Erin Cahill - GRDC In Conversation

**SUMMARY KEYWORDS**

GRDC In Conversation, traditional lands, grain industry, Moora area, soil types, rainfall variability, northern wheat belt, 2024 season, agroforestry, CSBP, private agronomy, precision ag, variable rates, technology adoption, soil amelioration

**SPEAKERS**

Oli Le Lievre, Erin Cahill

**Oli Le Lievre** 00:10

This series is a GRDC investment that takes you behind the scenes as we sit down with some of the people shaping our grain industry, uncovering their journeys, learning more about their passions and the projects that are part of their everyday. We are over in Western Australia. This is now the third part of what has been the GRDC In Conversation Podcast. We’ve covered Southern Australia, we’ve covered the north across NSW and Qld, and now we’ve headed west to meet with all sorts of growers, advisers, researchers and people involved in the Aussie grains industry. Welcome to the next series.

Hi, Erin. Mate, welcome to GRDC In Conversations,

**Erin Cahill** 02:23

Yep, no worries Oli.

**Oli Le Lievre** 02:24

I'm gonna have a crack, because I was chatting to someone yesterday, and I was very glad, because they said, when they come east, they struggle with town names and knowing where places are. For me, Moora is the local. Is that right?

**Erin Cahill** 02:38

Yeah, Moora.Yep.

**Oli Le Lievre** 02:39

 And then the area where you actually are is Walebing.

**Erin Cahill** 02:41

Walebing, Yep, here we go.

**Oli Le Lievre** 02:43

It's close.

**Erin Cahill** 02:44

It hasn't gotten up on it. Most of, most of Moora has gotten up on it. So, yeah, so it's a bit unique there, but yeah.

**Oli Le Lievre** 02:51

And I've had the chance just to, I guess, drive in, it looks unreal over here, where you guys are, and as a drive up your driveway, the barleys looks like it's cranking, and going to be a really good, good harvest, some rolling hills. But I'm wondering if you'd be able to describe the area where you farm and give us a little bit of insight to those people who are listening on the tractor or wherever they are.

**Erin Cahill** 03:11

Yep, we're sort of probably Moora is a medium high rainfall area. We're two hours north of Perth. We're sort of more or less halfway between Perth and Geraldton, probably about 100 - 120km from the coast. So it's a real mix of country where we are right here at home, is high production, sort of, probably some of the better soil types in WA you sort of medium gravels, white gum gravels, loams, there's clay soils, so there's there's that here. But then equally, when you go the other side and Moora out, you go out onto the sand plain, where a lot of poorer, lower water holding capacity soils, and a lot of the growers out there have done a lot with soil amelioration, spading, plowing over the last 10 or 15 years, and really turned that sort of country around. So it's a real mix here, but we're lucky that, generally speaking, we've got pretty reliable rainfall, sort of a long term average for more theoretically, is about 460 mil. But I'd say it's more like about 400 mil. That's probably what it's become in the last 15 to 20 years. So, yeah, but, and it's, you know, it's varied wildly. You know, last year we 2023, we didn't crack, I don't think we cracked 200 mil for the whole year. And 2022, the year before, we were sort of five or 600 mil. So massive fluctuation

**Oli Le Lievre** 04:41

- That you always have an average.

**Erin Cahill** 04:42

Yep, there's always of an average. So yeah.

**Oli Le Lievre** 04:44

And knowing your background, obviously an agronomist and farmer yourself, but I just need to get a little bit educated in the West. So where I'm covering as part of this series is really also the northern and mildly eastern part of the wheat belt, but not so much so. From Mingenew, and you kind of down in and around here, what will I see, and how will the farms and the landscapes change from north to south?

**Erin Cahill** 05:07

So where we are now, we're right at the end of the Darling range. So just just to the north of here is where the Darling range, which is the range that comes out of Perth this where it peters out and loosely, as you break east from here, you'll, you'll open out into, I guess, what you'd probably regard loosely as the proper wheat belt. You've opened out into to lot of big open paddocks, a lot more red soil interspersed with sand plain. And as you move north, that sort of carries on the road that runs what's called the Midlands Road, runs up from Moora to Mingenew. Basically everything to the west side of that road from there towards the coast, is mostly sand, plain soils. And what we deal with here is the same at Coorow, Kalamar, Three Springs, all the way to Mingenew. It's all a lot of guys done a lot of work with amelioration, and when you sit on the eastern side of the road, mostly it's medium to heavy soils, so better quality soils, but the rainfall drops away. So you close to the coast, high rainfall further from the coast drops away. But the soil types generally are better. So yeah. And that's, that's the northern wheat belt, pretty much. So yep.

