

## Classics of South Australian geography

### *The importance of preserving our native plants*

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#### **Introduction**

When Europeans first arrived in Australia they found a land within which all the living beings were in balance (although they did not realize this at the time). The members of the very numerous native tribes which hunted birds, reptiles and animals did so for one purpose, namely to obtain food. Killing for other purposes was rarely undertaken and this, together with their nomadic habits, prevented the serious depletion of any one kind of animal, bird, reptile or plant within a given area.

The white man changed all this. He decimated the animal and bird populations (what they did to the Aborigines can be obtained from other sources), and destroyed the plants by cutting down the forest and by firing and clearing the scrub. Some cleared land was necessary to grow crops for food production. But greed, leading to needless destruction, occurred too frequently, resulting in extinctions of plant species and also in serious soil erosion.

Next came the introduction of the two greatest destroyers of native plants apart from fire, namely sheep and rabbits. Where water was available, sheep could forage an area two to three miles in radius from each watering point. Because very few Australian plants were avoided or were poisonous to sheep, large areas of the countryside were eaten out, re-growth was not possible and the plant communities changed.

With rabbits the position was even more serious. Because these animals can obtain the water they need either direct from the vegetation or by re-using or re-cycling it within their bodies, rabbits do not need direct access to free water. Thus there are hardly any areas of South Australia which they cannot penetrate; they cause tremendous destruction to plant growth. Both these animals prevent regeneration of our plants, bush or scrub lands, and they also kill our native grasses, changing the character of the areas which then are invaded by unsuitable substitutes, such as Salvation Jane and Rosy Dock in the Flinders Ranges.

Initially the settler had used some of the native animals to supplement his food supplies but later he proceeded to wipe out systematically the larger species of

fauna—especially the kangaroo—in the mistaken belief that, because they are grass eaters, they reduced the feed available for sheep. This is now known not to be the case—in fact sheep, cattle and kangaroos can all graze in the same area and all remain in prime condition, because of their different feeding requirements. However, it may be some time before graziers will be prepared to believe and to accept these facts.

As the white man settled into his new domain, some of the plants, birds and animals caught his eye, and because of their beauty, interest, gracefulness, colour and other features, they were given some form of protection. Others, perhaps not so appealing, were not treated as kindly, nor were some of our most unusual and harmless animals always given protection. If a pelt or feathers were required to meet the fashions or other demands of the day, then protection was conveniently forgotten. Queenslanders will remember with horror and shame the open season declared a few years ago when thousands of harmless koalas were slain simply because of the commercial demand for their pelts.

### **Protection and legislation**

Gradually it was realized that our South Australian plants, like our birds and animals, were unusual, peculiar, and in many instances unique, and moves were commenced to have them protected—as had been done in other states of the Commonwealth (see, for example, the article entitled ‘The story of fauna conservation in South Australia’, supplement to *Education Gazette* October 1968).

Some states were bold, legislating in advance of their time by declaring protected a large number of plants; others timidly named only a few. In Western Australia the Government of the day wisely declared as flora reserves, whole districts of the southern and south-western portions of that state (coinciding with the settled and wheat growing regions), thus giving protection to the native plants growing therein.

A start to protect native plants in South Australia was made in April 1938 under the auspices of the Australian Natives’ Association. The initial meeting recommended:

1. The planting of seeds and seedlings of native plants in National Parks
2. The education of the public to preserve and protect our native flora
3. The publication of lists of native plants to be protected
4. The enactment of legislation to protect native plants on Crown Lands and roadways, as was done in Victoria and New South Wales.

It was also pointed out that except for the Fauna and Flora Reserve Act (1919/35), which established Flinders Chase (Kangaroo Island), and the *Woods and Forests Act* (1882) which prohibits the cutting of timber etc. from forest reserves, no other protection is afforded in South Australia except under the provisions of the *National Parks Act*. Eventually an Act ‘moulded on lines of existing Acts in other states’ was decided upon, and by September 1939 the *Native Plant Protection Act* had been drafted. It had its first reading in the House in November 1939 and was passed soon afterwards.

### The Act and Proclamation

The Act (No. 32 of 1939) is a short one of 12 sections. The first section defines various matters. Section 3 indicates that:

1. The Governor may proclaim any wild flower or native plant to be protected in any part of parts of South Australia
2. The protection may be limited or unlimited in time and region
3. The Governor may revoke or amend any such proclamation.

