

MAKING CONNECTIONS

LINKING BUSH REMNANTS

By Jenny Dewing & David Singe

MOST of us tend to be focused on our own patch of bush and as a consequence manage it as an isolated entity. It may be worthwhile taking a step back and considering the important role 'our patch' plays, or could play, in the broader vegetation landscape.

By connecting bush remnants, we establish a living network, which is more diverse than the individual elements. We then become part of a more robust system, that has the capacity to buffer and protect our patch from permanent loss of biodiversity caused by a localised disturbance or catastrophe. With time and good management wildlife activity in our patch should increase as a result of being part of a larger system.

A project currently underway in Bridgetown is looking to identify opportunities where these broad landscape connections can be made.

The BiG.liNCS Project

In March 1999 the Blackwood Environment Society received funding from the Natural Heritage Trust to undertake the "Bridgetown-Greenbushes Nature Conservation Strategic Plan", now known by its acronym as the **BiG.liNCS** project. The project is using a blend of geographic information systems, on-ground vegetation surveys, ecological expertise and local land manager groups to identify and target priority areas for future conservation management and on-ground works within the Shire of Bridgetown-Greenbushes. Ultimately the implementation of the strategic plan should lead to an effective integrated nature conservation network across the Shire.

Bridgetown's Vegetation Mosaic

The landscape mosaic in the Shire is composed of a series of distinct and typically unconnected elements. The largest of these are the big areas of State Forest to the south, west and north, which extend well out beyond the Shire boundary. These blocks comprise about 75% of the native vegetation cover in the Shire. Nestled inside these large forest areas are 12

unconnected smaller forest blocks, some of which are State Forest and others various categories of reserve, which make up another 18%.

Privately owned bush remnants are then scattered between these other vegetation elements, and account for less than 7% of the vegetation cover in the Shire. Of these 1500 private remnants most are only several hectares, with only around 150 being 20 hectares or greater, and a third of these modified to some extent (heavily grazed, regularly burnt or partially cleared).

The other significant element in the mosaic is the Blackwood River, which splits the Shire roughly in two. The river can be both a connecting element between vegetation remnants for some species and a barrier for others.

Under the guidance of consultant ecologists, the project team has been able to study the Shire's vegetation mosaic. The most logical routes for connecting all of the forest and reserve blocks and the private remnants greater than 40 hectares have been identified. To avoid dead ends in this proposed network, at least two connections were made to each element. The route of each connection typically optimises the use of smaller remnants along its path to act as stepping-stones. It also takes into account location in the landscape (ridge, creekline), the vegetation types which it moves through, and a social consideration where known (does the affected landmanager have an enlightened attitude to nature conservation).

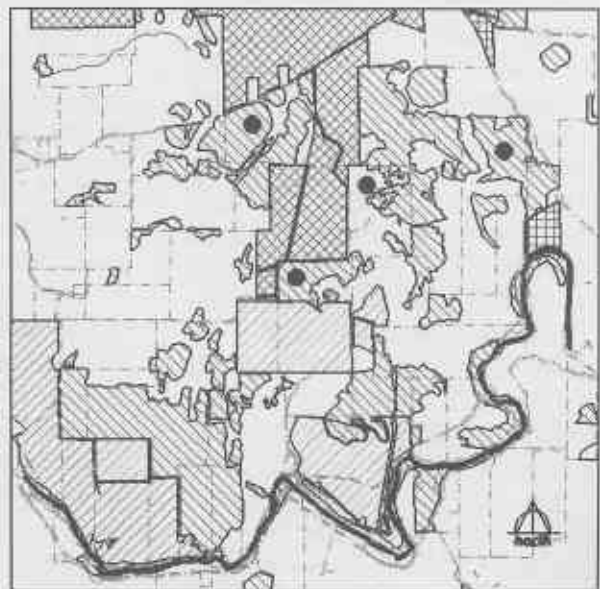
While the process has focused on the con-

nections between the larger public and private bush remnants at a whole of Shire scale, it can be used at a much smaller scale, right down to individual properties if the base data is accurate enough.

The BiG.liNCS project has also confirmed the importance of several potential connections, which had previously been recognised during *Land for Wildlife* property visits. BiG.liNCS team member and local *Land for Wildlife* Officer Jenny Dewing has been working with landholders along one of these connections for 6 months.

Wheatley to Wheatley Linkage

During a *Land for Wildlife* property visit in December 1998, Jenny Dewing and members of the Wheatley family identified a potential landscape connection through the property. Commencing on the Blackwood River, the connection passes through their remnant bush up to one of the Hester Forest blocks and back down across a number of large private remnants to the Blackwood River, about 10 kilometres downstream. It has become known as the 'Wheatley-to-Wheatley' linkage after the two distantly related families that live at either end of the link. The Blackwood Basin Group's



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Biodiversity Program has also recently ranked this chain of remnants as a high priority complex.

