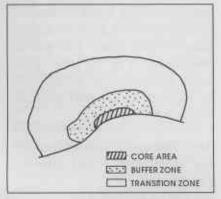
chance pit-stop at the roadside somewhere between Jerramungup and Ravensthorpe on the south coastled to my first sighting of the rare Western Whipbird. There were two exciting things about this, firstly it was my first experience of these shy birds and secondly I saw the bird in a narrow road verge, albeit in good condition. This was back in early 1993 and at the time I thought it was a sure sign that I was in for an interesting time carrying out biological surveys in the Fitzgerald Biosphere Reserve. Now almost five years later, and many, many trapping sessions later, I have been able to document the high biological diversity and hence high conservation value of the remnant vegetation surrounding Fitzgerald River National Park (FRNP).

The FRNP has a special place in the hearts of the many people who have got to know this wild and wonderful area. Its name is synonymous with a high diversity of wildflowers, rugged coastal mountains and wilderness. What is less well known is that it is one of over 300 Biosphere Reserves that have been nominated worldwide.

So, what's special about a Biosphere Reserve, and what does the concept mean?

The Fitzgerald became part of UNESCO's 'Man and the Biosphere' Program in 1978 when it became one of the 12 Biosphere Reserves in Australia. It was originally nominated because of its high biodiversity and relatively pristine condition.



▲ Truncated model biosphere reserve.

Fitzgerald River National park Biosphere Reserve in 1997.

## RESEARCH

## THE FITZGERALD BIOSPHERE RESERVE,

a model for conservation and sustainable land use

Angela Sanders

Ideally, Biosphere Reserves have three zones or areas; a natural core area where evolution can occur unhindered, a surrounding buffer zone where minimal human activity takes place and an adjoining zone of cooperation where most of the human activity takes place. In our case the FRNP makes up the core area and the buffer area comprises remnant vegetation surrounding the Park as well as the various corridors that link the Park along the coast and inland to other areas of native bushland. Farming is the main activity in the zone of cooperation and the involvement by farmers and others is purely voluntary.

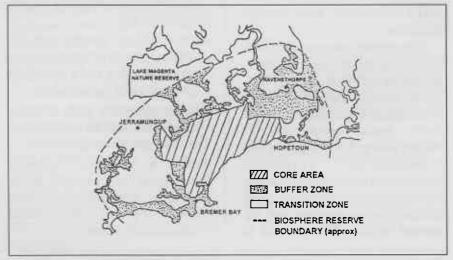
The biosphere concept includes managing the core area or park to ensure biodiversity is protected and provision is made for research to be carried out. CALM manages to core area with input from the FRNP Advisory Committee, which is made

up of local community members and CALM representatives. The concept also includes working towards managing the zone of cooperation and buffer zone in a manner that will protect the core area over the long term.

The FRNP, or core area, has five rivers flowing through it to estuaries on the coast and all of these rivers have their upper catchments in the cleared farmlands. Research on the estuaries and lagoons at the end of these rivers has shown that they are all suffering from increased salinity and siltation as a result of farm management practices. challenge to landholders in the upper catchments is to work towards using their land in a sustainable way, which includes decreasing the amount of silt and salt laden runoff reaching the rivers. Many farmers are now working together with Landcare Coordinators and CALM to establish management practices that will help protect the values of the core area. A number of projects are now under way to address this with fencing and revegetation being carried out in the upper catchments of these rivers.

After working with a Biosphere Reserve on a large scale, I believe that the concept can also be applied at smaller scales and indeed, many people are already doing this in their catchment or on individual farms. Our challenge, I believe, is to take care of remnants that still support sustainable populations of flora and fauna, and to establish buffer zones around them. These

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could provide seed or other natural resources for the future and would also provide a source of plants and animals for the core area should anything untoward happen, such as a partial fire.

What you need to establish your own mini Biosphere Reserve is a patch of bush in relatively pristine condition (LFW 'excellent quality' assessment - Ed) or core area, that you want to protect in the long term. A buffer zone then needs to be established around the remnant, all the threats need to be identified and a management strategy put into place. This may include linking corridors to other patches, replanting native vegetation or fencing existing bush. My surveys of corridors in the Fitzgerald area showed that they were acting as fauna habitat in their own right and I am happy to say that my first encounter with a Western Whipbird was followed by many others in corridors and remnant patches of bushland throughout the area. In the zone of cooperation it is

crucial that the farming is sustainable over the long term without compromising the values of the core area. Quite a challenge, but after working in the Fitzgerald I believe that the Biosphere Reserve concept is a sound umbrella under which to work, and is one that leads to truly integrated management.

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For more detail, read:

'Networks and the Fitzgerald River National Park Biosphere Reserve, WA' Watson et al. IN: Nature Conservation 4: the Role of Networks Ed. Saunders, Craig & Mattiske. Surrey Beatty & Sons. 1995

'Fitzgerald River National Park Biosphere Reserve 1978-1997: the evolution of integrated protected area management'. Watson & Sanders. IN Parks. Vol 7 No 1. Feb 1997

## The Fitz - Example to the World

Seventy of the world's leading national park and wildlife specialists went to Albany in Nov last year members of the World Conservation Union's (IUCN) World Commission Protected Areas. They were assessing the progress of protected areas from 'islands' to 'networks'. A focus durina the week was on the lewel in WA's conservation crown, the Fitzaerald River National Park. The tremendous work done by the surrounding community and CALM in establishing and managing the Fitzgerald Biosphere Reserve was acknowledged by delegates. It is an example for other developed nations to follow.