Discussions then arose regarding the species to be listed, whether grazing and lopping of branches within the pastoral regions would be an offence (it would not, as it turned out), and whether the Native Currant should be protected (but since this would prohibit the picking of the fruit, it was not added to the list). Elsewhere it would be an offence to pick a protected native plant or offer it for sale unless it could be shown that it was grown on private land. The Minister of Afforestation would ensure that permits were issued for scientific purposes.

In the *South Australian Government Gazette*, October 1940, a proclamation was finally made notifying that the following plants were protected for the whole state for an unlimited period:

*Eremophila longifolia* (Emu Bush)  
*Heterodendron oleifolium* (Bullock Bush)  
*Pittosporum phillyreoides* (Native Pittosporum)  
*Myoporum platycarpum* (Sugar Wood)  
*Capparis mitchellii* (Native Orange)  
*Eucarya acuminata* (Native Peach)  
*Eucarya murrayana* (Bitter Quandong)  
*Todea barbata* (King Fern)  
*Cleichenia circinata* (Coral or Birdsnest Fern)  
*Cheiranthra linearis* (Hand Flower)  
*Hovea longifolia* (Hovea)  
Orchids—all species.

You may think that this is a peculiar list and ask: ‘What about the dozens of other beautiful, interesting, unusual and rare plants—Banksias, Baeckneas, *Hibbertia* (Guinea Flowers), Grevilleas, *Tetralochea* (Pink Eye), *Thryptomene*, *Boronia*, *Correa* (Native Fuchsia), *Melaleuca* (Honey Myrtles), *Prostanthera* (Mint Bush), *Phebalium*, *Olearias* (Daisy Bushes) and the many other ferns, native violets and a host of others?’ The only alteration in the last 30 years was made in 1968 when Sturt’s Desert Pea (*Clianthus formosus*), the State’s Emblem, was added to the list!

Officially the matter stands here, but it is essential that action be taken either to increase the list of protected plants or to amend legislation so that protection can be extended to all plants within given areas. An alternative method would be to give protection to all native flora and then issue lists of unprotected species—the method which has been adopted in Fauna Conservation.

### **Future action and methods**

When the white man first came, bush, scrub, forest, swamp and grassland were everywhere. As exploration and land occupation took place, these areas were reduced. Because of the large size of the state, it was considered that there was always more land and plants 'over the hill'. Suddenly it was realized that this was not so and that steps would have to be taken to conserve and protect our beautiful plants to ensure that they will always be seen.

If we are going to protect plants, we must be sure why we do so. The following are some of the reasons:

1. Their beauty, colour, scent or some other attribute
2. Rarity or sporadic occurrence
3. A major constituent of the landscape
4. Scientific interest
5. Important food supplies for birds or animals
6. Economic importance both potential and actual, for example, *Duboisia-Hyocine*.

Plants not protected may be those which have become weeds and are poisonous or otherwise objectionable, but this in itself is no reason why they should be destroyed. In fact, examples should be preserved to ensure the plants are available for study in the future.

How can we best ensure that our native plants will remain? Those interested in gardening can grow many in a garden or even as pot plants or in window boxes, but the emphasis in these cases is on preserving the individual species rather than the flora as a whole. Many of those plants we grow come from other states, yet more than 25 per cent of South Australia's 2,300 different species are attractive flowering trees, shrubs and plants suitable for the garden. This is a useful, but not an important method of protection. Can we improve and make more comprehensive and effective the *Native Plants Protection Act*? At least three ways appear possible:

1. Add further species of native plants to those already proclaimed
2. Give complete protection to all native plants within certain areas
3. Under the *National Parks Act 1966* set aside areas containing all the known native plants.

The main problem in listing individual plant species is to ensure that the man in the street can identify the plants concerned. Thus the mere listing of a plant as protected does not necessarily ensure its protection.

The 1966 *National Parks Act* places a great responsibility on members of the Commission 'to obtain, hold, manage and conserve ... for all times the various natural habitats together with the indigenous flora and fauna'. To fulfil this aim, the Commission is attempting to obtain examples of all known floral and vegetational associations which occur in South Australia. These should then be declared a National Park, for once an area has been dedicated as a National Park, it can only be resumed by the passing of a motion by both Houses of Parliament after the legislation has lain in the Houses for 14 sitting days.

In addition to those in National Parks, all native plants growing along roadsides should be protected and Councils should be urged to ensure that the plants are not destroyed. Curiously, the native plants growing on the fauna sanctuaries, reserves and prohibited places—which are essential for the welfare of the birds and animals protected in them—are themselves not protected. Legislation should be amended to extend the protection to the plants.

