

Healthy soils and happy sheep

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For Mukinbudin farmer Stephen Sprigg, planting hundreds of trees on his farm wasn't about making money, but about being environmentally responsible. However, since planting 650,000 mallee trees in 2008, Stephen has found that they have enriched unproductive land and sequestered carbon in the soil while improving livestock wellbeing and lamb survival rates.



profile

Stephen and Ruth Sprigg
Futura Farm, P. Sprigg and Co.
Mukinbudin, Bonnie Rock

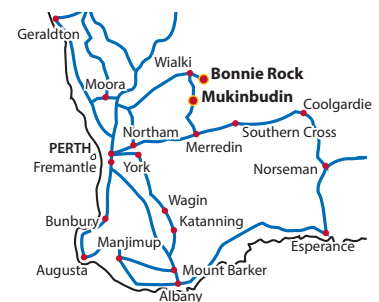
Farming system

Area: 16,000 ha, 13,000 ha arable

Annual rainfall: 300 mm

Enterprise: 650 ha of trees, cropping 9000 ha,
grazing 4500 sheep on 4000 ha,
SRS® Merino Wool

Soil types: Sandy loams to red clays



The farm partnership is run by many members of the Sprigg family including his sons Justin, Dwayne and Hayden and nephew Andrew. They like to keep things simple, growing mainly wheat with some oats for hay, some barley and canola opportunistically. They run a quarter horse stud and manage 4500 head of SRS® Merino ewes with the aim of cracking the UK wool market.

Tree change halts degradation

It all began in 2006, when Stephen was inspired by a fellow local grower, an avid environmentalist who was planning on re-vegetating his property. Stephen realised that having 300 mm of annual rainfall, a lot of which fell outside of the growing season, and extensive underground aquifers, was an opportunity for something.

‘Rainfall in the off season doesn’t help cropping much but it’s a good environment in which to grow trees,’ Stephen said.

‘So with the sporadic rainfall and reasonable aquifers, tree growth was predicted to get reasonable growth rates. The aquifers under the deep sands out near Bonnie Rock were not helpful to crops but perfect for tree establishment.’

‘We also had soils that were not good for grazing because they tended to blow and they were sub-economical for cropping too, so we decided to take an environmentally responsible position and plant trees – it just fitted the mould.’

After many consultations with Carbon Conscious (now called Alterra Ltd), which included drilling to find aquifers and monitoring weather patterns, the Spriggs decided to plant 650 hectares of unproductive land to oil mallee trees. Stephen learned that had they not planted the trees above the underlying aquifers on the perched water tables, the water could have risen and caused quite devastating salinity.

‘Luckily we planted the trees and their early growth rates were phenomenal. Since then the water table has lowered and the trees now rely on rainfall.’

The land the trees are on wasn’t always unviable, but over the past 40 years Stephen said it had become environmentally damaging to graze the land and the cost price squeeze saw it become uneconomical to crop.

‘Areas that were profitable in the 1950s and ‘60s aren’t anymore,’ he said. When you are limited to a one tonne crop, and your break-even point is 1.2t/ha, something’s got to change.

‘So we needed to try and reshape our farm business around the more productive soils. Whether you believe in climate change or not, we could see that those areas that were the most suitable for trees were the least suitable for cropping and grazing.’

They aimed for a block planting system instead, putting in 1000 trees per hectare over the 650 ha.

So from 2008 they planted about 650,000 trees, and despite a drought that year, Stephen said establishment was very good.

Methods and policies around trees

After about 12 months of negotiations concerning legislations and ownership, Stephen said the best option for his business was to sell 50 per cent of the land suitable for trees to Carbon Conscious (CC) and keep ownership of the other 50 per cent.

Stephen would then go on to take a 15 per cent share of the carbon credit from his land and a 10 per cent payment for maintaining CC’s land.

‘We had to try and guess what the legislation would be around carbon credits, to try and comply with the legislation before it had been implemented,’ he said. ‘So there is now a total of 25 per cent equity on the land from carbon sequestered by the trees.’

Stephen said it was good to have CC on the project as they handled the carbon methods. The project started under the Carbon Farming Initiative legislation using the method related to permanent mallee plantings and using the reforestation modelling tool as the method of measurement which has transitioned into the Emissions Reduction Fund. CC have aggregated their projects and successfully bid into the Clean Energy Regulator’s first auction.

‘They’re on the cutting edge on what has been happening so working with them was a no brainer, and when the expected price of carbon was \$23/t for carbon and we were storing 10t per year, that’s \$230 per hectare, which was quite attractive.’

‘Obviously since that \$23/t has been knocked off, we may be looking at more like \$5/t, that impacts on the income significantly. The income has been diminished because of the value of carbon worldwide, but it hasn’t changed the environmental aspect of the project.’

Stephen said while most farming decisions were based on economics, he believed farmers also needed to be accountable for the land.

‘When we manage so much land, looking after the environment is really a key focus,’ he said.

Stephen said even if there were no price for carbon, he would still do it all over again, because the side benefits of revegetating the farm were still worth it.

Trees provide lambing shelter

Lamb deaths can be a significant loss for farmers, financially and emotionally. Predators are a significant cause of lamb losses in WA and Stephen said they have had particular issues with eagles swooping in and taking newborn lambs. However, since planting the mallee trees, Stephen noticed a decrease in lamb mortality.

‘We run the lambing ewes in the paddocks with the trees and they take shelter between the rows from eagles; the trees help guard them from bad weather as well,’ Stephen said.

‘The trees make it impossible for eagles to swoop down and grab the lambs and the ewes picked up on it quickly and now hide in the trees when lambing.’

‘It’s become a good little nest for them and there is also feed between the trees.’

Originally the Spriggs weren’t allowed to hold livestock in paddocks containing the trees belonging to Carbon Conscious for three years, to make sure the young trees weren’t damaged, however the establishment and growth was so quick they were able to put sheep in earlier.

‘Sheep don’t worry the trees. We are using the right grazing practices and stocking rates to make sure they don’t eat the mallees,’ Stephen said.

‘There is feed growing in between trees and we have had good growth results from the lambs.’

‘Happy Sheep’ destined for UK wool market

Not only is Stephen an environmentally-minded farmer, he is also trying to improve animal welfare. Stephen is trying to crack into the European clean and friendly wool market, in particular the UK, which he says refuse a lot of Australian wool because of the impact of perceptions of mulesing and mishandling on their consumers.

‘The UK do not buy wool from Australia, even though it’s the best wool in the world if it is mulesed they won’t buy it,’ he said.

Stephen believes the rest of the world will eventually follow this trend because people are more aware of the practices and that farmers needed to listen.

His brand, The Happy Sheep Company, is already gaining some pace in the EU as being clean, green, non-mulesed wool which complies with the EU’s label requirements while offering a high quality, soft, Australian merino wool.

Stephen has been liaising with marketers directly to build his name and image.

‘Europeans are very concerned about the treatment of sheep, so it has to be a happy sheep to be acceptable—particularly in the UK,’ he said. ‘The perceptions they have is that we are barbarians, and in some cases we are. So we don’t mules and we handle our sheep with as much care as possible.’

The Spriggs shear their SRS® Merinos twice a year which has reduced their need to mules.

‘We have fast growing wool—typically sheep may get 200 mm of length a year, which was too much. So we shear them every six months and crutch them in between if we need to—we don’t have a problem with flies.’

Stephen said his wool is as soft as silk and has no prickle factor or entanglement.

‘The processing factor of this wool is remarkable and we market that along with the Happy Sheep element.’

The mallee trees also add merit to his Happy Sheep claim as they are well sheltered all year round from weather and predators.

