

# TREE PLANTING PROVES FRUITFUL AT 'KYEAMBA DOWNS'

By Bundle Lawson

Fifteen years of planting trees and protecting remnant native vegetation is paying dividends for Stephen and Sarah Palmer, through reduced erosion, improved surface water quality and the provision of corridors and shelter belts for livestock and native birds and animals. All the tree-planting projects the Palmers have undertaken have tied in well with their beef and cropping enterprises.

## *Fenced in*

The Palmers first began looking at ways to protect and enhance the remnant vegetation on Kyeamba Downs in 1999. Greening Australia was offering grants to fence off areas to prevent further erosion and protect remnant vegetation. The Palmers fenced off a 70 hectare site, which they continue to manage by crash grazing it once a year.

This management encourages a continuous coverage of native vegetation, which fosters the survival of indigenous plant species including ironbarks, hardenbergias, chocolate lily, leptospermum, nodding blue lily, hibbertia and many native grasses. The fenced off area also provides a refuge for many native species of animals, reptiles and birds.

From an environmental management perspective, fencing off this area has been very effective in slowing down the flow of water from areas of surrounding properties that have been previously cleared. This has prevented erosion starting or continuing in many areas, and has improved the quality of water eventually running into dams and the lower Kyeamba Valley.

## *Planting projects*

In the early 2000s, the Palmers began undertaking a number of Landcare-funded projects on Kyeamba Downs. The main purpose of these projects was to prevent erosion along creek lines. They began fencing off and planting about 6,000 trees over a two year period.

In 2006, the Palmers participated in a major planting project coordinated by the Murrumbidgee CMA (now the Riverina Local Land Services), which also involved Earth Tech and Greening Australia. The aim was to stabilise severely eroding banks on Kyeamba Downs, whilst working in with remnant vegetation.



*Eroded gully before (left) ... and after (right)*

Twelve kilometres of fencing was erected by the Palmer family over three months, to fence off the areas included in the project. Tree lines were ripped in during 2006, but due to the drought, the planting of the 10,000 trees did not take place until winter 2007.

### ***Broader picture***

By 2007, many of the environmental protection projects being offered were focussing on the broader picture, on a whole farm scale.

With guidance from the Murrumbidgee CMA, the Palmers drew up an Incentive Property Vegetation Plan. This involved fencing off two sites totalling 10 hectare, to protect and maintain the indigenous vegetation of this area. They then planted about 1,000 trees to complement the existing vegetation. In 2010, an Ecotender project from the Murrumbidgee CMA was used to link up with the 2007 project.

This involved about 5 km of fencing and the planting of 2,000 trees for the conservation of native vegetation.



### ***Recent activities***

The focus of environmental projects has continued to spread in recent years, led by the Cross Property Planning project. This project gave the Palmers great scope to connect remnant vegetation patches throughout the property and the broader Kyeamba Valley.

At the same time the Palmers also became involved in CSIRO's on-farm Biochar trials, which have shown no significant results to date.

Another significant project the Palmers undertook in 2013 of their own initiative was to create a wetland area on Kyeamba Downs.

With advice from Alison Elvin, the Palmers fenced off an area of about two hectares from livestock. They then planted over 200 trees including grey box, blakelyi, apple box, callistemon, acacias and casuarina species. These were all specifically planted in species groups, creating a 'patchwork effect' as suggested by Alison.

The Palmers have already seen a fantastic improvement in water clarity, and a dramatic increase in the birds, natural grasses and native plants in the wetland area. Earlier this year, the Palmers used CMA funding to connect existing remnant vegetation areas at three sites, planting 2,500 trees in these areas.

### *Growing tips*

According to the Palmers, site preparation is a key aspect of successful tree plantations. “All the areas where we have planted trees on Kyeamba Downs were fenced off, deep ripped and sprayed before planting. To date, our most successful plantings were those done in 2007, with rip lines initially done in 2006, despite it being during the peak of the drought”.

“Interestingly, one contracted tree planting project had the worst survival rate of any plantings on the property.”

“As far as tree species selection goes, we do not use a huge variety of plantings. Only those species which have survived through the drought are now continually replanted. This year, of the 2,500 trees we have planted, 100 were supplied through the Provenance seed collection, so it will be interesting to see how they survive.

“We will continue to plant trees where appropriate and possible on Kyeamba Downs, as we believe it not only benefits our property but also contributes to the improved environmental health further downstream in the Kyeamba Valley.”



*Kyeamba Downs wetland*