1st International Controlled Traffic Farming Conference Toowoomba, Queensland, 25 – 27 February 2013

ACTFA welcomes you to the 1st International CTF conference, which is also the 8th Australian CTF conference.

These conferences have been a valuable forum for farmers, advisors, industry and researchers to exchange ideas about the profound implications of controlled traffic in farm production systems since 1995. They have also been a powerful means of spreading the word about CTF practices and benefits, and a source of significant cross-fertilisation across all levels as people are stimulated to adapt and adopt systems, ideas, approaches and technology from other regions or industries.

We hope CTF 2013 will encourage a similar level of interaction between people from different parts of the world in discussing their systems and experiences. This has been a specific objective in designing the conference program, so there are no parallel sessions or specialist groups, and the farm tours and evening meals/social activities are arranged to maximise delegate's opportunities for interaction.

Controlling field traffic is not a new idea: the multiple advantages of improved field access, reduced energy use and improved soil conditions have been known for decades. What is relatively new (in the last 20 years) is its practical application on farm, an outcome assisted by the interaction and debate that has been a feature of CTF conferences. The program is farm and farming system focused and all delegates will visit grain and vegetable farms during the afternoon farm tours.

CTF is any farming system built on controlled traffic, which is clearly defined. Research and farmer experience has found that controlled traffic supports a wide range of improved practices, innovative spatial information and technology applications that provide a platform for significant triple bottom line benefits. This occurs only within a holistic systems context, recognising the interactions among their farms, soils, topography, crops, climate, equipment and technology. The fundamental aim is more profitable, sustainable, environmentally and socially responsible production. Indications are that this journey has just begun.

Since 2006, CTF conferences have been organised by the Australian Controlled Traffic Farming Association (ACTFA). The committee for this conference has consisted of Jeff Tullberg, Don Yule, Chris Bluett and John McPhee, with invaluable assistance from Sally Brown and Wendy Moline. The program covers CTF systems and cropping practices in different industries and countries, technology and crop/equipment interactions, agronomic /cropping system opportunities, economics and policy.

In the final session – "Where to Now" – we seek directions for ACTFA and the further promotion and adoption of CTF in both Australia and overseas. While there is widespread farm experience with CTF in the Australian grain, cotton and cane industries, there is still much to do for it to become the resource management foundation across all cropping industries, particularly where farm enterprises are involved in two or more industries. What role does ACTFA, and similar organisations overseas, have in furthering the development and uptake of CTF? What strategic partnership s should ACTFA make? Who is ready to step up and play a role in that journey? Who will be the supporters?

We trust you will find value in the presentations and discussions and go home with reinvigorated enthusiasm to try something new, "do it, but do it right". Remember, the principles of CTF are universal and applicable to any country and any industry. How you apply those principles depends on what best suits you and your farm. Start with a plan, seek good advice, and "have a go". We wish you a pleasant and productive visit and trust you find plenty of value over the course of the conference.



The Grains Research and Development Corporation (GRDC) is one of the world's leading investors in grains research, development and extension (RD&E). The GRDC invests over \$150 million per annum across a broad range of research areas. Within their carefully balanced portfolio is a range of investments, from long term, high risk, "blue sky" research to short-term, outcome-focused applied research at the local level. The Grains Research & Development Corporation is responsible for planning and investing in RD&E to support effective competition by Australian grain growers in global markets, through enhanced profitability and sustainability.



Conservation Farmers Inc (CFI) role in the agricultural industry.

CFI's business Mission Statement: A farmer focused organisation promoting excellence in profitable and environmentally sustainable farming systems.

CFI promotes practical management solutions, often through field days with a multi-faceted approach which offer a suite of answers, leading to improved adoption and practice change. CFI has gained a reputation for its innovative field days to provide unbiased information to farms and industry. CFI also supports other farm and industry groups, either through administration management or by coordinating their activities and meetings. This enables the groups to access key management and tactical solutions for their businesses. CFI is currently investing its time and resources into farm organic wastes, GPS systems, tram-track renovation solutions, soil water holding capacity and Landcare issues in Queensland and northern NSW.



Case IH is a global leader in agricultural equipment, committed to collaborating with its customers to develop the world's most powerful, productive and reliable equipment – designed to meet today's agricultural challenges.

Challenges like feeding an expanding global population on less land, meeting ever-changing government regulations, and managing input costs. Case IH's professional dealer network provides agricultural equipment, flexible finance, and parts and service support for professional farmers and commercial operators in more than 160 countries. Productivity enhancing products

include tractors, combines and harvesters, hay and forage equipment, planting systems, sprayers and utility vehicles.



