

Improving Production on Sandy Soils Update - Willalooka

9.00am Workshop
1.00pm Farm Walk *catering provided*
Wednesday 18th October 2023

REGISTRATIONS for catering;
tstrugnell@coorong.sa.gov.au or
text on 0427 750 050
Register by Friday 13th October

What you will see & hear?

- Sandy Soil Projects Update
- Understanding soil biology
& links to production
- Boosting pasture production on sandy soils

- Treatments to improve veldt grass production & feed value
- Boosting Feed Quality & Livestock Production on Sandy Soils

What do you want to try out next?

[Full program over the page](#)



Speakers

Dr Mel Fraser Soil Function Consulting

Dr Ashley Martin Microbiology Laboratories Aust

Dr Michael Wilksch MW Livestock Co

Felicity Turner Turner Agriservices

The Basin Farm Managers



Tatiara
the good country



CHISEL PLOUGH



ACTIVE MIX



DEEP RIP



This event is jointly funded
through Australian Govern-
ment's National Landcare
Program and the Limestone
Coast Landscape Board





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Coorong Tatiara Soil Hub

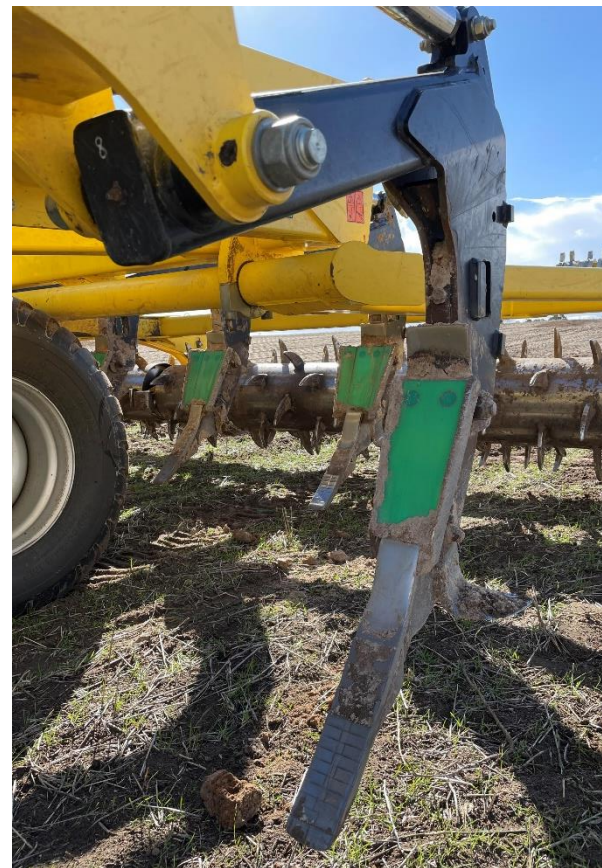


Providing growers and advisors with information, resources, and tools to support improved agricultural and economic outcomes across the Coorong and Tatiara Districts.

 [See projects](#)



www.ctsoilhub.au



Improved grazing production on non-wetting sands

Project Update and Workshop

Wednesday 18 October 2023



Objective:

- *To test a series of soil treatments to improve our understanding of soil amelioration practices that increase feed and livestock production on sandy soils.*
- *Measure the impacts of mechanical and chemical soil amendments across three demonstration sites.*
- *Improve participating producer knowledge and practice and increase industry understanding of soil management practices that enhance groundcover, soil biology, soil pH, soil structure, water holding capacity and feed production.*

Amelioration priorities

- Overcome water repellence
- Reduce soil strength
- Boost fertility
- Improve establishment
- Minimise risk
- Considerations: rock, drift, no clay for spreading, cost benefit

What have we done?

- Tested a range of deep tillage equipment
- Tested a range of composts and manures and fertiliser packages
- Measuring second year responses
- Working with what we've got





What have we learnt so far?

