LAWRY, Jenny and Clint Pitman, who farm west of Corrigin, have made it their goal to demonstrate and test sustainable agricultural practices on a whole farm scale, for 100 years, and to make their results open to the public. They wanted to show that broad acre farming could be environmentally, socially and economically successful.

This program became the basis of a Corrigin Landcare Project where environmentalists, farmers, scientists, corporations and Government provide financial and intellectual support. As such, selected practices acknowledged as "sustainable" are physically and financially monitored within the 3100 ha property.

One of their objectives is to increase biodiversity. In a property that has 4.5% remnant vegetation they are buffering this perennial vegetation by revegetating a further 20% of the property, 10% of which will be dedicated to nature conservation plantings. These numbers are arrived from "gut feelings", but the Pitmans do not plan on going broke in achieving them!

One focus on Valema Farms was the creation of 25 km 50 m wide corridors throughout the property. This program was completed over four years and involves boundary, creekline and keyline plantings.

Design was a large part of the process and undertaken by Robin Campbell. In order to mimic the natural environment, Robin

mapped the soil types along the corridors, and then examined remnants within the property to see which species were growing on these soil types. If suitable sites were not available on the property she went to others within a 20 km radius of the area. In one 2 km corridor situated on the keyline and connecting two of the larger patches of bushland, Robin mapped seven soil types. This corridor now occupies 9 ha of arable land.



## Valema Farms -Putting Sustainability to The test

## Avril Baxter

During this first year of the project, a grant was sought from the Gordon Reid Foundation for this and other properties to create the Upper Kunjin Catchment Nature Conservation Corridor. When the grant was approved, plant lists and numbers required were prepared, the seed collected and provided to local nurseries. This saw 55 000 trees and shrubs over 40 different species being planted during 1999-2000 on this property alone. In subsequent years another 90 000 seedlings were planted. Seeds where also collected of grasses, sedges, ground covers and annual flowers for direct seeding into the planting site.

Planting was done in clusters depending on soil type. Within each planting area, tall trees were planted in the middle of the corridor to stop roots invading the cropland. Outside were rows of small shrubs, which could act as breaks for weed invasion. The tall trees in the inside rows were planted by machine and the smaller shrubs by hand.



Clint and Lawry Pitman and Robin Campbell in the three year old corridor

Many lessons have been learnt from this exercise:

- 1 For a precise matching of vegetation to soil type, successful weed control and to obtain funding, the project must be planned several years in advance.
- 2 Timing can be hard when grants must be acquitted within one year.
- 3 Planting local provenance seedlings matched according to soil type is very time consuming. For the 9 ha of planting, 10 working days were spent in surveying, seed collection and ordering seedlings. The farming family alone cannot do this. The work needs to be supported by grants for wages as well as materials.
- 4 Seeds must be provided to nurseries by September to allow slower growing species to reach a manageable size for planting.
- 5 Different soil types need different site preparation – survival rates were excellent in duplex soils (90%) but less in sticky clays (60%), this was due to the chasm left by the ripper in the heavier clays.
- 6 Weed control is a major issue and must commence in the year before planting.

Overall the corridor cost \$2375 per km not including the cost of fencing, something the Pitmans could not afford without the aid of a grant.

Seeing red-capped robins moving through the young corridor is one of

the rewards for their time spent in planting. Other onfarm benefits are still to be measured. Such a large integrated project could not have been undertaken without the passion for "nature conservation". As Lawry says "seeing the corridor makes me feel good in my heart – aesthetics is a large part of working and living on the farm".

The Pitmans can be contacted on 9065 7074 or via email at lawpit@bigpond.com