Landholders in the linkage reflect the changing demographic and landuse profile of the Shire, where larger farms are being broken up into lifestyle bush blocks, hobby farms or tree farms. The seventeen properties include three large farms, four small farms, two timber plantations, a tourist enterprise, a berry farm, three bush blocks, a property owned by the Shire, a DOLA Reserve and part of the Hester Conservation Zone. Seven of the property owners are absentee owners.

Ten of the "greater than twenty-hectare" remnants in the Shire occur in the Wheatley-to-Wheatley linkage. Vegetation types include jarrah-marri forest, jarrah-wandoo woodlands, banksia-tea tree thicket wetlands, rock outcrops, the flooded gum woodland of the Blackwood River foreshore and "bull and ti tree" gullies. The linkage includes some large wandoo remnants, a less common vegetation type within the Shire.

Landholders have reported sightings of the common western grey kangaroo and small mammals such as chuditch, phascogales, brush-tailed wallabies and possums, bandicoots and water rats. Indeed, Eric and Gillian Wheatley at the downstream end of the linkage have an ongoing encounter with a young male chuditch. Responsible for taking their poultry, the chuditch was trapped on a number of occasions, dutifully taken back to the bush only to have it return for more of the same several days later. The chook pen is now chuditch-proofed. The area also provides nesting sites for red-tailed black cockatoos, wedge-tailed eagles and a number of owl species.

Landholder Groups

In October 1999 landholders with properties in the Wheatley-to-Wheatley linkage were invited to a meeting to learn about the BiG.liNCS project, and to consider opportunities for managing their remnant bush together, with nature conservation as a common goal. An important outcome of the meeting was this new way of seeing the landscape as an integrated system, rather than isolated patches of bush. There was general agreement on the value of working together,



Learning about the forest floor with John Dell.

particularly for weed and feral animal control and when applying for fencing and revegetation grants.

Resources available to the group include fencing subsidies from the Blackwood Biodiversity Program, advice on providing habitats for wildlife for landholders who register with the *Land for Wildlife* scheme, and vegetation surveys and management advice through the BiG.liNCS project. From this initial meeting two more landholders within the group joined *Land for Wildlife*, and two other landholders decided to covenant the bush on their property. Covenants are voluntary agreements to provide long-term protection for conservation values on private land.

From October to December 1999 Jenny Dewing (as Shire Landcare Co-ordinator) and Landcare Trainee Anthea Paino carried out vegetation community and condition assessments on most properties within the linkage. Specific management issues were discussed with each landholder on a property-by-property basis.

With landholders keen to learn more about the bush in their linkage, John Dell, Senior Technical Officer for the WA Museum was invited down in March this year. Twenty-five people spent the whole day in the field with John, walking and talking as representative sites on four properties and in the Hester Conservation Zone were explored. Landholders learnt first hand about habitats and how to manage them for wildlife, with particular emphasis upon reducing disturbance and encouraging natural regeneration.

The key lessons from John's visit were the importance of the invertebrate

communities that live on the forest floor and the unique management issues for fragmented landscapes. As with all situations where remnant bush and farmland adjoin, the balance between fire prevention and wildlife habitat maintenance was raised as a major concern. The day was capped off by evening spotlighting in the Hester Conservation Zone which revealed a pair of brush-tailed possums, a barn owl, and many spiders. Following this a fourth property registered for *Land for Wildlife* and two others are considering covenants.

Landholders followed up the March activity with a group fox baiting effort in April. Twelve dozen 1080 baited eggs were laid across the linkage during the same week.

Future Directions

At the big end of the scale the process developing through the BiG.liNCS project may be extended beyond its current Shire limits, or could be taken elsewhere and adapted to a quite different vegetation landscape. At the other end of the scale the process has only just begun. Landholders are thinking "whole of landscape" and "long term". **What we do now will have impacts in two to three hundred years and longer.** Learning to work together in a landscape sense takes time and involves negotiation and compromise. There is an opportunity to develop working partnerships with the Bridgetown-Greenbushes Shire and CALM. A workshop on fire management is planned. Several small gaps in the linkage need revegetating, and some remnants still need to be fenced. Importantly a start has been made and this same process will extend to other connections identified by the BiG.liNCS project.

Jenny Dewing is the Land for Wildlife Officer in Bridgetown, and David Singe the Project Manager for the BiG.liNCS Project. They both have properties on the Blackwood River, where they are connecting their remnant vegetation back to the river. Both work out of the Old Railway Station in Bridgetown. David's Boyup Brook property is registered with Land For Wildlife. Jenny can be contacted on 9761 2318, and David on 9761 2450.