**Oli Le Lievre** 06:19

And this season, 2024, growing season an interesting one for you. Lots of learnings. Can you just run us through a bit of a time lapse of from, from, I guess, pre selling, through to where we are now in the what are we the second week of September?

**Erin Cahill** 06:33

Second week of September, probably the biggest turnaround in a season that I've seen in my my time. But look, we finished 2023 I think our last rain in 2023 was about the 15th of September last year. Very dry year, as I said. And from the end of all that mid September rain all the way through to the end of May, which was our opening rain this year, we had about 30 mil of rain cobbled together in little ones, twos, five. So it was very, very dry, probably, probably one of the hottest dry summers I've seen. And as you drive around, actually, you'll probably notice in the remnant vegetation the road verges a lot of dead trees. So there was a lot of, you know, mature timber, even understory and young stuff that died just the ground was that dry with a really hot, dry summer. As you go out to our western farm, there's a lot of through the poor soil types, a lot of pine forests that got put in 2030, years ago, and that all died last year or this last summer. So you've got these big blocks of pines, pine trees that were put in for agroforestry, probably 80, 90% of those blocks are now dead. So, so that's happened progressively over the last five to 10 years, but this last six to eight months, it just, it just fell over. But from when it rained at the end of May, we did get a little rain in in early, early early May was a five to 10 mil event. It was probably more problematic than good. It caused some problems with guys with stuff emerging and then dying and yeah, but we're sort of lucky. We we didn't get that. In hindsight, I was probably disappointed that we didn't get it. But, but yeah, not getting it is is good, because we when it rained, everything came up really well. And since it started raining, it's been a brilliant season. So it's a huge turnaround. Probably the broad leaf, your lupins and your canolas are a bit scratchy because of that early start with the cereals, like you said, the barley and the wheat, they look really, really good. So if we can, if we can get a September, a kind September, anything's possible. Even if we don't, I think we'll still be okay, yeah, so, yeah. The what I had to go through with clients in terms of, probably, in that June period, we were looking at pulling costs, you know, we're pulling everything back through that June period going, "shit. We are. We're going to get enough rain to how's this going to turn out? We haven't got the residual moisture in the ground that we had in 2023 from 21 to 22." So we we had a bad 23 but we had leftover moisture. We knew coming into 24 that we had no residual moisture, and we had a late start. So that early part of June were guys were managing it really carefully with them. And then as July and August progressed, suddenly we went from pulling back to going all out. And it's been very sort of diverse. If you went, if what you're going up to me and you in a day or two time when we got our opening rain, we got, I think we got a 15, and then we got a 26 a couple of days later, Mingenew you in the northern ag region, they got between 160 and 200 mil as their opening rain, which is just mind blowing. And so they've, they've had a whole different set of management be. Because it they got a big opening rain, and then they got lots of rain following it up. And so they've been struggling to get onto paddocks, traffic ability. So we, we often use planes a lot through here, in the spring time, when it gets too wet to get on paddocks. Generally, that's not a problem they have up there. Whereas this year, they've had to use planes a lot, which is probably a bit new for a lot of those guys. So, yeah. So they haven't been able to get onto post emergent sprays or so it's, yeah, it's, it's different, but it's good,

**Oli Le Lievre** 06:48

Yeah and one thing I haven't done is used too many footy references as part of the GRDC in conversation, but it sounds like Western Australia's channeled a little bit of Hawthorn. So the Hawks, we know they've when we're recording, they've won the first round week of finals. Who knows where they'll go. But it really has been that turnaround from kind of a nothingness looking down the barrel of going wow, to having a bit of fun and flying.

10:52

That's a good analogy, because if 2023 was the West Coast Eagles, because it was terrible, then yeah, 2024 would well, be the Hawks. So yeah.

**Oli Le Lievre** 11:02

And so for you, obviously, you wear a couple of hats farming and the agronomy side, but talk to me about for you was farming an option. I know you're a fourth generation farmer, but also first generation farm owner.

