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The Australian Rangeland Society

THE AUSTRALIAN ARID LANDS BOTANIC GARDEN A WINDOW ON THE RANGELANDS

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ABSTRACT

The history of the Australian Arid Lands Botanic Garden at Port Augusta West is detailed. The garden is on a 300 ha site and will feature vegetation of arid Australia. Management of the project is explained. Topics covered include the role of the garden in displaying the flora of the southern arid zone and opportunities for research into the biology, propagation, cultivation and conservation of the flora and their potential use for medicinal and pharmaceutical purposes, food, fodder, fuel, land rehabilitation, cut flowers and stems and amenity plantings.

THE IDEA FOR THE ARID LANDS BOTANIC GARDEN

Following a Churchill Fellowship study tour in 1978 during which I investigated arid zone amenity horticulture in several countries, I developed a proposal to establish an arid zone botanic garden at Port Augusta. The concept of the Australian Arid Lands Botanic Garden (AALBG) is to establish a world class facility where research, education and display of flora from the southern arid zone of Australia is centred. My proposal was accepted by the City of Port Augusta in 1981 with the support of the Botanic Gardens of Adelaide. Public support for the development of the garden grew strongly. After an investigation by a State Government committee support was provided, but without financial assistance. An active 'Friends' group was formed in 1984 which promoted the garden widely, sought funds and lobbied for development.

THE SITE

The garden site covers more than 250 ha at Port Augusta West. It encompasses the best remaining natural vegetation close to the city including 'western myall' woodland and chenopod plain. There is a range of soil types, and impressive views over the headwaters of Spencer Gulf to the Flinders Ranges and north-west to the Tent Hills. The facilities of a regional city are close by, but the adjacent urban area is not dominant and cannot be seen from much of the site. A feature of added interest is the coastal vegetation, including mangroves and samphire, on the shore line of Spencer Gulf, which forms the eastern boundary of the site.

The botanic garden itself is being established on a portion of the site to the east of the Stuart Highway. Existing natural vegetation is being incorporated into new plantings. An impressive visitor reception building was completed in 1995 and now houses interpretive displays, a gift shop, a kiosk and eating area, and toilet and office facilities. This building incorporates energy and water saving features including solar lighting and heating. It is intended that the garden will incorporate and display technology appropriate to arid Australia. Quality interpretive displays for visitors are of particular importance during the garden's early years because many of the plantings will take some years to make a significant impact.

Substantial sections of the site, including locations of significance to Aboriginal people, will remain as natural vegetation. Rubbish has been removed, a vermin and pest plant eradication programme implemented and vermin-proof boundary fencing erected. Disused tracks and disturbed areas are progressively being rehabilitated. Walks with signage interpreting existing vegetation are being developed in some locations such as Flinders Red Cliff, where an interpretive lookout is proposed, and the adjacent coastal vegetation, where a boardwalk into the mangroves will be built.

THE ROLE OF THE BOTANIC GARDEN

The role of the AALBG will develop as funding and staff numbers allow. The vegetation of the southern arid zone of Australia will be featured; that is the WA Goldfields north to Shark Bay; east to include the SA arid zone, south-west Qld and western NSW. Plant displays will include species useful to man, both Aboriginal and European, including bush tucker, medicinal plants, and species used for artefacts, tools, building and for other purposes. Collections of plants of particular relevance to the pastoral industry, and also those useful for ornamental purposes, shade and shelter will be included. Initially a mixed planting of a wide range of species of particular interest is being established in the centre of the garden. Beyond this specific regional plant communities will be represented. There are opportunities for research in many fields, including arid zone ecosystems, vegetation communities, land rehabilitation and species of potential economic importance. Collaborative research opportunities with industry and other organisations will be sought on a continuing basis. Besides demonstrating appropriate technology, water efficient irrigation and landscape techniques will be utilised and displayed. The garden is becoming a significant venue for tourists, and interpretive displays and brochures, along with a system of Friends volunteer garden guides, all help cater for visitors.

Significant links have been developed with industry; for example, Western Mining Corporation (WMC) is a major corporate sponsor and the Electricity Trust of SA has also provided assistance, along with various other organisations. Informal links have been established with similar gardens including Endillloe, established by Brian and Fay Powell near Quorn SA, and the Olive Pink Flora Reserve and the developing Desert Flora and Fauna Park, both at Alice Springs. The Botanic Gardens of Adelaide has provided considerable support and assistance over many years.

FUNDING AND MANAGEMENT

Development of the AALBG has been slow due to a lack of funding, but there has been significant progress in recent years. In the 1980s early site development was funded by Council, the Friends group, and government unemployment relief schemes. Volunteer assistance was also greatly appreciated. WMC funded initial botanical surveys of the site and, subsequently, a detailed master plan, which has been adopted as the basis for future development. More recently substantial State and Federal Government grants, significant Council funding and continued sponsorship by WMC has meant that development has proceeded to the point where the AALBG will be officially opened in September 1996.

In 1988 a Management Advisory Committee was established to seek funding and oversee development. In February 1996 a Board of Management, which reports to the Port Augusta City Council, met for the first time. Membership includes representatives of Council, the Friends, industry (WMC), the State Government (Tourism SA) and the Botanic Gardens of Adelaide. An active planning sub-committee has been appointed. The garden's first permanent worker commenced in 1994, which has greatly advanced site progress. This has been aided considerably by Friends volunteers with occasional help from Greening Australia and trainees undertaking work experience. Obviously more staff are needed for the garden to be developed to its full potential. The Visitor Reception Building is operated by staff of the Wadlata Interpretive Centre in Port Augusta and provides services of a high standard for visitors. It is possible that in the long term the management of the AALBG will be passed to the Botanic Gardens of Adelaide and be operated as one of the fine gardens in their system.

CONCLUSION

The future of the AALBG promises to be exciting as there is enormous scope for development. The SA Government is considering the establishment of an SA Arid and Pastoral Zone Research Centre in conjunction with the AALBG, utilising several hundred hectares of adjoining land. Should this proceed, with some shared resources, such a joint facility would become a major centre for rangeland research and play an important role in increasing the understanding of, and the caring for, the unique heritage we have in the wonderful biodiversity of our rangelands.