



The Friends of The Australian Arid Lands Botanic Garden *Port Augusta Incorporated* Newsletter

February 2011

President's Message

A very happy new year to all Friends and supporters of the Australian Arid Lands Botanic Garden! Those who do not live near Port Augusta rely mainly on this newsletter to maintain contact and hear of Friends activities and developments. It was good in November to welcome Friends and supporters of the AALBG, Ian and Carol Clark from Brisbane to the Garden. If you are coming to or passing through Port Augusta and have time let us know so some local Friends can meet you. It is always a pleasure to welcome Friends from afar. Shirley Mundy and Shirley Moy been very willing workers for the Friends, the AALBG and a number of other community organisations in Port Augusta for many years. It was wonderful to hear that they were nominated for the Port Augusta Citizen of the Year Australia Day Award recently. Congratulations and thanks for all you do for the Garden and your community.

Since our inception in 1984 our membership subscriptions have been maintained at \$8.00 single and \$10.00 family membership. The committee has decided to increase these to \$15 single and \$20.00 family membership and this will be effective

from 1st July this year. Despite the increase our subscriptions will still be considerably less than most similar organisations. A message enclosed with the last newsletter mentioned that the South Australian Government was considering selling off both Mount Lofty and Wittunga Botanic Gardens with land to be subdivided for housing! There was a great deal of correspondence generated on this issue and eventually government released a statement stating that these gardens would not be sold. Since then though, there have been further staff reductions at these gardens and the Adelaide Botanic Garden, which does not auger well for the future. A public committee is being established to closely monitor the SA Government's handling of these three state run botanic gardens. It is interesting to note that the operation of these three major botanic gardens costs less than 1% of the state's environment budget yet it seems that the government does not consider them important enough to maintain the current level of funding which many see as inadequate anyway. (The AALBG is operated and funded by the Port Augusta City Council and is not part of the state run system of botanic gardens in South Australia). Friends are thanked for protesting

against the sale of these gardens as it was the volume of protests from all over Australia which eventually forced the government to respond. We look forward to seeing those who can make it to our next meeting where we will hear about the innovative Seawater Greenhouse Project on the coast near Port Augusta, where sea water is condensed and used for irrigating food crops in a huge greenhouse. This development has quietly gone ahead in less than two years and is now supplying fresh produce locally and further afield. This year we will be planning and refining the program for the Association of Friends of Botanic Gardens conference which we will be hosting with visitors coming from all over Australia in 2012. This will be a great opportunity to showcase the AALBG.

John Zwar, President

Next Meeting

The next meeting of the Friends of The Australian Arid Lands Botanic Garden will be held on the 26th of February the 1pm in the herbarium / meeting room at the Visitors centre AALBG.

Guest speaker will be Mr Reiner Wolterbeek, Project manager Seawater Greenhouse

The Seawater Greenhouse represents a unique solution that enables year-round crop production in some of Australia's hottest and driest regions, using seawater and sunlight. The project is underway near Highway 1 at Winninowie / Port Patterson.

A timely project, considering the shortage of fresh fruit and vegetables due to the floods in Queensland and Victoria. The tomatoes they have grown are being sold here at Port Augusta. A very interesting and informative afternoon so come along and hear for yourself all about this amazing company.

DATES TO PUT IN DIARY

ABC Gardening EXPO 12 - 14th March 2011

Laura Folk Fair 2 - 3rd April 2011

Desert Detective Day at AALBG - April 24th 2011
A day of school holiday activities for young and old

Australian Plants Society Port Augusta Group AGM
2nd March 2011 at Garden Club Hall
Elizabeth Terrace Port Augusta at 7pm



Botanic Gardens Are Not For Sale

Minister for Environment and Conservation Paul Caica today reassured all South Australians the State Government is not selling the Adelaide, Mount Lofty or Wittunga Botanic Gardens. Mr Caica said despite speculation in the media, there are no plans to sell the Botanic Gardens.

"I want to put to rest any concerns that the Government is selling, or even considered selling the Botanic Gardens as part of savings measures in the last State Budget. The Sustainable Budget Commission did not recommend this saving to Government in its final report, and the Government did not consider a sale in delivering the significant cross-government savings task.

"An early working document from the SBC which was leaked to the media, had included an option to sell the Wittunga and Mt Lofty Botanic Gardens, but even this was rejected by the SBC in the preparation of their final report. The Botanic Gardens are a much loved South Australian icon and the State Government is not selling the Adelaide, Mount Lofty or the Wittunga Botanic Gardens. This Government will continue to preserve our Botanic Gardens for the ongoing benefit and enjoyment of our community now and in the future."

Friday, 3 December 2010
www.premier.sa.gov.au

Curator's Report

Well Happy New Year to you all and what a start it has been!

Certainly a not so happy start for many, with the shocking floods of Queensland that are now causing damage in other states and that have wreaked havoc on lives and property for so many. The clean up goes on and will continue for some time and we may never know the real cost. My thoughts also go to several Queensland Botanic Gardens that have suffered significant damage to infrastructure and living collections. Losses will continue to become apparent for some time as plants succumb, unable to cope with such extended inundation.

