



Old Kokardine Valley Floor Revegetation



Project Snapshot

Land Manager's Name:	Colin, Ross and Robin Lane
Property Size:	4,500 ha
Location:	Wongan Hills
Annual Rainfall (mm):	345
Enterprise Mix:	Cropping & sheep
Soil Types/Vegetation Types:	Predominately wodjil

Key Messages

- The seedlings have been more successful where they have been planted into the barley crop
- Good site preparation ensures greater plant survival
- Planting trees improves both the aesthetics of the area and the value of the land

The Story so far

'Lynburn' is a family run property north east of Wongan Hills at the top of the Avon River Catchment. Here Colin Lane and his parents Ross and Robin crop and run sheep. Colin came across Wheatbelt NRM's Soil Conservation Incentive Program on the internet and instantly knew of an area on the farm that would benefit from revegetation.

On 'Lynburn' there is a valley floor that is subjected to wind erosion, run-off, waterlogging and rising salinity. By establishing a dense population of trees and shrubs Colin believed he would be able to minimise these impacts. "After observing farmer groups in our area and within the same catchment undergo tree and perennial pasture planting projects, we have come to realise that action we take in our part of the catchment can have benefits for the landholders downhill. Lower run-off rates and hence less erosion from heavy summer rains, as well as abatement in the rise of the saline watertable are some of the positive impacts we have seen from plantings."

Planting trees for multiple purposes

Through this program the Lane family planted oil mallees, saltbush, *Casuarina obesa* and *Melaleuca* using their own tree planter which they built out of a set of press wheels and a tyne. They have used this successfully for several years. They have also found success using a scarifier to control weeds prior to sowing.

Colin planted 3,000 oil mallees (*Euc. Lox liss*) in a belt higher up on the hillside to help control the wind erosion and planted 50,000 saltbush (*Atriplex nummulara*) in areas that were strategic for their grazing program. In addition, a mixture of 5,000 saltbush (*Atriplex amnicola*), 1,000 *Casuarina* (*C. obesa*) and 1,000 *Melaleuca* (*M. hamata*) were planted in the more saline sites, along the valley floor to abate waterlogging, water erosion and the rise in the saline watertable. "Although some of the

affected land has a sparse population of naturally occurring samphire and small-leaf bluebush on it, this vegetation does little to abate waterlogging, wind and water erosion of the soil and is of little use to the farm business as it has a low feed value", Colin explained.

Lessons learnt

The Lane's found that groundcover and climatic conditions had a significant effect on the survival rates of the seedlings. For example seedlings that were planted through a newly sown crop of barley were much more successful than the ones planted on bare ground. "I suppose this just proof of the importance of groundcover", Colin said. The unseasonally dry winter also resulted in a higher mortality rate of the seedlings that were planted on the bare ground of the more saline site.

Through Wheatbelt NRM's SCIP program the Lane's will replant the failed areas in 2013. Colin intends to spread some organic matter on the site prior to planting in an endeavour to obtain some cover on the ground and stop the capillary action on the saline watertable. Meanwhile, the more successful saltbush pasture sites will be lightly grazed.

Once the sites are successfully established Colin hopes erosion will stop along the creek, the water table will be lowered and some useful grazing opportunities will occur. This will make the sites more valuable to the farming system as well as being aesthetically pleasing on the whole.

Acknowledgements

Colin Lane

Tracey Hobbs



Published: August 2013



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www.wheatbeltnrm.org.au

Wheatbelt NRM
75 York Road
PO Box 311
Northam WA 6401

Phone: (08) 9670 3100
Fax: (08) 9670 3140
Email: info@wheatbeltnrm.org.au