And finally about the plants themselves. There are plenty of areas, where plants contribute to the scenery, which will never be National Parks and yet the plants should be given protection. Such protection would have been difficult to implement in the past, but now that the State Planning Department has declared Regional Planning Areas (see map in Figure 1) protection to all plants growing within these should be possible. It will be noticed that the Planning Areas cover the 'settled' and the immediately adjoining areas, which are the principal regions where tourists and visitors go to see our mountains and scenery. Thus it is hoped that, within the near future, legislation will be enacted to ensure protection for all native plants contained within the 11 Planning Areas of the State. You can all help in this matter by speaking to those in authority, asking them to ensure that our native plants will continue to grow and beautify the countryside for all time.

#### **Further reading**

*Native Plants Protection Act 1939*

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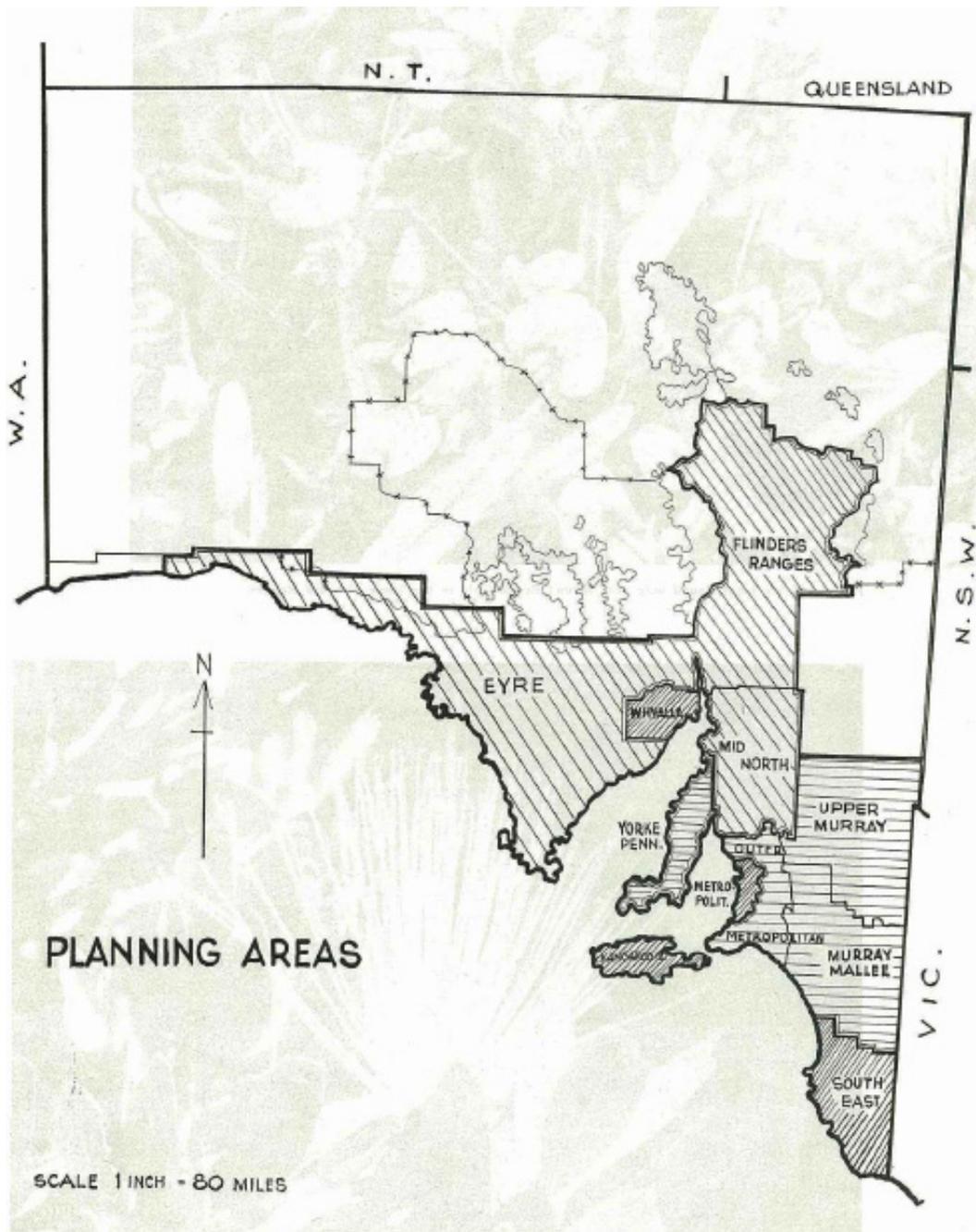
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*Figure 1. State Planning Department map of Regional Planning Areas*