# GRDC PODCAST TRANSCRIPT

**10 Years of WeedSmart and the Big 6**

[00:00:05] **Intro** This is a GRDC podcast.

[00:00:12] **Camilla Plunkett** Hello, I'm Camilla Plunkett. WeedSmart is an extension program developed to help growers and agronomists look at ways to manage their weed populations at a whole farm level. Whether it's the technical aspect of managing weeds or the biology of weed populations, WeedSmart has management solutions that can be applied across all cropping systems. GRDC is a WeedSmart platinum partner, joining forces with several other agricultural, industry and commercial partners to ensure diverse, effective, and sustainable crop weed control. This co-investment is celebrating its 10th year as a project and I caught up with high rainfall zone agronomist, Jana Dixon and southern extension agronomist, Greg Condon, to find out about the new revamped Big 6 for 2023. Jana it's been ten years. A lot has happened, WeedSmart has grown and evolved and is certainly a project to celebrate.

[00:01:21] **Jana Dixon - WeedSmart** We pride ourselves on being pretty dynamic and innovative and staying up with the latest trends, but our main focus is to stop resistance in weeds and manage weeds on farms to make sure farms are profitable in the future.

[00:01:35] **Camilla Plunkett** So the Big 6, six easy steps if you like? A framework that you can refer to for a range of different weed management tools and strategies.

[00:01:45] **Jana Dixon - WeedSmart** We've chosen six because it was easy to group together, and it really does keep it simple. So I guess you can think of these strategies as a bit of a checklist. How many of the ‘Big 6’ am I doing? What am I doing really well? What am I not so good in? And yeah, growers and agronomists have really responded well to this framework. So, the six strategies that we talk about is rotating crops and pastures as one, mix and rotating herbicides, increasing crop competition is number three, optimising spray efficacy is sort of the latest addition we've added to the ‘Big 6’, which was involved in the revamp, stopping weed seed set and implementing harvest weed seed control is number six.

[00:02:28] **Camilla Plunkett** And Greg, why was WeedSmart developed?

[00:02:32] **Greg Condon - WeedSmart** WeedSmart is an extension program developed to help industry, particularly producers and agronomists, look at ways to manage their weed populations at a whole farm level. So historically weed management been focussed on the individual components, so herbicides in particular, so the technical aspects of managing weeds or the biology of weed populations. Herbicide resistance was managed in isolation. So what we aim to do in WeedSmart and it's now been going for ten years, is bring together all the different facets of integrated weed management. It's been termed WeedSmart, so it's packaged up in a pretty smart communications platform and then deliver that across the nation through a range of tactics with extension officers, case studies, an annual conference every year there's a webinars podcast, there's a whole lot of different media forms to help deliver all the different information related to managing weed populations, but also in the context of profitable farming systems. So, we don't want to just focus on the weeds in isolation and their management, but how it actually fits the way a practical system for growers on their farm.

[00:03:41] **Camilla Plunkett** And those resources are available on the website weedsmart.org.au and the social media platforms are regularly updated for those who wish to receive updates. Jana, how effective has the campaign been?

[00:03:56] **Jana Dixon - WeedSmart** I think it's been very successful. It's a really succinct way of communicating six different strategies that can be used for managing weeds, and I think growers and agronomists have really responded well to it. They're able to use it as a bit of a checklist. Let's try and tick off as many of the ‘Big 6’ as we can, rather than just focusing on one strategy. We know having a silver bullet approach isn't the way to go. So yeah, I think it's been really successful and it's great to be revamping it and relaunching it.

[00:04:28] **Camilla Plunkett** Greg, can you take us through the ‘Big 6’?