**Erin Cahill** 11:16

Yeah. So our family were sort of pioneers out at Nangeenan out west of Merredin. Great granddad, sort of started out there. All the brothers, dad and his brothers are in partnership out there. And Mum and Dad left there in the mid 70s and moved to Moora, and then started farming on the sand plain west of Moora, and gradually, sort of were farming there. I grew up out there, and then dad got sick in the mid 80s and leased the farm out. We still lived on the farm, but leased the farm out. And he was a good engineer and building stuff, and so you can see the option with agroforestry. So he started planting a lot of trees and had a nursery. And that was gave him a chance to sort of get back on his feet a bit. And then they sold the farm in 2000 and by that stage, I was already working for a company called CSBP. I'd done boarding school in Perth and Ag Science at Union. Had a job with CSBP, and I was in their field research team based out of Perth covering sort of the whole of WA which was a really cool insight into learning a lot in a condensed period of time. You're doing trials from Esperance to Geraldton and ever in between. And my background was soil science and plant science. So it was, it was great. And I got transferred back to Moora as a territory manager for them in 1999 and I was trying to get mum and dad to, sort of, I wanted to go back on the farm. And basically, mum wasn't keen to me see me working for a bank for the next 30 years, which, you know, because I was gonna have to buy the amount. It was never going to be a hand on type proposition. And ultimately, they sold it in 2000 and in 2002 I sort of was still working for CSBP, but I could see all these little blocks of land around town that were covered in wild oats and not doing anything, little sort of horse paddocks, myself and a mate, who was the oldest aggro at the time. We borrowed a combine and a tractor, and we leased 40 hectares, 100 acres, and that was 2002 so it was a really, really, was one of the dry years WA had. It was pretty ordinary. So we put our 40 hectares of wheat in, and at the end of the year, we managed to turn a really, really tiny profit. And so then the next year we we found a few more paddocks, and we got a bit more. And 2003 was a really good year. And so we just, he ended up moving back down to his family farm, down at Arthur River, and I sort of carried on leasing, and gradually just built up leasing. We bought a bit of plant and leased and leased, and then I got an opportunity with Tony and Judy Snell to do some share farming, who we still share farm with now today, which is whatever that is, 17-18, years later. So we started share farming with them in 2007 and have just gradually built up from that original 40 hectares to now. We're cropping about 2,300 hectares, and we own probably about 800, 700-800 hectares, and the rest is a combination of lease and share farm. So, and we've started with a funky old scarifier and a crappy old tractor that I bought off dad for five grand. So now we've got a state of the art plant we can it's all CTF, it's all latest technology, and we've just sort of built up from scratch.

**Oli Le Lievre** 14:37

And so did you start with the intentions of like, trying to say, as a young 20 something year old, grow an empire. What did you just go, like, let's just do something with our spare time and try and make a little bit of cash and see how we go.

**Erin Cahill** 14:51

 oh, it was probably the latter. It was. I was helping people in my role with CSBP to grow crops and. Obviously grew up on a farm, so it was helping people do it, but you get the bug to do it yourself and see whether you can practice what you preach. So that's how it started, and then it just sort of evolved, and it became a good way of a little bit of extra money, which is a bit silly, really, because everything I made, I just put back into the farm. So it didn't actually become extra money. It's the scourge you want to better tract, or you want it better. So it just, it just evolved. And I was obviously still working with csbp. They were brilliant to work with all the way up until I left them in 2010 and went private agronomy from there on. But yeah, it was just, it was just an evolution. There was no, yeah, there's no sort of empire building or anything like that. It was just, just like farming and what, what it could evolve into. I mean, ultimately, the goal was always to probably be farming full time, but I think that is a hard thing to achieve in the... Price of land in that time has just evolved massively, and you're always capital constrained. You're always chasing it. So you know, when mum and dad sold the farm in 2000 they sold it for 150 bucks an acre. Two years later, it was 302 years later, it was 450 you could have bought country on the flats in Moora, which is a high production area. You could have bought land there for 500 bucks an acre in 2003 and we were just trying to get enough capital together to do it. And, you know, land sold that sort of country sold around Mora last year for five and a half 1000 bucks an acre. Arable. So from 2003 to 2023. 20 years, it's gone tenfold. So that's been a challenge with with farming. And I think going forward, that's going to be the risk for young people to get in, is it's not just the land, the the machinery has done the same thing. You know, a brand new header used to be 500,000 a brand new header now is 1.1-1.2. You know, self fulfilled broom spray was, you know, four or 500 now it's eight, 900,000 so it's all evolved. And you know, you can start off with second hand gear, like I did, second, third, fourth hand. And you you go, but as you scale improves and things evolve, you you need to move with the times. So you have to invest. So.

**Oli Le Lievre** 17:34

How did the agronomy side help you with that? Was it like? Yeah. How did it help you with establishing and and getting your head around running your own farming business as well.