Booderoo - treatments

AGED MANURE



INVERSION



CHISEL PLOUGH



ACTIVE MIX



DEEP RIP





Control



Inversion



Plough + Mix



Deep Rip



Control



Inversion



Plough + Mix

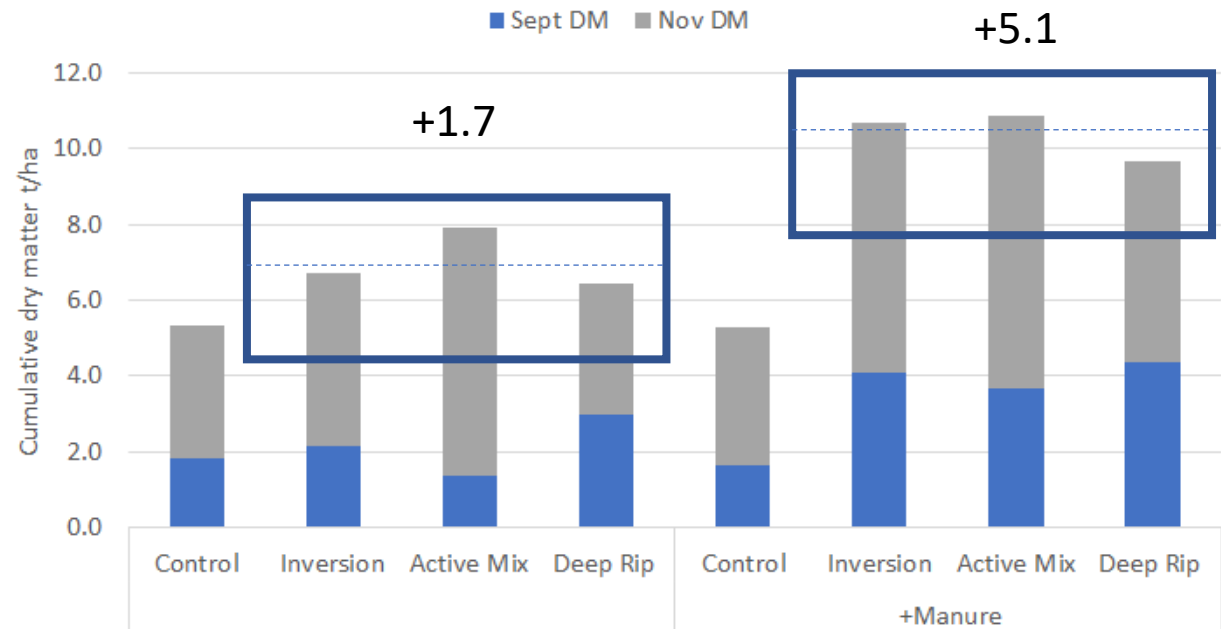
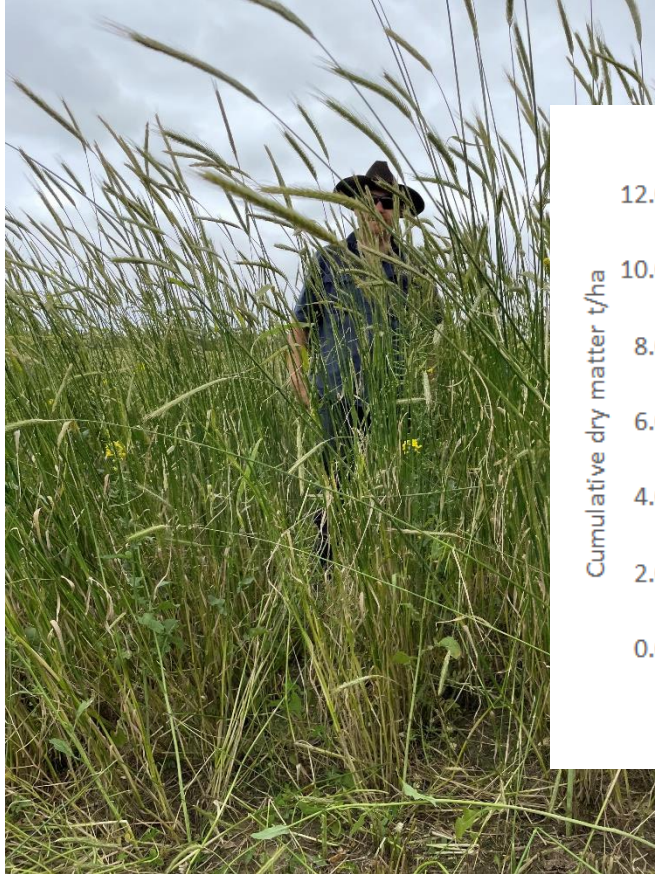


Deep Rip

+ Manure

+ 300 N, 82 P, 200 K, 50 S, 140 Ca

Booderoo – Yr 1 Results



Booderoo – Yr 2 Results









Amelioration learnings

- Mostly diluting water repellence
- Reduce soil strength - yes
- Boost and/or dilute fertility
- Improve establishment - sometimes
- Minimise risk – broadcast helps
- Increase grain and fodder yields
- But...





The impact of amelioration on soil biology

The impact of amelioration on feed quality
and implications for grazing livestock

Strategies to boost production of existing pastures

What haven't we explored yet?



Dr Ashley Martin

Microbiology
Laboratories Australia



Dr Michael Wilkes

Michael Wilkes Livestock Co
Pty Ltd



Felicity Turner

Turner Agribusiness

Today's presenters

Time	Program
9.30 – 12.00 with smoko	Introduction to soil biology with Ash Martin
12.45	Depart for The Basin – Petherick Rd
1.00 – 3.15	Set the Scene – Mel & Heath Nickolls
	What have we learnt so far – Hamish Verco
	Impact of treatments on soil biology – Ash
	Impact of treatments on fodder quality – optimizing grazing outcomes – Michael Wilkes
	Optimising existing pastures and strategies to raise the bar – Felicity + Mel
3.15 – 3.30	Reflections, refreshments and evaluation