



# Grain Growing In Low Rainfall Environments

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Scholar

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# The Premise

That there are techniques and methods to potentially make large advances in low rainfall cropping zones within Australia.

A photograph of two men standing in a vast, golden-brown grain field under a cloudy sky. The man on the left is wearing a blue and white striped short-sleeved shirt and dark trousers, with his hands on his hips. The man on the right is wearing a light blue long-sleeved shirt, light blue jeans, and a green hat with a yellow band. The text 'My Aim:' is overlaid in white serif font across the middle of the image.

# My Aim:

That by the end of this presentation you will have renewed faith in the potential of the drier grain growing areas of Australia.

“We all want progress, but if you're on the wrong road, progress means doing an about-turn and walking back to the right road; in that case, the man who turns back soonest is the most progressive.”

C. S. Lewis

As in so many cases the answer to complex problems lies in simple principles.



Looking at rainfall with  
different eyes

- a paradigm shift
- Micro water harvesting



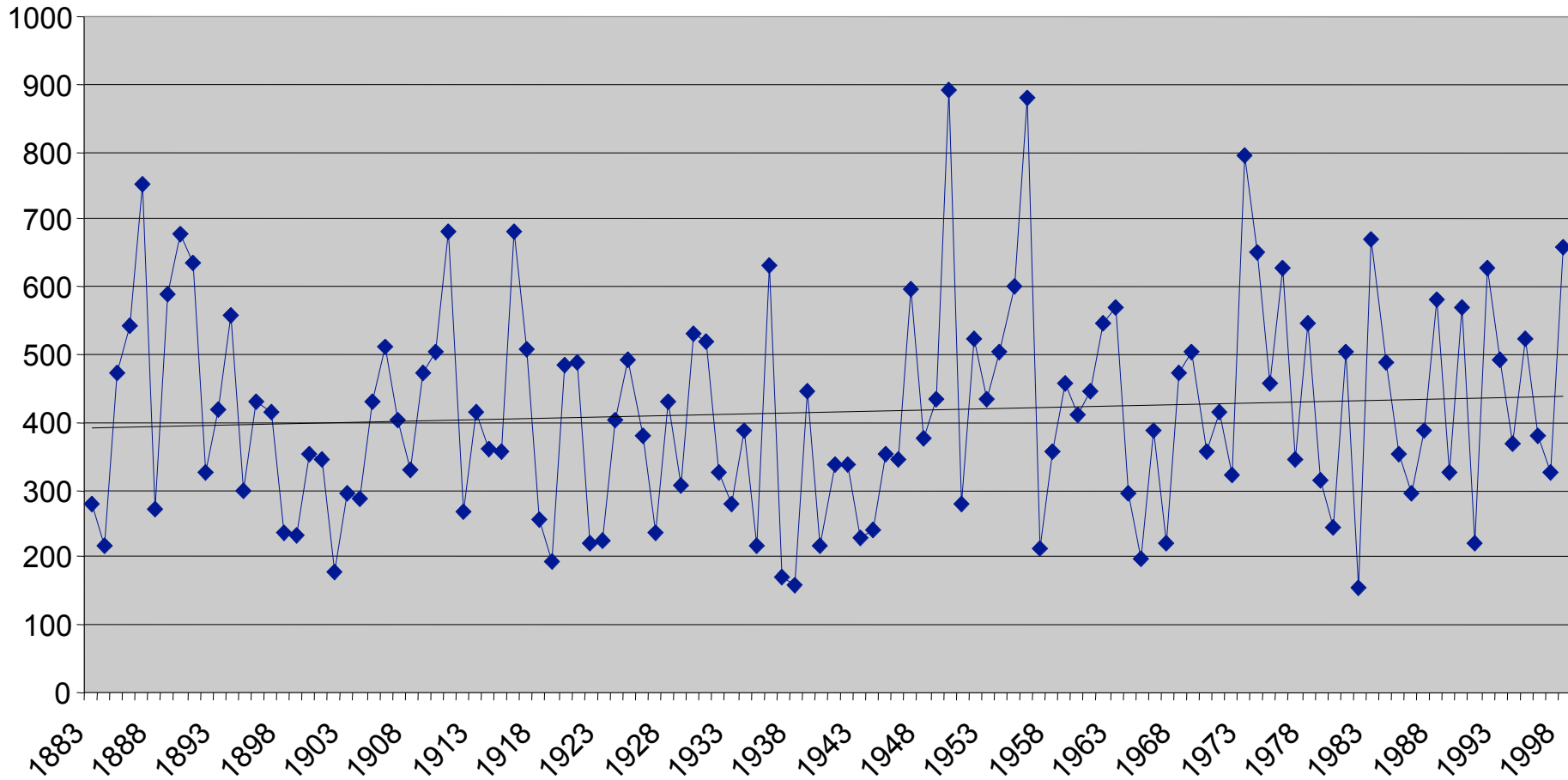
Farm A  
1000 hectares  
600mm pa.  
6000 ML

Farm B  
1500 hectares  
400mm pa.  
6000 ML



Financial risk in lower rainfall environments, managing the risk.

# 110 years of rainfall data for our Condobolin farm



# Climate interaction with rainfall and their relationship to grain production.

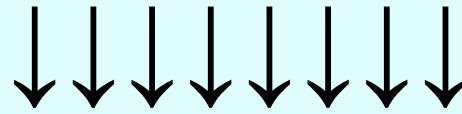
# Biomass management



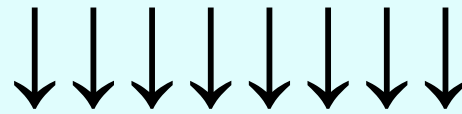
Residue; Low rainfall grain  
productions best friend...

From Kenya to Canada, the theme is;

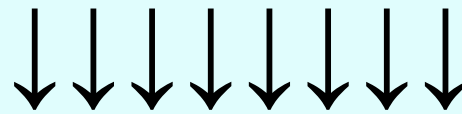
RESIDUE



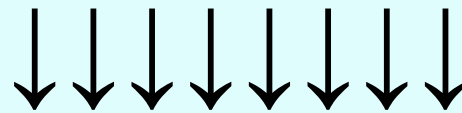
BETTER MOISTURE INFILTRATION



BETTER MOISTURE RETENTION



MORE AVAILABLE PLANT WATER



BETTER CROPS!!



Blue Sky ideas.....





Supercooling is the cooling of a liquid below its normal freezing point without changing from a liquid to a solid.

BBC FOUR

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Stuart Barden  
2009 Nuffield Scholar



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