**Erin Cahill** 17:42

There's, well, two things that gave me cash flow so I didn't have to worry about so when I worked for CSBP, I was on salary. So whatever the farm made, it didn't have to support me the farm, you could just whatever the farm made could be and reinvested. So we could do that. And then subsequently, when I left CSBP And I was working in my own business, again, it was my cash flow to to have our living, educate our kids, do all those things, and the farm could keep evolving, but probably more so it got you to, you know, I've got the same client group of people that I have pretty much work with now, mostly for 25-26 years. So from when I started with CSBP, when I moved a lot of those guys became my private clients. And I've been pretty lucky there. A lot of them are very good farmers in their own right. They're sort of leading the charge a bit. So you just learn, you learn off them, you learn alongside them. You know, you sort of evolve along the way. I've always been pretty keen on precision ag and what that can do for us. And so I've been able to learn on my patch, you know, almost use myself as a bit of a guinea pig. And then I can, you know, then I can go and thrust some of these things on them that they might not be as keen to take on, but you can do it knowing that you've tried it. And so yeah, it's having the two things has been great. But I think just your your advising and living the same as what the people that you're advising are. So if it's not rained for you, it's not rained for them. So your decision making process, I think, is becomes pretty good. You, you know, you understand the things that bolt into and out of a gross margin, and what you really, really need in an agronomic sense, versus what's nice, you know, what you really need, they're the non negotiable. And what you can bolt on the top in a good year, it becomes the this, you know, the cream, I guess, so equally in a dry year that where do you strip back to? So I think it's, yeah, they've, they've worked well together. It's probably been challenged for time, a lot of the time, and I've had a very understanding wife. And because there's been a lot of weekend work and nights and all the rest of it. But...

**Oli Le Lievre** 20:03

Yeah, it's worked well. And, oh, I'll follow up on that because I was reading it. I think it was a country style or someone did a an article on you guys a little while ago. The kids were young and and your wife had mentioned that the kids, like a lot of in those early years, a lot of the time was spent well, how do we go and spend time with dad on the farming side, because that was obviously what you needed to do to start to make those, yeah, gains there.

**Erin Cahill** 20:27

Yeah, and it's early days. It was hard, and it's obviously got easier as as we've got a bit of scale and we've been able to employ people, and the gears got better, so you can get stuff done quicker. So, and the kids have grown with it, and they're at the point now where last harvest, so my daughter's 15, and son's 13, so they both, daughter sort of started to drive the chase had been the year before last, and her son, you know, they did Sundays on the chaser last year. So they're keen. And, yeah, they've just evolved with it. You know, with the agronomy, I'd take them out, you know, so they learned weeds and bugs and disease from a really early age, sort of inadvertently, they were just with you, and you'd be looking and they'd, you'd sort of explain it to them, and and then, you know, in terms of the on the farm, they're just, it's just country kids that just becomes, they just sort of, I think they just lap it up. So, yeah, yep,

**Oli Le Lievre** 21:24

I'd love to know about the that transition from CSBP into the private agronomy side. Like, why would why was the timing right? And how did that kind of evolve for you?

**Erin Cahill** 21:34

It was sort of bit by default. So I'd been with CSBP for a while. And what had happened is it sort of grown from having, you know, like I said, 40 hectares, 80 hectares, 200-500. And to do it, I was doing it on weekends, and I was taking my annual leave. So I was using annual leave for seeding. I take a week at seeding and a week at harvest. So I was doing all the work. And so basically, I was using sort of my annual leave up, and then I got to seven years, and I had long because at that stage we've got long service leave. So I was sort of juggling this leave where I could still have a couple of weeks off in January for a break, but eating into my long service leave, and I was still, I sort of got the runs on the board early with CSBP and doing quite well. And I went to them in 2008 or nine, and sort of said, "Oh, look, I've chewed up all my long service. Can I have? I think it was about six weeks of unpaid leave a year?" And they knew what was happening. I was very open. And, you know, I was still doing my job for them. Well, I hope. And so I sort of said, can I have six weeks so I can do seed and harvest, and then at least I can have a couple of weeks break in January when things are quiet, and the boss at the time sort of came back to me surprising, and said, Well, "you can actually have six weeks paid leave a year." We're not. And I was like, "oh shit. I wasn't expecting that." So, so we did that for another couple of years, and then I just felt like that the the fertilizer industry at the time was changing, and I had a few mates that left at the same time, and it just felt like the right time to jump out and and and go on my own. And so I sort of joined. There's eight of us that were in the ag vivo group. So that's we're all sort of there's three of the four of us that, three of us that are farming and doing agronomy, and the other guys are just doing agronomy. But yeah, so that's where we sort of jumped into so we're a network of guys that are all spread medium to high rainfall and being in being, you know, when you're working for a company and they were a great company, you're still constrained by another employer and what they expect, and that's fine. And, you know, I did all the things I had to, but when you your own boss, running your own show, you just get that little bit more flexibility. And with a family coming along, it just made it easier, so that in January, when we want to have a break and go away camping or coast or whatever, you could just do it. So just it just gave us a lot of flexibility, which meant that all the hours you put in during the year, you didn't have to feel guilty taking a break, you know, if you're doing it on someone else's time, I guess so, yeah.