[00:04:31] **Greg Condon - WeedSmart** The ‘Big 6’ is a framework around the different integrated weed management platforms that growers have at their disposal. So it brings together all the information from a whole range of industry and extension sources that have existed in the past and are in place at the present time. So it just tries to bring it all under the one umbrella. So for example, the key aspect of starting any farming system, particularly in dryland broadacre, is crop rotation. So that's number one in the ‘Big 6’ is rotating crops and pastures. So that allows you to introduce diversity for not only your crop types, but also the weed management programs that follow it. And then that's closely followed by the mix and rotation of herbicides. Herbicides are generally a key focus of a lot of weed management programs, but we try and dilute that with looking at not only the chemical aspects but also the cultural tools, but the herbicide aspect of the modes of action that are used on farm and then the research that goes into resistance management is critical to helping manage weed populations. And thirdly, stopping weed seeds set. So as we get to the end of a growing season, we often look at what options we might have to manage weed seed sets, so that could be crop topping in a pulse or a canola phase or conversely cutting them for hay or silage. So stopping that seed set to minimise the addition to the seed bank of other susceptible or resistant populations. So that extends into the I guess the next part of crop growth is that optimising crop competition. So all the different aspects that go into crop competition to help reduce that weed seed bank, so that might be applying lime or gypsum to improve crop competition, increasing sowing rates, using hybrid canola varieties. So we're mixing and rotating our herbicides in a diverse rotation, we're adding crop competition on top of that, it compliments each other in each step of the farming system. Spray efficacy is a new focus within WeedSmart Big 6, so we've changed the focus around, I guess, spraying technology into spraying efficacy so we can really look at all the different aspects that are going into this sector of managing spray drift, optimising where droplets end up in the canopy and in fallows. The new technologies around camera spraying, autonomous systems, so this is really important for us at a basic level, but also at an advanced level with all the new technology coming in, to make sure that those spray droplets are hitting the target for obviously efficiency of application, but also mitigating that off target aspect of spray application. And the last one, but not least, is the implementation of harvest weed seed control. So largely coming out of the Western Australian programs of integrated weed management with narrow windrow burning and chaff carts and chaff decks and that's sort of being extended into the eastern states as more advanced systems like the impact mills have evolved. So that sees the destruction of weed seeds as they exit the harvester, so that's really key part of this collaborative approach where we've got all these different aspects of weed management that work together. Some producers might choose to do three or four of the ‘Big 6’, and there's few rockstars out there that do all six, but it's just focussed around complementing that largely, the chemistry used with the culture tools.

[00:07:38] **Camilla Plunkett** Sounds like a very succinct checklist. Jana, why relaunch the ‘Big 6’? Have people forgotten about weeds? Have they all been eradicated or is it a case of continuing to be vigilant?

[00:07:51] **Jana Dixon - WeedSmart** We've had some really great success with dealing with weeds over the years, but they're never going to go away. We're always going to be dealing with them. But the exciting thing is, is that the way we're dealing with them is going to change. Our farming systems have changed, the technology has changed, and I think the revamp of the WeedSmart ‘Big 6’ is really reflected this, the change in our farming systems. We want to be dynamic and continuously changing. So yeah, I think that's sort of where the revamp came from. And one of the main key changes to the WeedSmart ‘Big 6’ was the addition of optimising spray efficacy. So we've shifted the double knock strategy away from the ‘Big 6’ and that is included in the mix and rotate approach and we've added in optimised spray efficacy. So this is becoming more and more important to make sure every droplet you're spraying is hitting the target. We want to be getting the best control we can for the weeds, for our profitability, for best practice herbicide use, there's a range of reasons why this needs to be in the ‘Big 6’. It is really about best practice spraying to make sure we're able to use these products into the future in a sustainable way.

[00:08:59] **Camilla Plunkett** Sounds great. So the ‘Big 6’, rotating crops and pastures, mixing and rotating herbicides, stopping the weed seed set, optimising crop growth, spray efficacy and implementing harvest weed seed control. Sounds like the perfect recipe for the grower to call the shots, not the weeds. And lastly, Greg, WeedSmart week, the ten year anniversary?

[00:09:27] **Greg Condon - WeedSmart** So this year WeedSmart celebrates its tenth year with our conference in Dubbo, which is the WeedSmart Week, which is kicking off on the first of August in Dubbo. We've been blessed with great involvement from the local community, we've got a committee there of agronomists and local industry people, so we'll have a day long conference in town with a lot of panels. So we've actually got more farmers speaking this year than ever before, combined with some leading agronomists, which is pretty exciting. So these people are all giving their time for people to come along and listen to how I guess some of the farming systems in the western plains of New South Wales are evolving, particularly dealing with some pretty tricky weeds, like I said, the Feathertop rhodes, annual Ryegrass, Windmill grass in both the summer fallow period and the winter crop, but also the practical stories as to what works. We can hear the doom and gloom about what the resistant profiles are, but what are people doing about it on farm? And there's people who are running very profitable farming businesses, dealing with these weeds so, we want to showcase that. And so we've got a lot of farm panels and then day two and day three, we get out on farm. So we'll be visiting Narromine, where we'll visit a couple of local growers and there'll be a machinery demo from some of our cooperating stakeholders in terms of machinery groups and then day three, we'll head north to sort of Warren and Collie for another round of farm visits. So yeah, the conference is looking pretty exciting.

[00:10:49] **Camilla Plunkett** You've been listening to Jana Dixon and Greg Condon from WeedSmart, which is celebrating ten years of helping growers change weed control practices in broadacre and mixed farming systems. For more information, head to the WeedSmart website at weedsmart.org.au, where you will find an array of resources and information regarding WeedSmart Week kicking off in Dubbo on the first of August. This is a GRDC podcast. I'm Camilla Plunkett. Thanks for listening.