CT Farming Patchewollock

Peter Walch

My farm is situated in the Mallee region of North West Victoria. The soil type consists of mainly sandy loam to sand and the annual rainfall is 325mm, with the GSR at 220mm. The rotation is mainly cereals for example, W-W-B-W and I commenced tramline farming in 2003. The system is designed on 3m wheel tracks.

More operations are now occurring because of different farming technology and techniques, for example 4-6 spraying events per year. Auto steering and CT farming are a perfect fit. After repeated operations on your paddocks the logical step of matching your equipment size is obvious.

EQUIPMENT

- **12m air seeder bar with 300mm spacing**

The tractor currently being used in seeding operations has dual wheels, however looking to place the tractor on 3m-wheel spacing in the future. A 12 ton air seeder cart is also on this spacing.

- **24.6m urea boom**

The urea boom is home made, which is towed behind the air seeder cart. This enables the use of variable rate control.

- **36.9m boom spray**

A new axle was installed on the boom spray to increase the span to 3m. An articulated tractor had 4 wheels removed and the remaining 4 wheels moved out to 3m.

- **13m harvester**

The 13m-harvester front from Midwest Fabrications [www.midwest.net.au] was mounted on the center of the machine, which led to problems with the auger length, chaser bin width and residue spreading. A Redekop residue management was installed [www.redekopmfg.com] which spreads chaff and chopped straw the width of the module. The harvester's wheels are also on 3m-wheel spacings.

- **Chaser Bin**

The chaser bin is on 3 m wheel spacing and the top of the bin has been widened to 4.5m it travels 95per cent of the time on tramlines except when emptying the harvester.

ADVANTAGES OF CT

- Do not need to be concerned about the weight of machinery as all operations are on permanent wheel tracks

E.g. Harvester: 22 ton
    Seeder: 15 ton
    Boom Spray: 8-10 ton

- Can both increase the water holding capacity or decrease the evaporation rate of the soil, which in dry land farming systems can be the difference between producing a crop and not
- CT can change your management of the farm, and the operations carried out on the farm begin to take on more direction
- Inter row seeding using auto steering has huge production benefits for a continuous cereal rotation
  - Paddock landscape is easier to manage with the ability to conduct skip runs
  - Input costs are reduced due to zero overlap (5-10% savings)
  - Less fatigue, especially for older farmers

- Straw is better managed with the combination of CT and auto steering; the direction of travel should be the same for the seeder and the harvester.
- Tall stubble can be managed using auto steering and inter-row seeding, which speeds up the harvesting operation and reduces the need to spread large volumes of straw (less power requirements). Taller straw creates better protection for the soil and there are fewer issues for the next year's crop
- It is very important to have the harvester on tramlines, as I believe it does the most damage. In the drought of '02 the crops did not grow on the previous header tracks (unsure about duels on the harvesters)
- Tend to become wary of your soil, for example digging, probing, and looking for the build of the mulch
- You start to realise the importance in the operation efficiency

PROBLEMS

- Choosing the direction of the tramlines is confusing: some research indicates E-W and others N-S. In my case, I have looked at where trucks can efficiently access the paddocks to determine the direction. As a result I have made some mistakes
- Farm layout: plans should have been made with the image of no fences in mind – perhaps consider employing a consultant prior to commencing CT
- Computer mishaps
- Wind erosion of tram tracks can be an issue, but maintaining high residues should minimize this.

COSTS

- If your next purchases are made with a CT plan in place, the costs should be minimal and the gains potentially enormous