**Oli Le Lievre** 24:22

 It's a bit of a perk of the job, isn't it?

**Erin Cahill** 24:24

Yeah, yeah. So, yeah, you know, kids, sports, days, you know, anything like that. You just your own boss. You can. You're not asking someone for, "Can I have half a day off?" You just do it. So.

**Oli Le Lievre** 24:36

 And I think that's, well, that's the thing that I say I'm learning slowly, but that I've chatted to other people who run their own business, and it's kind of like, well, you of like, well, you when the moments pop up that you can do something, you make them matter, especially from a family point of view. But also it's that that kind of ridding yourself of guilt, because, you know, at the end of the day, you're not going to compromise the business, because everything else comes back to that. Yeah, that's you. Keep it right. You can make it work.

**Erin Cahill** 25:01

Yeah, and you have to, you know, probably guilty early days of not taking enough time off, like you would just go, go, go, trying to burn the candle at both ends, because of that guilt factor, I guess. But you know, as a kids have got older, got better at trying to take a day or half a day, depending on what it is. Or, you know, when we go on holidays, you know, September, school holidays, we go away camping. You know, January we have and when I'm off, I just check out on, that's it. With a very good skill, yeah, and, and it's good you're not, you know, I'm happy to put the phone away and just yeah, check out and give them my attention, because they probably suffer a bit in terms of, you know, varying times when you can't, because farming is all about timing. So you know, if something needs to be sprayed or or fertilized, it needs to happen. And so there's, they compromise during the year, but when we the other side of the year, I'm, you know, happy to do whatever it takes to keep them going. So yeah, and my wife, so she does a fantastic job.

**Oli Le Lievre** 26:05

And you mentioned that part around like burning the candle at both ends. Did it? Did it come to a grind at any stage or a halt? Or were you able to keep it up and then to a point where you kind of realized that, yeah, the time to bring in a bit of balance was right?

**Erin Cahill** 26:20

Never became a grind. There was times when you wondered what the hell you're doing or why you're doing it, and there still probably is when you have a bad day. Farming has plenty of good days, but there's days when it all just goes pear shaped, and despite your best efforts, and sometimes you wonder why. But no, I was, I think if you're passionate about what you do and you love what you do, and that's we're trying to instill in our kids. Whatever you do for a job, you're going to do it for 40 or 50 years. So whether it's farming or something else, just make sure whatever you do you're passionate about, because then it makes the hard days easy. And you know, I take a lot of you know, I'm outside all the time with with work and agronemy, or farming and just observing. I just love watching the day as it evolves. You know, sunsets, sun rises. So, no, it's never been. There's been days where it's been hard but never got, you know, to, yeah, you you burn the candle. But I think because you can see the fruits of your labor most of the time, even in a dry year, you can where things don't you might not get the financial result that you wanted, but you can always look at stuff and go, I did that well, I could have done that better, you know? So there's always this constant evolution and practice. So no, it's never been, no, never.

**Oli Le Lievre** 27:41

Yeah. Are you a reflective person? Like off the back of that?

27:45

Oh, yeah, I don't like to stand still. I like moving forward. So you need to look at what worked, and that's probably born out of your own farming stuff, but also what you're doing with clients, you know, if you're doing the same thing now that you were doing five years ago. Well, you know, we you've got to keep evolving, and you've got to keep moving, and I like to do that, so I guess, yeah, if that's reflection, yeah, yeah, yep.

**Oli Le Lievre** 28:11

What does it look like from here, going forward for both the agronomy business, but also your own farming?

