

**N**ATALEE KUSER and David Singe bought a property on the Blackwood River in Boyup Brook at the end of 1998. In just over two years they are well underway on an ambitious program of fencing and revegetation to protect and create wildlife habitat. Thoughtful design, sound technical advice and staged implementation exemplify this practical project.

David and Natalee said "We wanted to place a basic nature framework over the land, making the most of existing bush remnants and the river corridor. This allowed us to define the areas in which we would concentrate our immediate vegetation restoration and re-introduction efforts, and provided a backdrop for other future activities on the property."

### Previous Landuse.

The Lodge Road property was originally a large farm subdivided to create a number of medium sized rural holdings, of one to two hundred acres. Prior to subdivision the river flat country provided rough grazing for sheep and was occasionally cropped.

The property stretches for two and a half kilometres along the Blackwood River, with a number of river habitats including old paperbark thickets, seasonal wetlands and long river pools. Sections of the foreshore are well vegetated. Soils are mainly of the Blackwood Valley System ranging from sandy duplexes to gravelly sands to shallow rocky soils with granite outcrops on the highest sites.

Small remnants of the Jarrah - Marri - Wandoo woodland persist on the rocky outcrops as elsewhere, but grazing appeared to have removed the entire understorey.

### Creating the Plan

When David and Natalee bought the property at the end of 1998, they carried out an initial assessment of the soil and vegetation types, the condition of the river foreshore and upland remnants, potential weed problems and looked for signs of rabbit activity.

## REVEGETATION

# REVEGETATION - FROM PLANS TO IMPLEMENTATION

Jenny Dewing

With this information they set out to create a property landcare plan with the work to be staged over a number of years. The plan included fencing to protect the vegetation remnants and the Blackwood River foreshore, revegetation of the foreshore and creekline and connection of the bush patches to create functional wildlife corridors.

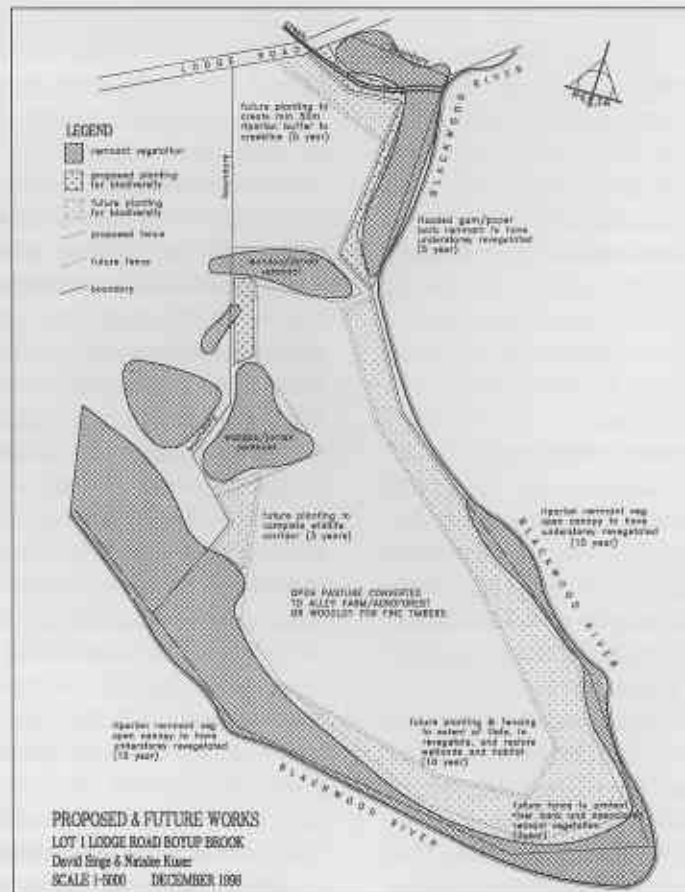
This plan has steered them through two successful grant applications and has clearly set out the stages by which the extensive rehabilitation task is tackled.

One of the first steps in this program was to obtain advice on revegetation and the creation of wildlife habitats. They joined *Land*

*for Wildlife* in December 1998, at about the time that they were preparing an application for incentive funding from the Blackwood Basin Community Startup Scheme. *Land for Wildlife* provided site-specific revegetation lists for hand planting, and direct sowing and technical support for revegetation and assisted natural regeneration techniques, as well as information on creating habitat for wildlife. As the river flats had been grazed continuously for a long time, an adjacent property's river flat site in good condition was used to compile the species list. David and Natalee became interim members in the *Land for Wildlife* Scheme, with the prospect of full registration when the rehabilitation program was well underway.

