ON THE FARM - THE GOOD DIRT

FEBRUARY EDITION

Of Droughts & Flooding Rains

Kerri Goschnick sees the big picture of land management. He uses historical evidence to understand what has happened over time.

Through his work with the Department of Primary Industries at Alexandra, Kerri notes that large scale erosion in the region these days is rare. "This is due to improved land management strategies," he says. "People now understand the economic and environmental impact of soil erosion."

In the last 20-30 years the change from predominately sheep to cattle grazing has helped reduce soil erosion. Cattle aren't able to graze as close to the ground, leaving more groundcover to protect the soil.

Back in the 1980s, the hilltops would be covered yellow with capeweed in spring and then turn black as it died off and sheep grazed off the ground cover. Kerri says if there were summer thunderstorms, "it would be like icing on a cake with black flows of soil debris and sheep manure moving down the hillsides. Not only was the topsoil removed, but it had an effect on water storage and water quality. These days there are few bare hilltops."

Kerri has seen considerable change in land management in the region. "Since we got into Whole Farm Planning and soil health, people have become more focused on rotational grazing to maintain ground cover."

An example of this is a Cathkin farmer who initiated land class fencing and rotational grazing on his steep west-facing hill. The change on the hill was so dramatic that a neighbour asked what crop he had sown.

"Nothing," the farmer replied. "But now I take the sheep off in early November, run a handful of cows on the hill and don't put the sheep back until Easter."

Kerri can provide landholders with advice about ways to tackle erosion. Using trees is one solution, but it is most effective if it is large scale, "not 15 trees in a corner".

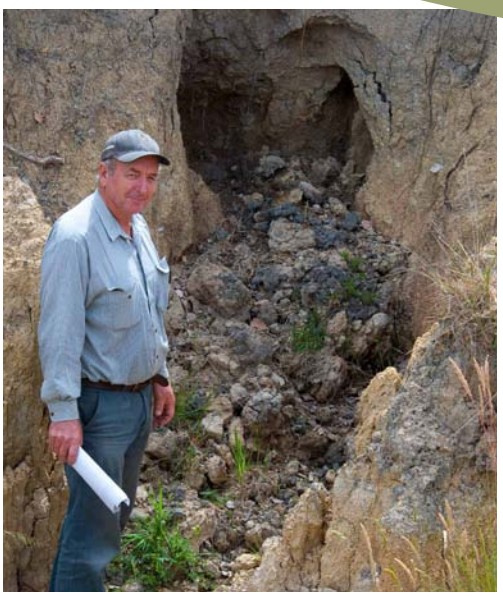
"Trees won't be able to stop deep erosion, such as in gullies," Kerri says. "If your erosion is more than half a metre deep, tree roots can't hold the soil, then you have to look at structural solutions – and pray for dry years."

The most difficult land management situations occur after bush fires. During the past 20 years in the region there have been four major fire recovery programs. Recent years have brought the challenges of floods as well. In the early 1940s a combination of drought, rabbits, fires and finally floods produced 21 miles of gully erosion upstream from Leckie Park in Alexandra. In the 1973/74 floods there was also great landscape damage.

With similar flooding events in 2010/11, there was infrastructure damage but no landscape damage. Kerri attributes this to improved land management, because "groundcover is paramount in slowing the rate of water movement and runoff."

For future soil security, we need to change the things we do in a landscape and build that into planning, he says.

"Living in the oldest, driest, flattest and poorest soil continent in the world presents us with challenges that require long term planning, not just responses to the most recent event," he says.



Kerri Goschnick, Department of Primary Industries

WHAT'S ON

29 Jan	Soil test interpretation workshop with Don Cook	Alexandra	Info Greg Bekker 0417 340 236
8 Feb	Soil test interpretation workshop with Cath Botta	Broadford	Info Brad Costin 0439 347 488
11 Feb	Soil test interpretation workshop with Cath Botta	Yea	Info Rhiannon Apted 5736 0108
15 Feb	Calculating fertiliser and lime requirements for decision making	Yea	Info Rhiannon Apted 5736 0108

FURTHER INFO

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