**Erin Cahill** 28:16

Um, the agronomy business is probably, it's funny because that, I mean, at that, probably that point where, you know, was all burning the candle at both ends. I was about three or four years in, and I had left CSBP with a group of clients, and I had just worked my whole thing around client numbers. So there's about 35 guys I was looking after. And it was basically about 150,000 hectares I was trying to cover for those 35 guys. And about three year, four years in, I was trying to work on a in the growing season, getting back around on farm every three weeks. I was just struggling to do it, and I couldn't work out why. And I sort of was in the office one night doing off, you know, looking at stuff, as I do, and I came in, and I suddenly realized I was looking at client numbers, not hectares, and they had all leased and bought more land. So I wasn't looking after 150 anymore. I was looking after just short of 190,000 hectares, and that's why I couldn't get around in three weeks. So I was a bit slow on the uptake, but so I I actually ended up handing over a proportion of three or four clients to the east to another agronomist, which took off three particularly large growers. And it was a shame, because that low rainfall I really enjoyed, and they were great people, but it gave me some time back and then over the journey. In the last sort of few years, I've had a few guys retire and retire out of farming. Now, a few of them have sold their farm onto other clients. A few have sold out altogether. So I'm still looking after about 28 so haven't... you know, I'm not replacing people, but the hectares I'm covering is still about 150,000 so that's that sort of number. You know, ideal world would probably lighten the load on that and gradually do a bit more farming. But I'm not. You know what happens, happens. I'm not. Yeah, I'm not going to chase one over the other. So.

**Oli Le Lievre** 30:21

Keeps you busy anyway.

**Erin Cahill** 30:22

Keeps you busy. I've got a few more years of boarding school fees, so probably one, I guess, once boarding schools out the way. So we've got two years for our daughter and four more years for our son, once that pressure's out the way. Yeah, we'll probably relax a little bit more, and then, depending on what they do in terms of they may or may not come back to the farm. So if they don't, we'll have a really good retirement. If they do, I'm probably here for a fair bit longer. So we got well, they both showing signs. So yeah, so it's just the evolution. We'll just see where it goes.

**Oli Le Lievre** 30:58

That or you might be struggling with harvest and whatnot, because you might be following the kids around playing cricket or something.

**Erin Cahill** 31:04

Yeah, yeah. No, it's all um, yeah, there. It's all there. So yep.

**Oli Le Lievre** 31:09

What makes a good agronomist?

**Erin Cahill** 31:10

Um, I think someone who's you gotta listen, but you've also got to be prepared to help make decisions. So often people look guys I work with, they know how to farm. They don't need me to tell them how to farm, but they need me because they've all got busy. I need to be abreast of all of the the new stuff that's evolving. They want me to just sort through all of it and bring it back to this is the key stuff, you know, sort through all the chaff, because there's a lot of that. So you've got to be able to do that for them and then help them. I guess there's a lot of, again, the guys I've worked with work for a long time. There's a lot of reassurance. So we're going through, you know, wet year or dry year. You know, they know what to do, but there's often a lot of bouncing ideas and and it's not agronomy is yes, it's the science that science is really important. But with farms getting bigger and guys trying to stand back a little bit from they're not necessarily the guy that's on the seeder or the sprayer or what, not anymore, they're managing logistics. So the agronomy of logistics has almost become a really important part to the science is, how can we make all this work really seamlessly, really effectively in terms of both outcome financially and outcome on the ground in terms of sustainability and all those things moving forward. So, you know, you become the con-- you become the conduit for that. So yeah, and becoming their eyes. As farms get bigger, they can't get across the ground, across everything. So, you know, with your experience, you can go in and look at stuff and say, right, oh, we've got to do this, and this, or no, no, that's fine. That can just hold and wait. So it's, it's, yeah, you sort of, I guess that's the the way of looking at it. I've got a client that I've dealt with for a long time, and he presented me with a T shirt the other day that he'd had made up he was really proud of himself, with Dr Doom emblazoned on the on the front of it. And and it was sort of was a dig in that every time I come out to see him, he has to spend money, but like I say to him, we do a paddock plan at the start of every year that's quite detailed, and everything I'm talking about with you through the course of the years in that paddock plan. So you're not spending anything that you didn't know about, but that was just their, their sort of joke to give me this t shirt. And, yeah, so it's there's a lot about listing and implementing a plan, so.

32:12

And for people who are sitting there, and maybe because this series will come out around harvest time, but as you say to that, the people who have gone traditionally, come the end of the year, they get the chance to sit in the header, and they can see across every paddock and what's happening. What are some of the tips and tricks that you're seeing working with your different clients? Of how do people actually get across the stuff that matters versus, I guess, the noise?

