

## Clint and Jess, Wayne and Dianne Della Bosca

*Knowing where weeds are gives confidence for the following crop*

Owners:	Clint and Jess, Wayne and Dianne Della Bosca
Location:	Southern Cross, Western Australia
Farm Size:	7500ha 3 properties, 100km apart. 1800 breeding ewes
Annual average rainfall:	275-300mm
Soil types:	heavy clay, wood soil sand, medium loam
Crop program (2017):	Wheat 2600, canola 1000ha, barley 1000ha, oats 1000ha, pasture 1900ha
Typical Rotation:	Heavy clay – continuous cereal, maybe a pasture one year in 5, Lighter soil Canola, Wheat, Wheat, Pasture

*For Clint Della Bosca, adopting harvest weed seed control (HWSC) was a logical progression as he moved to a controlled traffic farming (CTF) operation.*



*Clint Della Bosca standing in front of his header during harvest*

Farming over three properties in Southern Cross in WA's eastern wheatbelt, the Della Bosca family had always spread straw and chaff behind the header as they didn't want to concentrate nutrients to narrow windrow lines.

While Clint has always wanted to have harvest weed seed control (HWSC) in his farming system, he wasn't wanting to burn as he places a high value on crop residue. EMAR Chaff decks by Primary Sales to funnel weed seeds onto permanent tramlines provided Clint with a HWSC option that worked for him. The chaff deck was easy to fit on the harvester prior to harvest 2016 and the support from the dealer was great. Once fitted, virtually nothing has stopped them from harvesting for a significant amount of time.

After the first year using the chaff deck, Clint said that his biggest realisations is how HWSC has changed his approach to weeds, noticing concentration of weeds on permanent tramlines and how important control of tramlines will be when paddocks are in pasture. "Knowing where your weeds are gives the confidence to sow earlier, or change the chemistry you're using. It adds flexibility to the system."



*The Emar chaff deck fitted to the back of Clint's header*

The chaff on tramlines have also meant that his capacity to get over the program when summer spraying has increased as the level of dust has reduced significantly allowing an extra tank of spray in some days. The challenge for Clint is to capture as much weed seed into the harvester as possible.

"In a good year when you have good crop density, you don't have that problem. But it is only one year in five when we have a good crop." To increase the amount of weed seed captured, Clint harvests as low as possible and has slowed down to take in more straw and capture more weed seed even though this reduces harvest capacity.

Despite his best efforts to get the majority of weed seed into the harvester front, Clint does notice that some ryegrass does not go in the front. The harvester front, despite running as low as possible, is still unable to collect every weed seed, and in lower yielding crops the amount of weed seed unharvested is higher.

To try and combat this, Clint has made some modifications to the header front to capture both more weed seeds and grain.

The most noticeable difference on Clint's header front is the coreflute fitted to the reel to sweep grain and weeds off the knife onto the belt. Having noticed a yield advantage to fitting the coreflute, Clint's gut feel is that it has to be increasing the capture of weed seeds. The other modifications to the front include a narrow knife guard and Primary Sales extendable fingers to get a cleaner cut and prevent weed seeds bending underneath the header front and not being harvested at all.



*Low harvest height is critical to success of HWSC*

Concerning Clint is selection for ryegrass that sheds or grows prostrate as it is difficult to collect at harvest. "HWSC doesn't eliminate the need to be very hard on weeds outside of harvest. We still need to use every tool available."

With the low weed burden over the farm, Clint is reluctant to return some paddocks to pasture for livestock because of the lack of feed.

"It gives the option if you think a soil type can handle another cereal then do so to try and maximise profit."

However, soil pathogen build up means that Clint is looking for diversity in his rotation. For Clint the ultimate HWSC would be looking at something that destroys weed seeds, but for now he knows exactly where his weeds are.



*Corflute and extended fingers fitted to the header front to capture more weed seed and grain at harvest.*

