

Notes on the Wirilda revegetation project

By Brendan Lay,

Summary of the project

This project was started in 1974 when, at the age of 26 and while still footloose and fancy free, I bought an eighty acre (32 ha) section of land in the eastern Mt Lofty ranges, near the small hamlet of Harrogate on the upper reaches of the Bremer river valley. I bought land in this location because, as a scientist working for the Dept. of Agriculture, I was destined to be transferred to the new city of Monarto, the brainchild of former premier Don Dunstan.

I always wanted to revegetate an area of rural land with native species, and as at that time I was a member of the then Society for Growing Australian Plants, was keen to try any interesting native, regardless of where in Australia or Tasmania it originated. I have travelled widely, especially inland and in the outback throughout my working life, and while doing so collected and grew, from seed or in some cases seedlings, a large variety of trees and shrubs

In 1977 it became a team project after I married Elizabeth Magarey. Also after a number of dry years (the area is in a rainshadow and only receives about 450mm average rainfall), we found that species native to the area or similar areas with the same soil and rainfall, survived and grew better on average than more “exotic” natives. We also, in the mid 1980’s, found that it was often better to direct-seed into the rocky ground (after effective weed control), than to risk tubestock seedlings which often failed to survive if significant summer rainfall did not occur. Now, after a recent run of excellent years, extensive natural revegetation from seed of the planted trees has resulted in most areas now resembling natural bushland or “scrub”. (see photos attached)

By the end of last century we had planted more than 20 000 seedlings and now have established many times that amount by direct-seeding. From the start of the project we teamed up with Greg Baker, an entomologist with SARDI, who has an even larger area of land on the eastern side of the Bremer river, and is doing similar revegetation work. Although we largely operate independently, we have had a number of joint projects and together in 1978, bought a strip of land to join the two original land parcels, making the total revegetation project area about 100 hectares or one square kilometre.

Since the mid 1980’s, our portion of the project area has been entirely covered by a Heritage Agreement with the Minister for Environment, relieving us of the normal

taxes, rates and charges over the land. This also protects the vegetation from future land clearance or other destruction.

Firewood harvesting

As the heritage agreement excludes the harvesting of dead planted trees, we have in recent years started to “clean up” some areas (adjacent to public roads and particularly where fire risk is evident). The wood from these fallen or dead trees is cut up and sold or given to family or to charity.

However the greatest damaging event to occur during our tenure of this land happened in July 2016, when 140 k/h northwesterly winds bowled over hundreds of mature trees. These winds accompanied a winter storm with an unprecedentedly low atmospheric pressure of 974 hectopascals, (similar to a category 3 cyclone). Much of the agricultural area of SA was similarly affected although excellent rains accompanied several of these storms.

The firewood harvested for the Hearth Breads Bakery is from fallen trees in a stand at Wirilda, Pt Lincoln. The trees are a form of sugar gum, (*Eucalyptus cladocalyx* var *nana*) a sub-species shown to be very prone to wind damage or uprooting in the soft soils of this area. They are on Greg Bakers land near the southern boundary fence.



Sugar gums (Eucalyptus cladocalyx var nana), planted in 1980 on Greg Baker's section. Some of these were felled by strong winds last year and earlier.



A fallen tree cut and ready to transport for further processing for the Hearth Breads Bakery wood oven.



A load of dry sugar gum ready to leave "Wirilda" Harrogate. In the background is a typical view of the revegetation area as it appears today.