### Seeking Funding

Incentive funding received in 1999 from the Blackwood Basin Group provided a kick-start to the project. Then in 2001 funding from the Blackwood Valley Landcare Zone provided another boost, subsidising and expanding their program of work for that year.



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## Trial and Error

In 1999 the first section of river foreshore, the rocky ridges and creekline were fenced - some two kms - creating a corridor of varying width, not less than forty-five metres.

Two and a half thousand local native seedlings were planted, with the help of the local Green Corps team, on 2.5 hectares of creekline and upland ridge. Cheryl Hamence (Bridgetown Community Nursery Manager) together with Natalee raised these seedlings from locally collected seed, particularly understory species. Extra seed was collected for direct sowing trials on the rocky ridge areas.

Some valuable lessons were learnt from this first revegetation effort. Although about 70% successful, seedlings were lost because of poor species to site selection, rabbit damage and using some smaller less vigorous seedlings. Site preparation was adequate but plants that were planted in the wrong position on sandy banks, or in areas where they were inundated for a prolonged time, did not survive. The value of tree guards was highlighted for good seedling establishment in all situations and where rabbit control was not adequate.

In 2000, Natalee collected seed and raised another thousand seedlings. These were used as infill in the less successful areas from the previous year. Bare rooted Melaleucas were also trialled. A soil wetting agent was added to the non-wetting sandy areas on the upper bank of the foreshore. Tree guards were reused from the previous year. Despite the poor season due to the abrupt early finish, about 50% of the seedlings successfully established.

## Natural Regeneration

By December 2000 natural regeneration on the fenced river flats was becoming noticeable. *Eucalyptus rudis* volunteered readily together with an excellent crop of paperbarks in one particular site and native lobelia along the water's edge. Rushes and sedges bulked up, particularly *Baumea preissii*, a

## REVEGETATION



Scarlette (8) and Isobel (5) in a rocky remnant

common plant on wet flats along the Blackwood River and tributaries in this area.

Direct sowing was trialled the previous year but failed because of weed competition. However, seed that was scattered opportunistically into suitable niches along the seasonal lagoons germinated quite well. Gradually the foreshore understory is returning and a healthy population of native grasses is spreading. Evidence of recovery of understory on the rocky ridges in the fenced areas is apparent. Previously non-visible species (due to grazing pressure) making some impact such as Hibbertias, seedling grass trees (with no parent plant in the vicinity), native grasses and ferns and more!

In early 2001, LFW invited David and Natalee to fully register the property. Their new sign proudly stands amongst the recently established understory of the Flooded Gum woodland. It is eye-catching from the road.

## Next Steps

Natalee and David plan to continue this year with another section of the river to be fenced in 2001, bringing the total river fencing to two thirds of the foreshore length.

They want to concentrate on increasing structural diversity in areas that they have previously fenced and planted, adding ground covers and

native grasses to the established Wattles, Rock Sheoak and Lemon-scented Myrtle.

They are keen to try small heap burns, further direct sowing and techniques such as smoked water. In the future they are looking at connecting the rocky ridges to the river by stepping-stones of vegetation. The low-lying swampy areas of the river flats will be fenced and revegetated to create habitat for local water birds.

It is too early to assess the impact of this new vegetation on wildlife numbers but there has already been a noticeable increase in the number of small birds. Monitoring bird species and numbers, spotlighting for small mammals and recording frog calls are all useful monitoring techniques, together with photo monitoring points for vegetation.

David is researching long term high value timber trees such as those grown for the craft wood market. Possibilities for this area include Rock Sheoak and River Banksia.

## The bigger picture

There are a number of similar properties along the Blackwood River near to this one. Several other landholders have joined the *Land for Wildlife* program and are in the early stages of the same process as Natalee and David. There is an opportunity for these landholders to work together. Already David and Natalee have shared their experience with nearby LFW neighbours.

Management actions such as weed and feral animal control and creation of wildlife corridors are much more effective if carried out at a landscape level.

The Blackwood River in this part of the Blackwood Valley has sections of good vegetation remaining, is wide and offers a variety of habitats including deep pools and broad seasonally inundated flats. It is already a significant wildlife corridor that deserves to be protected, enhanced and managed for its conservation value.

*Jenny Dewing is the Land for Wildlife Officer in Bridgetown. She can be contacted on 9761 2318.*