with Grassroots Agronomy, use Agworld and that there are significant advantages in collaborating on the same platform, she decided to implement Agworld within Pontara Grain as well.

**RESULT**

By keeping all their farm records on the Agworld platform and assigning financials to all operations and inputs, Warwick and Di now have accurate financial reports available on a field-level. With these financial reports they are able to experiment with new and novel cropping systems and make informed decisions as to what works for them and what doesn’t. As a result, Di and Warwick are able to maximize the profitability and sustainability of Pontara Grain.
A journey of continuous improvement

Warwick and Di Holding started farming back in 1996 with the purchase of their first block of land. Now, in 2019, they crop a total of 2,700 hectares at Yerong Creek, NSW on a combination of owned, leased and share farmed blocks. Much has changed in the last 23 years for Warwick and Di; what hasn’t changed however is their constant quest for improving their farming operation and relentless focus on sustainability and profitability. What started with the adoption of Controlled Traffic Farming (CTF) in the mid 2000’s, has evolved into a very unique cropping system in which they have now adopted companion cropping over the last three years.

Di explains: “I’m an agronomist myself and as such I’m always interested in how we can adapt and improve our operation with the latest ideas and methods. Combine this with my husband Warwick’s mentality of ‘giving everything a go’ and you have the recipe for a lot of interesting trials! Something that we’ve done from right when we started farming though is keep good records; first in Excel, now in Agworld; it’s the researcher in me that really wants to see records and other data for everything that we do. By having historical field records and financial reports of everything that we’ve done available in Agworld, we can make sure we compare all relevant data and make the best decisions moving forward.”

“Our agronomy consultants Greg and Kirrily Condon were already using Agworld and when we realised that we could connect with them on the same platform and get their data for our farm sent directly to us, we decided to adopt Agworld as well. Previously we used spreadsheets for all our farm record keeping, but that really costs a lot more time in the end. We now create a seasonal plan together with Greg and, as the season unfolds, Greg will turn this plan into recommendations and send them through to us. We then turn this into a work order and, after application, an ‘actual’ in Agworld. Sometimes Warwick converts the work order in Agworld while he is still in the tractor but,
usually I'm the one that takes care of creating the actual records after Warwick has applied the input; it really is a team-effort.

**Companion Cropping**

With seasonal conditions seemingly becoming ever more extreme, Warwick and Di had been looking for a cropping system that can minimize the effect of wet winters and waterlogging on shallow soils with low water holding capacity while not carrying a large yield penalty in dry years. Initiated by Greg Condon, they have been trialling a companion cropping system on their farm, while also leaving out some control strips so that effects can accurately be measured. “Whenever we try something new, we want to be able to compare data with what would have happened if we hadn't implemented the change, and track it over the long term” Di explains. “With having all our operational and financial data in Agworld, it is quite easy to see the results of each scenario; which enables us to make the correct decision moving forward.”

“Some growers frown at companion cropping as they don’t really know what it entails but, once they see the results, they tend to change their mind quickly.” Warwick adds. “We sow our wheat for example at 11” spacing and between every second row we sow our companion crops with Mid Row Banders (MRB’s); this is a mix of tillage radish, purple top turnip and field peas (Percy variety). The mix is a work in progress however, as we are still learning a lot every year. Usually we would put 50kg of urea down with the MRB’s, but we do apply more urea after planting so that the crop gets at least the same amount of nutrition in the end. The idea is also that the companion crops create more plant available nutrients for the future.”

Di continues: “Our aim with companion crops is to grow more dry matter to soak up excess water to minimise winter water logging where shallow topsoil sits over sodic clay. The legumes in the mix add a bit of nitrogen and the tap root channels into sodic subsoil are beneficial for subsequent crops. Although it is hard to quantify, we feel that the real benefits will come in the form of soil health in coming years. We usually spray the companion crops out in the middle of August to give the wheat all the space it needs. Last year however was an extremely dry year and we sprayed most of our companion crops out five weeks early as we didn’t want them to compete with the wheat for moisture. But again, we left some control strips where we sprayed the companion crops out at the normal time, five weeks later. To our surprise, we didn’t get any yield penalty in these control strips whatsoever; it’s great to be able to try these things and learn as we go!”

**Visualising results**

Everything Di and Warwick do, gets translated back to data so they can measure the results and make more profitable decisions in the future. Di: “Agworld helps us with collecting and storing our data in such a form that it is very easy to create reports from. Now, whenever we sit in our lounge and discuss business with someone, it is really easy for us to look back in Agworld at exactly what we’ve done in a particular field a couple of years ago and what the results were.”
“And one of the best things about Agworld for me is that I can contact the support staff via email or chat, and they get back to me straight away; that is so valuable.” Warwick adds to this: “Something I really like about Agworld is the new SVI (Vegetative Index) layer. Whenever I’m in a field, I like to pull up the SVI layer to see if there are any in-field differences that I need to investigate further. Just the other week Di noticed an abnormality in the field, and we checked it out together; turns out it was a 10-hectare patch of lucerne flea in the middle of a field. Without the SVI layer we probably wouldn’t have noticed this but now I was able to get out there with the sprayer immediately and fix the problem before it got any worse.”

Di concludes with: “On our farm, it is all about having data available when we need it, where we need it. This can be in the form of an SVI layer when we’re looking at the crops, the financial overview of a crop we grew in a particular field two years ago, or anything else. Agworld helps us collect, store and visualise our farm data which then helps us make informed decisions throughout our farming operation.”