CTF Solutions Pty Ltd was formed in 2002 to support CTF adoption by research into CTF development and spatial information applications to understand and manage variability, training for growers and advisers, and on-farm advice for change to CTF.

Current directors of CTF Solutions are Don Yule, Jeff Tullberg and Wayne Chapman. CTF Solutions has conducted 14 R&D and programs for national and state agencies, as well as private companies. It is a member of 43pl within the and on-farm advice for change to CTF adoption CRC for Spatial Information.



QRAA administers government financial assistance programs in the form of loans, grants, rebates and subsidies. Current programs include:

- Low interest loans up to \$650,000 to assist primary producers to increase enterprise productivity, profitability and sustainability
- Natural Disaster Assistance schemes (loans and grants) to assist primary producers to recover and restore their operations following natural disasters.



Trimble's Agriculture Division is a leader in precision agriculture, GPS and guidance solutions that help customers operate farm vehicles and implements more efficiently, save on input costs and increase yield and productivity.

First International Controlled Traffic Farming Conference 2013

To ensure better decision making, Trimble offers an integrated operations management solution called Connected Farm that provides information exchange across the entire farm using industry-leading software and hardware. Additional Trimble solutions include vehicle and implement guidance and steering; application control for seed, liquid and granular products; laser- and GPS-based water management technology; and a harvest solution. For more information on Trimble Agriculture, visit www.trimble.com/agriculture.



PrecisionAgriculture.com.au is a consulting company offering advice, training and products associated with precision farming industries.

With a strong understanding of the complexities associated with farming systems we foster partnerships with key stakeholders in order to deliver targeted solutions.

We consist of a team of 10 people who have a passion for integrating spatial technologies with the management processes of cropping systems. We value the concept of measuring to manage as being critical for continual farm improvement and provide the products and services to enable farmers to strategically respond to the challenges of crop production relative to space and time.

We believe precision agriculture techniques need to be implemented in association with the understanding of interactions at the farming system, whole farm, and sub-paddock levels. We therefore view our services as being complementary to existing farmer consultants/agronomists, providing opportunities for all to be involved in the process.

iii

	1 st Internati	onal Controlled Traffic Farn PROGRAM	ning Conference					
Monday	25 th February	T I COTO III						
Theme	heme 1 – Does CTF Deliver? Chair – Chris Bluett							
	Session	Topic or Title	Speakers					
0830	Introduction	Welcome, Housekeeping						
0835	Australian CTF	CTF – On track to our future	Don Yule, CTF Solutions, Qld					
0855		CTF practice in grain, cane and horticulture	Aaron Sanderson, Farmer					
0910	Australian Farmers Systems	Why Controlled Traffic? A consultant's perspective: integrating agronomy into CTF	Andrew Newall, Newag Consulting, Victoria					
		Overview of Controlled Traffic Farming in the Australian Cotton industry	Dave Anthony, CEO, Auscott					
		CTF in Horticulture: Implementation and Impact	Ed Windley, Farmer, Kalbar, Qld					
		Large scale cane systems	Dave Cox, Davco Farming, Queensland					
1010	Morning Tea – Sponsored by							
Theme	1 – Does CTF Deliver? Chair – John Rochecouste							
1040	New Zealand	CTF (and stuff) in New Zealand	Dan Bloomer, Landwise, New Zealand					
1100	Europe	An overview of Controlled Traffic Farming (CTF) systems in Northern Europe	Tim Chamen, CTF Europe					
		Organic farming in the track	Peter Bay, Organic Vegetable Farmer, Denmark					
		Contractors improve yields and make better feed quality by use of CTF in forage grass	Mogens Kjeldal, Contractor Advisor, Denmark					
		10m CTF grain system at Hendred Estate	Julian Gold, Farmer, UK					
1200	Spatial Technology	CRCSI: The next wave of spatial science research in Australia and New Zealand	Peter Woodgate, CEO, CRC for Spatial Information.					
1220	Poster Thumbnails	The future of satellite CTF and precision horticulture Effect of Infiltrax™ on soil structure	Keith Dyer, Trimble Positioning Services; Sarah Limpus - DAFF Q; Edward Scott, Injekta P/L,					
1230	Lunch	Posters						
1330- 1730	Afternoon field trips	Darling Downs Grain Horticulture						
1800	ISTRO Meeting	ISTRO CTF Working Group	Tim Chamen, Convenor					
1830	Drinks, BBQ	<u> </u>						

