## Why Controlled Traffic? A consultant's perspective: integrating agronomy into CTF

Andrew Newall

NEWAG Consulting, Victoria



NEWAG Consulting is one of the leading agronomic consultancy businesses in Victoria, having a strong focus on No Till/Zero Till and Controlled Traffic farming. Located in Horsham in the heart of the Wimmera, NEWAG consulting advises leading and innovative farmers helping them to achieve strong and profitable results.

NEWAG Consulting provides a range of services to clients including regular paddock inspections, crop recommendations for weed, pest and disease control, advice and recommendations on plant and soil nutrition, farm planning and monthly newsletters. In addition, a comprehensive trial program is conducted each your to keep clients up to date with the latest research and development with a direct focus on crop protection products, crop nutrition, No Till/Zero Till and Controlled Traffic.

The aim of NEWAG Consulting is to ensure clients successfully adopt a profitable and sustainable crop production system that encompasses the No Till/Zero Till and Controlled traffic principles to achieve desired results.

Abstract:

## "Why controlled traffic?" "How will it benefit my business?" "My crops are as good as everyone else's" or are they?

All common questions that I have been asked over time to justify why they don't need to look at controlled traffic.

Farmers in general are very good at comparing yields in good years but no so good in bad years. We need to grow grain every year, as it is not the high yielding years that have the big effect it is the bad years with low or no yields that have the biggest impact on business.

Basically CTF really is about having a bigger bucket of water. In the beginning our soils started out the same, however over the years due to our practices we have reduced our bucket size.

We learnt this very quickly in the Wimmera where we experienced a big run of dry years. We wanted to grow grain every year to be sustainable. This is why my group of clients have been a big adopter of CTF as we realised we weren't producing in these dry years. So we had to change. We will look back on the dry years, one of the best things that happened, as it made us sharpen up and look at other ways to do things. CTF was one of them.

Implementing CTF is not just about lining up your machinery at a certain width on 120 inches or 3m spacing, it is about encompassing this system with other parts of your farming system to complement what you are already doing.

I have seen any guys over the years implement CTF on their farms but without integrating it with other parts of their system they don't see the true benefits.

So why do we integrate CTF into our cropping system?

What are the true benefits?

- Increased yield is number one, on average we see around 30% yield increase in our soils from CTF, this is supported by a number of trials and paddock results.
- More PAW, not just water but PAW. It is important to distinguish the difference. Many
  people assume moisture in the soil as PAW. We all know how dangerous it is to
  assume.
- Greater rooting depth and less waster energy being used on root growth in compacted, soils, now root development does not have the resistance therefore plants can use this energy in other areas of the plant.
- Less weeds, now that we drive on 11-16% of our paddocks and not 45-80% like we used to we don't stimulate weed growth. In this day and age with new machinery that weighs much heavier than older machinery this is very important.
- Better and more even crop emergence as seed placement is more even as we now know where our wheeltracks are and can adjust machinery accordingly. Even with Parallelogram seeders crop emergence is still not as good on non CTF paddocks as field loss % is usually higher on wheeltracks compared to CTF paddocks that have far less wheel tracks hence less field loss.
- Better cycling of nutrients as biology is increased as there is more oxygen in our soils. This also results in less root disease.
- With CTF and RTK guidance we can now be more precise with our spraying. Now we can successfully band spray our wide row crops, shield spray wide row crops easily and the one greatest improvement has been increased spray efficacy from matching row spacing with nozzle spacing.

With all these benefits there do come some negative which are important to address and are some reasons why some farmers in our area that adopted CTF have struggled. Also with CTF your muck ups can be more evident.

- Poor residue spread, is one of the biggest restrictions with CTF. It dictates harvest with and how well you will be able seed next year.
- Sowing into wheeltracks.
- More thought with crop rotation planning especially if alternating between narrow and wide row crops.
- Management of wheeltracks. Renovating works well when done properly but works against you if done poorly, poorly renovated tracks are impossible for seeders and sprayers to stay on and cause issues during the season. Finding the best way to renovate wheeltracks successfully is still a work in progress.

However all these issues are quite manageable and are certainly not reasons why not to adopt CTF. CTF is the single biggest improvement we have seen on yields in broadacre farming and has been successfully adopted across Australia and the world. Why more farmers, researchers and advisers don't look at CTF as a way to quickly improve production is staggering. There is no other current influence that increases production like CTF does, and within