**Oli Le Lievre** 34:16

Yeah, so, I mean, all of the companies now, it doesn't matter whether it's a red header, green head or a yellow header. They've got really good technology in them for mapping weeds, mapping constraints. So you can drop pins, or you can, even if you don't want to do that and you want to go back to a paper based map and just draw on a map all the things you know, there was growing grass over there. There was non wetting soil there. So it's the guys that you know that constant, I guess, reflection. What is, you know, what? What happened? What did we see? So harvest time, you know, you're collecting yield data, and a yield map tells you the outcome. A picture tells you a snapshot in time, but doesn't tell you why. So the why is someone sitting in a seat going, "Oh, shit, we didn't quite get our plant numbers right on this soil type." You know, maybe it's non weeding soil. Maybe it's some other constraint, or weeds. You know, the yield dropped off in the yield map. But was that due to weeds? Was it due to a compaction zone? Was it due to subsoil pH? Was it, you know, whatever. So that's where collecting that information at harvest time and then implementing that into your planning the next year. So the way I sort of worked my year, we're doing all of 2025, planning now. So we'll start planning crop rotation, fertilizer requirements, chemical rotations now. We get to harvest time, I jump on a header and do my thing, and we talk, you know, I talk constantly on the phone during harvester. Guys generally have a break January, and then February will normally sit down and start to look at the result from harvest, and look at the plan that we put in place in the September and we'll start to mold that, you know, revise that September plan for February, March for the coming year. And then we'll do all our soil testing, and that all becomes into the plan. And then they'll, they'll get a fairly detailed paddock by paddock book. It's all electronically based as well, but it's amazing how a lot of them still like a turning a page, and they can scratch notes on it and and I like that. Like if you see someone that's that's recording stuff and making notes and drawing on maps that they're invested. So equally, if someone you know is using, say, John Deere ops center or something, and they're doing it digitally, which is my preferred, then I can take that and take that spatial information and turn it into something so, so guys are doing it both ways, so we'll put that into the plan, and then the middle of the year we just, it's just implementation of that plan and fine tuning it, and as weeds or bugs or disease comes along, or nutrition requirements, we just evolve it. But because I've worked with these guys for a long time and know their farms really well, generally, there's not too much that sneaks up that bites us, you know you generally, you're trying to plan ahead. And probably much to my wife's discussed I remember what's happening in the back paddy Fred Jones is far better than I remember birthdays and anniversaries and stuff like that. So it's, you know, she sits in the car and listens to me and just shakes her head sometimes. So, yeah. That's because it's the experience though, of going out and seeing something and then you can remember, remember it to your favorite song or something?

**Erin Cahill** 37:42

Yeah, you can you just, yeah, it's what you know. I've got a useless in my filing cabinet. In my head. I've got a useful and useless information file. And yeah, so.

**Oli Le Lievre** 37:53

What do you think across your career has had the biggest positive change for for you and your work as an agronomist and farmer?

**Erin Cahill** 38:02

Being able to do stuff spatially, as in iPhones, iPads, taking data into the paddock and using it. You know, a lot of so when I started soil test results used to be posted from the CSPP lab in Perth out to the post office in Moora. I'd go to the post office and grab a wad of them, and I'd go out and I'd look at them, and I'd write recommendations to the grower. That was sort of what you did in February, March. Now it comes through as a data file. You can look at the numbers, and you can turn those numbers into a an outcome, into a variable rate map for lime or potash or gypsum or compound fertilizer or nitrogen. So to be able to do that and do it well with the data, and as you get to know your area and your soil types, like I can do it really well for here, I wouldn't ever envisage that I can go and do it brilliantly in another area. I could probably do it okay, but you know your own area and your soil types and your risks really well. So for our neck of the woods, that that ability to take data spatially and turn it into something and then use it in the paddock, in season, on a map, where, you know, if an iPad and you see something and you're going, oh shit, what's what's going on there, and you can pull stuff up, that's been a big change compared to what it was 2025 years ago.

**Oli Le Lievre** 39:26

Is there something that you're getting really excited about, or some sort of, whether it's a technology or practice or whatnot, that you go, this is going to be pretty exciting for the next 10 or 20 years?