	1 st Internatio	onal Controlled Traffic Fari	ming Confe	erence
Tuesda	v 26th Echrusev	PROGRAM		
	y 26 th February 1 – Does CTF Deliver? (Chair - Tim Chamen		
THEITE	Session	Topic or Title	Speakers	
0830	North American	Overview of CTF activity	Peter Gamache, CTF Canada	
	Systems	in Canada CTF	Steve Larocque, Beyond Agronomy	
		in Western Canada	Canada	, , , , , , , , , , , , , , , , , , , ,
		issues and impacts		
0910	CTF in Africa	Controlled Traffic on	Willem van de Walt, S Africa. Neil Lecler, Sugar Assoc. Exp. Stn.	
		Springbokflats South		
		Africa		
		Controlled Traffic		
		Farming system:		
		analysis and pilot project in the Zimbabwean		
		sugarcane industry		
0940	S America	Controlled Traffic	Dio Antille, ERC Wexford, Ireland	
0010	o / iiiioiioa	Farming in Argentina:	Dio Antino, ENO WOMOIG, Heland	
		challenges and		
		opportunities		
0950	Poster Thumbnails	An investigation traffic	Emily Smith, Harper Adams UK	
		and CTF in		
		Germany and		emmel, Bavaria
		Switzerland	Dio Antille	
		Soil compaction resulting from and tracks	Cranfield,	UK
1010	Morning Tea – Posters	Hom and tracks		
	2 – Making CTF Better.	Chair - Neville Gould		
1030	Layout and Logistics			Tim Neale, Precision
		to manage deep and rutted		Agriculture, Queensland
		wheeltracks in CTF and		
		mixed bed systems		
1050	Equipment issues and	A Wide Span tractor desig		Hans Henrik Pedersen,
	opportunities	CTF solution for vegetable	s and	CTF Europe
	4 x 15 min talks	other crops		James Caract Farmers
		Controlled Traffic machinery into the		Jamie Grant, Farmer, Kielli, Jimbour,
		luture	future	
		Agronomy and system opportunities in different regions and industries –		Queensland John Midwood, Southern
				Farming Systems,
		Victoria		Victoria
		Challenges to implementing Controlled Traffic		Neil Halpin, Senior
				Systems Agronomist,
		practices in peanut - sugar	cane	DAFF Q
4000	On a Call To the	farming systems		A de se MAZ III T ' I '
1200	Spatial Technology	Integrating the		Adam Wall, Trimble
		technologies New technology insights		Technology Liam Connolly, CNH,
		THEW LECTIFICIORY ITISINITS		Sydney
1230	Poster Thumbnails	Soil & Economic Benefits i	n Vea	John McPhee, TIA
		N Grain Farmer's thoughts		Suzette Argent,
		CTF to Reduce Run-Off		DAFF Q. Kaela
				McDuffie, DNRM Q.
1240	Lunch	Posters		
1330 –	Afternoon field trips	3. Darling Downs Grain		
1730	0 (5:	4. Horticulture		
1830	Conference Dinner			

	AM sday 27 th February		
	3 – CTF: The opportunities. (Chair – Peter Gamache	
	Session	Topic or Title	Speakers
0830	Soil biology/health	Controlled Traffic Farming: exploring the (likely) responses and associated benefits soil biota	Pauline Mele, Department of Primary Industries, Victoria
0910	Agronomy	Agronomy and system opportunities in different regions and industries – 5 min summaries followed by Q&A discussion	Jon Midwood, SFS, Victoria Steve Larocque, Canada Neal Johansen, Qld Hans Henriksen, Dmark Brian Robotham, Span Consulting, Qld Dan Bloomer, New Zealand
1015	Morning tea	Posters	
Theme	3: CTF - The opportunities. (Chair – Kevin Platz	
1045	Economics	Assessing the economic value of Controlled Traffic Farming practices	Jim Page, Queensland Department of Agriculture, Fisheries & Food
1105	Environmental	CTF impacts: Environmental = Economic impact The likely impacts of Controlled Traffic Farming on the dynamics of soil organic matter	Jeff Tullberg, CTF Solutions Tim Chamen, CTF Europe
1130	Policy directions	Policy impacts on Agriculture TBA	Martin Blumenthal GRDC
	3: CTF – The opportunities. C		
1200	Where to from here?	Discussion of the opportunities and future for ACTFA	John McPhee, TIA Don Yule, CTF Solutions Jeff Tullberg, CTF Solutions
1230	Lunch		
1400	Post conference tour departs	SE Qld	