



Conference establishes standards...

...for controlled traffic farming



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There is a strong view that three metre wheel spacing is best for broadacre CTF.

THE slogans that came out of the Australian Controlled Traffic Farming Conference at Gatton, Queensland, in July were “Just do it” and “don’t muck about, do it right”. The conference will change growers and industries. Delegates were all full of energy and enthusiasm, the way forward is clear.

CTF05 brought together elite growers and support people from the grains, cane, cotton and vegetable industries and across the nation. They had common interests – optimum use of natural and purchased resources, improvement in their environment and lifestyles, and the belief that CTF was the way forward.

This must have been one of the biggest and widest collections of elite croppers anywhere in Australia, and they had generally never spoken to each other before. It is both surprising but very encouraging that their future directions are so similar and

complementary, that they had so much to talk about. CTF is the right track.

The grains and cotton industries provided enormous experience with the necessity for on-going change, the cane and vegetable industries were looking to fast-track their futures.

Total attendance was 197, including 104 growers from all states (except Tasmania), 29 trade and press people, and seven from catchment and landcare groups. And CTF05 was international, four from New Zealand and two from USA. The trade show focused on new technology – GPS, GIS, satellite imagery, controllers and recorders, and new machinery. Major sponsorship was provided by John Deere, GRDC and CTF Solutions.

Thirty-eight papers were presented, 26 from growers describing their journeys to profitability and sustainability, and 12 technical papers. The dominant themes across all speakers were – past experiences have

made the mistakes and clarified the future, CTF benefits and how to achieve them, making the most of new technology, machinery and technology standards, improving soil health, change, and groups. And there were a few from left field, like driverless tractors!

Many growers recalled their start on the farm and their first tractor. There were stark reminders of the change that growers have been through in less than a lifetime, a rate of change that has been much faster and more challenging than urban Australians, and an experience of change that is the platform into the future.

Just do it!

Controlled traffic on-farm is only about 10-15 years old and the science behind it is not much more than 20 years old. The progress has been amazing, apparently due to the rapid farm scale testing of ideas. With those few years of experience, undoubtedly

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strengthened by the tens and now hundreds of growers who have “had a go”, the basics of CTF in 2005 are clear, the mistakes have been made and the lessons learned.

Have only one set of wheel tracks, use two centimetre guidance, have accurate layouts, and plan for the next five years. There was a strong view that a three metre wheel track is best but the need to use main roads etc. in the cane and vegetable industries suggests that 2m will be as wide as they can go. Most irrigation also suits 2m. There seems to be every reason to standardise on 3m and 2m wheel tracks and the benefits for manufacturers across industries would be considerable. The alternative seems to be the shuttle rockets which are two horse’s arses wide so they can fit through railway tunnels!

The wheel track challenge for the future is on mixed farms – what to use on farms that grow some mixture of irrigated and dryland grain, cotton, cane and vegetables? Why can’t 3m become the overall on-farm standard?

CTF Benefits

CTF has created opportunities for all industries, and has increased their sustainability and profitability. Very large increases in yields and profitability were reported. CTF supports a whole new agronomy and new agronomy is needed to maximise the benefits of CTF. Many benefits are based on 2cm GPS providing permanent wheel tracks and accurate guess rows – inter-row operations such as seeding, fertilizing, weeding, spraying; wide multi-module machines; stubble handling; all summed up as “know where you are farming”. On-farm research is easy with defined strips, same



Scott McCalman, winner of the NSW Farmer of the Year, says CTF is opening up new cropping opportunities, including cotton.

width harvesting and automated recording (yield monitoring, imagery, data logging). “You can’t manage what you don’t measure”.

New technology is a tool to support CTF goals and CTF is a great platform for new technologies such as GPS, GIS, imagery, auto-steer, precise management, knowledge management, etc. These are all tools that are a good investment in CTF systems.

Even the driverless tractor was suggested. Five years ago, I said never but today I think they will be here in five years time. These ‘drivers’ will overcome labour shortages and have the ability to do a better job.

The operator with a portable console can check the equipment while it is operating, move the supplies truck, etc.

Increasingly, new technology will go into the farm office for record keeping, marketing and controlling farm operations.

Standards

Standard widths for wheel tracks and equipment modules are just common sense and the “in-the-paddock” changes are easy to do, but possibly painful in the short term. “It’s not hard when you want to do it”. The benefits for agriculture would be enormous and maybe, are essential to get us though the next 10 years or so, as our world gets smaller and smaller. Today, we are limited by machinery, and we need to change that. Manufacturers will change if growers express some common sense. And, I think, CTF and CTF Conferences can be the forum to achieve this.