**Erin Cahill** 39:37

Yeah. Look, I think farming is made up of lots and lots of little things like the, I think the evolution in equipment so be able to cover ground really fast, but also cover it like guys that are sitting in a boom spray aren't sitting in a bunky old thing in an open cab being exposed to chemicals and all the rest of it. We can, we can do our job fast, safely, and with a really, really accurate outcome, way more so than what we did historically. So for the environment, for food production, that's, you know, you can't food safety. You can't sort of have it any better. But variable rates, one of those things will precision ag it's been around for quite a long time now, but across the industry, it's probably been, probably poorly adopted, and still is. GPS, as in auto steer, is pretty widely adopted. But when you get it down to managing at a paddock level with variable rate, fertilizer, variable rate seed, variable rate chemical and fungicide applications. It's still pretty low percentages across the whole of Australia, I'd say there's probably only 15 or 20% of guys that are actively using it all the time. So I think that's got a lot of legs to take that a long way, and probably the use of AI to take some of that data and bring it together that then I can then take it and make it even more usable. I think going forward, some of that will be exciting if we can get that to be more effective. Because crunching numbers and all that's time consuming, getting data into a format that you can use it. That's where a lot of it gets stopped, because people don't, they don't understand that. To make this stuff being used, you've got to get all your mapping right, your boundary files. You've got to get all your paddock naming, just all the general admin. You know, it's the old added shit in, shit out. If you do it, well, what the outcome is good, but if you do it poorly, the outcome is... or people just drop away. So I think as the industry evolves, and people understand and the newer generations are good because technology, they've they've grown with it, whereas a lot of people, sort of, my age or older, probably have evolved with it, but they haven't, you know, they haven't started off with an iPhone or something right from the get go. So, so I think technology, in that sense, I think autonomy is going to be a massive, massive plus the ability to get stuff done in a timely fashion and also help people have, you know, we're talking about quality of life before I look at summer spraying, you know, we have to do it. I hate doing it. You know, you're getting up at two or three in the morning in the summer time, when you try and have a break spraying, you know, till eight or nine o'clock, depending on the conditions, and you've got to get your whole farm sprayed. Whereas, if I can have a autonomous thing, spraying it spot, spraying it over the summer or even in winter, great. So I think that that evolution of autonomy, coupled in with taking precision ag to the next level, that that's exciting and probably where I've put a fair bit of effort into, so yeah.

**Oli Le Lievre** 42:53

Very exciting. I've got one more question, and not that we want to pit east and west, but I think let's do it for a bit of fun. What's maybe, what's something from the east that you would love to have over here?

**Erin Cahill** 43:07

Their soil types.

**Oli Le Lievre** 43:09

Okay, fair.

**Erin Cahill** 43:10

So, yeah, I think I've been fortunate...

**Oli Le Lievre** 43:13

Very quickly.

**Erin Cahill** 43:14

Yeah, I've been fortunate to travel over there. I don't, I mean, they're footy teams, some of them are good, but we all, we all have evolutions in that the eagles be back at some point. But, yeah, they're soil types, you know, like they've they're pretty picky, not, not all of them, but what we farm in WA is generally some of the oldest, most weathered, poorest stuff, you know, not just in Australia, but in the world. And what guys have been able to achieve on it is an absolute credit to them. And the evolution of soil amelioration and nutrition and farming techniques. So, so they're soil types, but that that's lazy then, because I think if you've got, if you've got it easy, you don't, you don't evolve. But, yeah, that would be be nice. But look, I look at what we've been able to achieve in WA with what we've got both saw tops and rainfall and, yeah, yeah, probably been changed a lot.

**Oli Le Lievre** 44:17

It was very quick answer. Let's see, though, what about something from the West that the East could have that make their life better, easier, different?

**Erin Cahill** 44:26

I don't know. I think with the West, a lot of the growers, and you'll probably, you'll probably see it as you go north, a lot of the farmers in WA are pretty progressive. They they float along under the guys doing a really good job tend to float along under the radar. But they radar, but they do it really, really well. And we've had lots of guys come over here from the east looking at what we're doing. And I mean, I've spoken to grower groups that have come over, and they've got off a bus, and they've looked at the ground and kicked it and gone, you know, if I can't believe you guys actually farm this. And so I think If maybe our, probably our, we're always keen to adopt and adapt in WA because we have to. And I think if some of that went east, I'm not saying they're not good farmers, because they are, but we're probably just push things a little bit faster and harder because we have to. And if you put that wheel with their soil types, you know, dub Australia as a production country could...

**Oli Le Lievre** 45:28

- becomes a pretty deadly combination.

**Erin Cahill** 45:30

It does. Yeah.

**Oli Le Lievre** 45:31

Well, Aaron, yeah. I just wanted to say thank you so much for the last hour or so of chatting and the couple of hours and the cup of coffee, it's a beautiful spot you've got here that you get to call home. And I'm really looking forward to driving around.

45:43

Yep, no, thanks for doing this. It's, um, it was, it was first time I've done one, so it was really interesting. And yeah, we live in a we live in an amazing place, so we're, we're super fortunate. And, yeah, thanks.

**Oli Le Lievre** 45:55

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