PRACTICALITIES

MAKING YOUR NATIVE GRASSES GROW

by Ed & Linda Blanchard.

WE have a 120ac bush block just outside Popanyinning, 35km north of Narrogin. The property lies at the bottom of the landscape about a kilometre from the Hotham River. There is a gravel ridge running diagonally across the property, which divides up the vegetation. The lower part of the block on the southern and western sides is very salty and has a large number of dead trees with only grasses and sedges as an understorey. Wandoo and other large tree species dominate the slope of the higher part of the block and in the north-eastern corner there is an area of heathland dominated by dryandra.

We bought the property just over two years ago and as Linda is a passionate horse rider, part of the plan is to keep horses in small paddocks where they will be supplementarily fed. However, we did not want to compromise the nature conservation values of the property.

Before we bought it, the property had been part of a farmer's paddock and was grazed periodically. One of the first things we did was to put in a W-drain to remove the surface water that was spreading out across the flats. The regeneration of the native grass species was spectacular, with large areas of this low lying area now covered with Foxtail Mulga, Elegant Speargrass, Wallaby Grass and other native species. This was seen as an excellent area to paddock the horses, where by rotating them around some small paddocks, they could encourage the native grasses to persist. The problem was to manage the increase in unwanted weed species such as Guildford Grass (Iris family) and Barley Grass.

The strategies we have adopted include :

- planting fast growing shrub/tree species to minimise the weed seeds blowing in from the paddock next door,
- burning areas to minimise the fire fuel and to hopefully destroy some of the unwanted grass seeds
- a follow up with chemicals to control weed species.

A range of shrub/tree species have been planted on the block, thanks to the generosity of the Western Power Greening Challenge, to complement the species already growing there.

We have worked very hard to reduce the huge fuel burden right across the block, creating a good firebreak around the property, then using controlled burns followed by chemical weed control, primarily a Glean (Chlorsulfuron) / Roundup (Glyphosate) mix with 20g/ha of Chlorsulfuron and 1 to 1.5 litres/ha of Glyphosate. In some of the areas with a high weed burden two applications were necessary to reduce the weed burden sufficiently.

Glyphosate is a non selective, leaf absorbed, translocated herbicide. As a knockdown, it kills most plants that it touches. It is particularly effective on perennial weeds sprayed after their "dead thatch" has been removed. It is of low toxicity to mammals, birds and fish however, the surfactant used in many generic brands is toxic to frogs but there is a product Roundup Biactive that uses a surfactant which is not toxic to frogs.

Chlorsulfuron is a selective and translocated herbicide that is absorbed through the leaves and roots. It controls a large variety of bulbous and broad-leaved weeds and was included in this mix to control Guildford grass. Chlorsulfuron acts on the ALS enzyme in plants, which is not present in animals, and this is the main reason for its low toxicity. Plants resistant to Chlorsulfuron have developed and are expected after repeated use. *[Nb: be careful - this chemical can also damage trees - Ed.]*

After the chemical applications in June/July and August/September the areas appeared quite bare but within a month there was a good coverage of the native grasses which have expanded their area dramatically.

Even after a very dry spring the native grasses in these low-lying areas are still green in late November and are therefore transpiring soil moisture. However the native grasses that volunteered grow only during the cool part of the year ie. they are winter active. Our challenge is to introduce some native grasses which actively grow over summer eg kangaroo grass, so we can have a truly perennial native grazing system.

Regeneration of native grass species in an area, which had been burnt and then had chemical weed control. Photo: E.Blanchard.