Managing My Bushland



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INTRODUCTION

My brief from Ken Wallace was to outline what has been done to preserve remnant vegetation on our farm, and to outline the information on which we base our management.

John and I farm "Koobabbie", which is part of the Waddi Forest district of south-east Coorow. The land was selected by my grandparents in 1906, and developed by them and by my parents. The development was carefully planned, and waterways, granite, diorite and lateritic hills, and areas showing signs of natural salinity were not cleared. Strategically placed belts of woodland were retained for shelter. Unfortunately, only one rocky hill was permanently fenced from livestock.

My parents died prematurely, and by 1966 John and I were farming "Koobabbie" on our own account. We now own 6 855 ha, of which 4 028 ha is arable or used for grazing.

The remaining 2 857 ha, or 41.5% of the farm, can be described as uncleared salt lake country not grazed by stock (1 864 ha), rocky hills, most of which are fenced from stock (521 ha), and timber belts, most of which are fenced from stock (472 ha).

There are three major soil and vegetation types: sandplain on lateritic soils above the Darling Scarp, woodland on duplex soils, and saline lakes (Beard 1976).

MANAGEMENT OF REMNANTS

The property has approximately 196 km of fencing. Of this, 43 km is fencing necessary to fence the bush from livestock, and 5 km protects salt-affected land from grazing by sheep.

The fenced-off remnant vegetation is in 47 separate areas, ranging from 2 to 1 682 ha in area. Many of the fenced remnants are only separated because of the necessity to have a laneway for stock and vehicles to access paddocks. Of the 47 fenced remnants, only six are islands in cleared paddocks. The remnant vegetation fencing program began in 1970.

We still have 12 remnants that urgently require fencing but, unfortunately, they require long lengths of fencing for small total areas of bush.

The only financial assistance received has been \$625 towards fencing, and 1 200 seedlings as part of a Greening Western Australia grant to the Waddi Forest Landcare Group.

The program to fence off remnant vegetation was given great impetus in the early 1970s, when I read Between Wodjil and Tor by Barbara York Main (1967), This book clearly demonstrates the profound changes wrought on the natural ecosystem by even minimum interference by agriculture. Although depressed by the realisation of the degradation of our bush, I resolved we should endeavour to preserve all the remnant vegetation, no matter how degraded. As a result, we have given first priority to fencing remnant vegetation, and our tree planting endeavours are aimed at reconstructing the more degraded areas, in preference to planting in cleared paddocks. Ideally, the bush would not need managing, but because of the impact of weeds, feral animals, and changes in indigenous flora and fauna. intervention is required.

At about the same time, I met the late Charles Chapman, who farmed at Winchester (32 km northwest of "Koobabbie"). He was a dedicated amateur botanist, and on that first meeting named three species of plants. Because of his encouragement, I became very interested in learning about the local flora.

In 1976, Roy Casey came to work for us. At last, we had an expert fencer, and the fencing program began in earnest.

It was in approximately 1980 that Brian Jack purchased an area of bush west of Coorow and established a plant nursery. Until the early 1980s, the idea of tree planting in our district was to make an annual purchase from the Forests Department nursery at Dryandra, usually of goldfields species or *Eucalyptus camaldulensis* (river gums), and 50 was a large order.

Brian quickly convinced me of the importance of growing local flora, preferably using seed collected on the farm, and ideally from the site where it was to be replanted. Since the mid-1980s, I have been collecting seed which Brian grows for me. He pasteurises his soil, and supplies plants free of soil-borne diseases and weeds. We no longer purchase or receive plants from any other source.

In the early 1980s, Brian and Victoria Syme were instrumental in establishing a wildflower group in the district. As the emphasis of the group changed to natural history in general, many interesting people addressed our meetings, and often stayed at "Koobabbie". I cannot stress too much the importance of having people like Roger Edmiston, Penny Hussey, Denis Saunders, Barbara and Bert Main, etc. coming into the area, providing ideas and encouragement, and recommending sources of information. Fortunately, Roger Edmiston was one of the first speakers, in approximately 1982. We were using the post-hole digger in our clay to make tree planting easier. Since Roger's visit, we have ripped the soil before tree planting. After reading about a specially developed auger attachment for tree planting in Rural Research, we purchased one. It is useful for planting among existing trees, but requires a strong armed man with plenty of time to operate it.

In 1987, an area of 2 208 ha, consisting mainly of salt lake country 2 km west of our house, came on the market and we purchased it. We farm the 348 ha of arable land, and exclude stock from the remainder. It is a very interesting area with a wide variety of habitats, and is regenerating well. Nine hundred plants of a new species of Halosarcia grow around one lake, and will eventually be described as H. koobabbiensis. The other exciting discovery was Ptilotus caespitulosus, collected by James Drummond in 1842 and not collected since. An area like this provides little long-term grazing, and should be preserved in perpetuity. Excising the area as a reserve has management problems. I would like to see a legal mechanism developed so that land-holders can, if they wish, place permanent preservation orders on areas of bush they have preserved, which transfer with the land title.

Some areas of bush we have fenced have *Gastrolobium* parviflorum (box poison) regenerating. Because this species is poisonous to introduced species of vertebrates, it provides some protection to the bush. Legal protection will still be necessary to prevent

clearing, but the poison will ensure farmers do not allow stock to graze on a short-term basis.

In 1987, an article appeared in the *Countryman*, an important line of communication to farmers, in which Denis Saunders called for volunteers to keep a checklist of birds sighted each week. We still keep the list, and have learnt a lot about birds in the process.

About the same time, Denis spoke to our wildlife group, and alerted us to the plight of the Carnaby's cockatoo that nests in the timber belt that runs past our house, and on the salt lakes.

In 1990, we commissioned Dr Stephen Davies to undertake a survey of the wildlife of "Koobabbie". Stephen spent two weeks here in autumn and spring. It was my first experience of using pit and Elliott traps, and mist nets. We already had some information on reptiles present, because Betty Wellington has made a number of visits here. Our CSIRO bird checklist was the basis for the bird list, and I made a plant list.

At present, the list of reptiles recorded for "Koobabbie" stands at 18, bird species total 93, and the very incomplete plant list numbers 313. There is not sufficient information on frogs to make a list, but they are here.

In the late 1980s, the Waddi Forest Landcare Group was established. At one stage, with Viv Read and Phil Bellamy as advisers, our group conducted some valuable workshops on mapping, salt land revegetation, and remnant vegetation. However, the office bearers tend to be overwhelmed by the bureaucracy and the paperwork the landcare movement generates. For the little financial support provided by governments, it has been suggested we would be better off incorporating and financing ourselves. At present, our group is lacking momentum and ideas.

The work on remnant vegetation done in the last decade is now reaching farmers in publications like *Managing Your Bushland* by Penny Hussey and Ken Wallace (1993), and *Revegetation Guide to the Central Wheatbelt* by E.C. Lefroy, R.J. Hobbs and L.J. Atkins (1991). A similar publication for the northern agricultural areas is currently being prepared. For John and me, long-term farming goals are very

important. We rarely use insecticides, are involved in a Department of Agriculture biological program for the control of insect pests in pastures, and endeavour to minimise the use of herbicides and fertilisers. We strive to ensure that farming on "Koobabbie" is sustainable in the long term environmentally and economically, and aim to keep our farm as an interesting and pleasant place to live and work.

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PROCEEDINGS OF THE DRYANDRA WORKSHOP SEPTEMBER 1993

