

Section Editor:

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# Farming Systems

## Farming systems projects on Eyre Peninsula in 2015

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INFO

Title	Maintaining profitable farming systems with retained stubble	Application of CTF in low rainfall zone	Eyre Peninsula Grain & Grain 3	Overdependence on Agrochemicals
<b>Project Code</b>	EPF00001	ACT00004	SFS00028	CWF00020
<b>Funder</b>	GRDC	GRDC	GRDC	GRDC
<b>Partners</b>	Lead: EPARF SARDI (delivery)	Lead: Australian Controlled Traffic Farming Association (ACTFA) SARDI (delivery)	Lead: SARDI (delivery) Rural Solutions SA (extension) EPARF, LEADA	Lead: Central West Farming Systems
<b>Duration</b>	5 years, end 30/06/2018	5 years, end 30/06/2019	3 years, end 31/12/2016	3 years, end 30/06/2017
<b>Area covered</b>	Upper EP There is a LEADA project covering lower EP. Part of the GRDC Stubble Initiative, covering the southern grain growing region of Australia. 10 major grower group partners plus CSIRO.	Upper EP Other groups involved are Upper North Farming Systems, Central West Farming Systems, Mallee Sustainable Farming, BCG, SPAA, DEPI VIC.	EP Other groups involved are Southern Farming Systems, East SA managed by Ag Excellence Alliance, BCG, and Mallee Sustainable Farming.	Upper EP, Upper North SA Other groups involved are BCG, Mallee Sustainable Farming.
<b>Aim</b>	Increased knowledge and skills allowing farmers and advisers to improve farm profitability while retaining stubble in farming systems on upper Eyre Peninsula.	Adoption of Controlled Traffic Farming (CTF) in the LRZ is very low (eg SA/Vic Mallee, 4%) compared to other zones in the Region (eg Vic HR, 26%). This is believed to reflect scepticism about its benefits in many LRZ environments when weighed up against the cost of adopting the practice. The project will evaluate whether or not this scepticism is justified.	Growers and advisers using processes, tools or packages to design and manage flexible mixed farming systems equipping them with the ability to adopt and respond to changing environment and market conditions to manage risk and generate profits.	By 30 June 2017, 1500 growers and 20 advisers of the low rainfall zone of the southern GRDC region have the knowledge (technical & economic) and tools to reduce their dependence on agrochemicals.

<b>Topics to be addressed</b>	The build-up of snails, mice and fungal disease carryover on cereal stubble and increasing in-crop weed infestation. Difficulty of establishing crops into medic pasture residue. Establishment of crops on non-wetting soils.	Effects of compaction on light soils. Increased yield or cost savings (e.g. less fuel) by alleviating compaction damage. Management of wheel tracks and CTF implementation when using very wide equipment.	Grazing and better managed crops and pastures in the crop rotation and improving farm business decision making skills.	Reducing dependence on chemicals by using other methods to reduce weed numbers, such as increasing crop competition through increasing sowing rate, narrowing row spacings, row direction (shading effect).
<b>Trial/demo sites in 2015</b>	Lock – Hentschke, comparing crop establishment based on time of sowing, seeding rate, position and depth on non-wetting sand. MAC – South 7, sowing into stubbles, height and in-row vs inter row. MAC – S3S, spray topping pastures. Mt Cooper – Gunn, establishment into pasture residues mown/worked/harrowed/nil. Link site: MAC Airport - crop sequencing	Research site MAC S3S – range of compaction treatments applied in wet and dry conditions, to see if there are impacts on yield. Seeking grower demonstration site on upper EP.	MAC – S7, high vs low input and grazed vs ungrazed mixed farming systems trial. Collection of snail data for Stubble project. MAC – S6E barley grazing demo. MAC – S7, medic pasture trial with inoculation, sowing and grazing treatments. MAC– S7, impact of grazing and N application on two wheat cultivars. Minnipa – demo, value of stubble in the system including wheat, barley and canola stubble.	MAC – S4, row spacing and seeding rate and the influence on weed numbers by crop competition. MAC – N7/8, row spacing and row direction (North-South and East-West) and the influence on surrogate weed numbers (oats) by crop competition.
<b>Outputs to be delivered</b>	Produce guidelines to control pests, weeds and diseases while retaining stubble to maintain or improve soil health, and reduce exposure to wind erosion.	Research and development sites, extension of information through existing events and publications.	A series of workshops, case studies, demonstrations and research articles to help growers manage risk and generate profits in mixed farming systems.	Research and development sites, extension of information through existing events and publications.