A new challenge comes with new technology and we are again being limited by incompatibility among equipment. This seems easy to fix and manufacturers and suppliers are moving quickly. More pressure from growers can only help.

United States controlled traffic farmer Mitchell Clay says the technology is revolutionising farming on his property.



The Conference attendees passed a resolution that “networks of 2cm GPS base stations be established across all cropping districts”. CTF Solutions has undertaken to progress this resolution.

An associated Standard relates to the comment “access the best people, access the best advice”. Agriculture is increasingly limited by the brain drain from the bush, and by the skills and competencies of advisors and suppliers.

Soil health

Rapid benefits to soil health were reported, within one season. And these were across all soil types. Obvious and measurable benefits included repair of soil compaction, soil animals and biology (worms etc.), trafficability, access and timeliness (don't slip off the wheel track!), and the responsiveness to amendments and fertilisers. These can be easily assessed by grower's observations. For example, soil compaction repair is clear from walking over the soil and from fuel measurements on the cabin monitor.

The change and the rate of change have been massive, and the expectation is for these to continue. Change towards CTF has

also increased growers capacity to change, to take on the big challenges. Individually growers are more skilled and more confident, and co-operating in groups has been a very powerful support and functional approach.

I think that co-operative approaches will increasingly drive business improvements as CTF growers see mutual gains from group contractors, suppliers, marketing and lobbying.

An overwhelming conclusion was that CTF is a strong unifying influence. The Conference successfully brought growers from the extremes of cropping and they easily talked about common issues and common solutions.

Everything was relevant to everyone. There is enormous potential to direct this unity and energy to issues of mutual concern. The base station network will be an interesting first step.

Clay Mitchell from the United States took us by storm, or more descriptively, by cyclone. As an “alternative” farmer in the wide community of USA farmers, Clay is committed to CTF and new technology,

and is successful. He blew us all away with his mastery of technology (his father in the home office can over-ride the controls of the spray-rig he is driving by internet connections) and his analysis of climatic and spatial impacts. Four New Zealanders contributed in a quieter but still effective fashion.

We were fortunate to celebrate two milestones. Scott McCalman addressed us the day after being selected as 2005 NSW Farmer of the year and Jeff Tullberg, the grand-father of controlled traffic in Australia, announced his retirement from the University of Queensland after 35 years research and teaching the science and engineering of CT.

What's next? In 2006 the CTF06 Conference will be in Victoria (probably Ballarat). CTF Conferences are attractive to all cropping sectors and we expect an even larger attendance next year.

Find out more:

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Young CTF association formed

A KEY outcome from the National Controlled Traffic Farming (CTF) conference at Gatton Qld was the initial steps toward an Australian Controlled Traffic Young Farmer Association. Precision Agriculture Agronomist Andrew Whitlock called for interest after the final session of day one of the conference, and the response was overwhelming. Thirty-five people signed up and many more expressed an interest on behalf of their friends and neighbours.

The aim of a national association would be to support the learning and development of advanced controlled traffic farming CTF systems throughout the country. There is a need to support the innovative farmers who are paving the way for the future. The first step is to provide a network for sharing ideas and knowledge, and to then provide tools, funding and advise for continual development of farming systems.

The focus is largely based upon controlled traffic farming, as it is the obvious platform from which farming systems

can launch into the productivity improvements that will be required for a profitable future. From an initial adoption of CTF techniques, farmers can move down an exciting path of incorporating precision technology, advanced thinking and intelligent management into their farming systems. This will help them to ensure their ongoing profitability and sustainability.

A committee was formed comprising of two representatives from each State whose aim will be to develop an approach to service the needs of the young innovative farmers in Australian agriculture. When we say ‘young and innovative’ we are talking “young at heart” - in other words, enthusiastic farmers of any age who are serious about taking their farming system to the next level.

Some initial ideas for the association include an interactive website where members can link their farming system details to

a map of Australia, share ideas and propose questions in a chat room, and find links to relevant research, new technology and expertise.

Telephone conferences are a fantastic tool for delivering expert information and for discussion sessions with all members. Such conferences allow us to organise national and international expert guest speakers to address any group member who wants to pick up the phone and listen and ask questions.

A regular newsletter with updates from all States could provide timely and relevant information. Study grants could be used to encourage members to travel interstate and abroad to seek the latest information. Annual meetings could be held at the National CTF Conferences.

Find out more:

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