# On Tracks at Dookie

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Harmer Farms is a family partnership (Mark & his wife, Leiticia and parents, Ray & Lynne), based at Dookie in North Eastern Victoria.

Our business is a continual winter cropping enterprise over 1600ha in a 525mm rainfall zone. Soil types include sand, loams (grey & red), heavy grey clays, black self-mulching clay, gravel, stones and rocks.

#### **HISTORY**

We started direct drilling in 1985 and more seriously in 1987 with a Shearer Trash Culti drill, 3.8mt @ 180mm spacing. At this stage we still had a mixed farming enterprise, approximately 700ha crop, hay, 1200 sheep and clover and legume seed production.

- 1990 80% of crop was no-till, using home made knife points;
- 1995 Pulse crops were succumbing to disease and weed pressure. Soils were becoming compacted due to sheep and a lot of random traffic. We started deep ripping some of the lighter soils. We also started growing TT Canola after a failed Lupin crop. (3.8 seeder, 18mt boom)
- 1997 very compacted soil, poor root development and low water use efficiency.
- 1998 we changed to an Air Seeder with more tyne break out pressure, and deep banding on 230mm (realised we couldn't keep scratching it in!) Rotation: Wheat, Wheat, Triticale, Canola. (7.5m seeder, 18m boom)
- 2000 Root development had improved with deep banding. We started seeding up and back, to try to help with spraying and spreading accuracy also experimenting with spraying out some of the wheel tracks to make later in-crop management easier. (7.5m seeder, 18m boom)
- 2001 Started Tram lining. Used a Contractor with 2cm GPS to mark out 90% of paddocks. A recently purchased sprayer was extended by 2m (4 nozzles @ a cost of \$100.00) to spray 22.5m tip on tip. This was 3 multiples of our 7.5m seeder. The spreader we were and are still using is more than capable of spreading this distance. Sold the last of the sheep!

Since 2001 we have simply maintained these wheel tracks. All seeding is done by eye (no marker arms), and so far, we are still maintaining a good level of accuracy.

Our wheel tracks are 1.75m, which may seem an odd figure but it allowed us to run inside the wheel equipment of our existing seeder, so that the seeder levelling is not compromised by sunken or bogged tramlines from previous years. Our rotation for the last four years has been Wheat, Wheat, Canola ... not very exciting but quite profitable in our area.

#### **ADVANTAGES**

Our system isn't the product of a master plan or design layout, the only cost was \$5.00 per ha for the contractor to mark out the paddocks at 22.5m and approximately \$100.00 to extend the boom ... the results have been fantastic.

Our soils are soft to walk on. We don't have any run off or pooling of water. Water use efficiencies have increased from approximately 14-15kg\mm in '95 to readily exceeding 25kg\mm. All hillside contour banks have been removed and we now farm these paddocks up and down the grade. Crop management is so easy with tram lining there just isn't an excuse not to optimize every opportunity. We can spray and spread whenever we need or want to. It is not uncommon for our wheel tracks to have up to 10 operations on them per year.

## **PROBLEMS**

Our current seeder isn't capable of handling our large amount of cereal residue and we believe that our system is or has plateaued out until we can retain this resource.

## WHERE TO NOW

We are currently assessing different disc or disc type combo seeders to be used in conjunction with 2cm guidance. In May, we EM Surveyed the entire property and are intending to vary rate Nitrogen this year, and all other fertiliser inputs going forward. 3m x 9m idea is rattling around in the back of our plans as well.

## **CONCLUSION**

Just do it! We can't believe everyone isn't! Even if it is only making what you currently have work in some form of CTF the benefits will fund the bigger changes down the track!