Here at the AALBG it is all go, our newly located and expanded retail and plant shop at the Visitor Centre is almost complete and visitors will be pleasantly surprised at our now much more spacious foyer area. Our aim is to improve our visitors experience and offer a larger range of uniquely arid related products, locally made wherever possible.

We have continued planting in the Courtyard area in front of the Visitor Centre and now boast a substantial planting of Sturt Desert Peas all flowering beautifully.

We are also planning a couple of plant collecting trips this year so will be able to start beefing up our plant collections with fresh material and hopefully some new species.

We are also gearing up for some great events like the ABC Gardening Expo March 12-14, the Laura Folk Fair April 2-3 and for the very first time a day of school holiday activities (for both big and little kids). This new event is called the Desert Detective Day and will happen on the April 24. Volunteers play such a vital role in the success of these events so if you can spare any time to help please give us a call.

Some of the exciting projects that will be started this year will be the planning of the bush tucker area and redesigning of the Eremophila Garden. Some of the unexciting projects will be a redesign and possible relocation of the Visitor Centre septic systems and some inclusion of additional storage and office space to the Centre.

We continue to have our important band of merry men and women carrying on voluntary work in our nursery each Wednesday, taking tours on week days and occasionally helping out in the Visitor Centre and in the gardens. We also welcome two new part time staff members Bernadette Reichstein and Marie Storey. They will be the cheery faces to greet and help visitors at the Visitor Centre.

This is set to be another busy and progressive year at the AALBG and I look forward to keeping you all informed, check out our website for updates;

www.aalbg.sa.gov.au

'till next time

Michael Anlezark - Curator/Manager
Australian Arid Lands Botanic Garden

Mesembryanthemum crystallinum



Common Ice Plant

Is a prostrate succulent plant that is native to Africa, Western Asia and Europe. The plant's leaves are covered with sparkling wart-like glands, reflected in its common name. Its leaves are edible, as with some other members of the Aizoaceae family.

Source - Wikipedia

It is considered a weed here in SA and has adapted well to our climate. When it dies all the salt in the bladders leach back into the soil and makes it even more salty. You will find it growing profusely after heavy rains along saline and in sandy soils. A very attractive plant when young with parts of the plant red in colour.

Chris Nayda



New shop at AALBG Visitor Centre. Note door on left, access to Garden Centre



Section of Garden Centre

A Biological Survey Of The AALBG (continued next newsletter)

PORT AUGUSTA, SOUTH AUSTRALIA

March 27 - March 31, 2006

By Bernhard Haase

PREFACE

This survey of the Australian Arid Lands Botanic Garden has been conducted to update existing information on vertebrate animals and vascular plants that have been found previously on the site.

The exclusion of stock and the control of rabbits for the past twelve years has resulted in an increase in vegetation density and diversity, this in turn has increased the animal species able to exist on the site, both as permanent residents and seasonal itinerants.

The original lists of plants occurring naturally on site, and lists on mammals, reptiles and birds, have been greatly increased during the last 12 years from observations by garden employees and volunteer plant and bird enthusiasts. The establishment of a botanic garden has introduced many new species of native plants to the area, but there is still a large area of naturally existing and predominately undisturbed vegetation, with its fauna. These are the areas chosen to be surveyed.

ABSTRACT

The Australian Arid Lands Botanic Garden covers an area of approximately 200 ha. It encompasses predominately:

- Low chenopod shrub land plain dominated by *Maireana pyramidata* (Black Bluebush)
- Areas of low sand dunes,
- *Zygochloa paradoxa* (Sandhill Cane Grass) and *Acacia ligulata* (Sandhill Wattle)
- Some low lying clay pan soaks,
- *Atriplex vesicaria* (Bladder Saltbush)
- Open low woodland,
- *Acacia papyrocarpa* (Western Myall),
- A coastal gulf waters tidal fringe,
- *Avicennia marina* (Grey Mangrove) and *Sarcocornia quinqueflora* (Beaded Glasswort)

The areas that have been developed for the botanic garden take up approximately 50 ha, and have introduced other native plant species from the southern Australian arid zone. These plants are artificially irrigated and have probably increased the number of animal species able to exist in the area, especially during drought periods.

Survey methods over the past years have been mainly by observation, either organized searches or occasional sightings. Others are by accidental encounters during other activities whilst working in the garden areas.

THE PHYSICAL ENVIRONMENT

The site comprises of low sand dunes on the southern side which are stabilized by a good covering of plants, predominately:

- *Zygochloa paradoxa* (Sandhill Cane Grass)
- *Acacia ligulata* (Sandhill Wattle)
- *Dodonaea viscosa* ssp. *angustissima* (Narrow Leaved Hop Bush)
- *Maireana pyramidata* (Black Bluebush)

The soil consists of mainly loamy / sand, with a pH of 7. The Stuart highway passes along the southern boundary next to the sand dunes. An area of low, open woodland adjoins the sand hills and consists of mainly:

- *Acacia papyrocarpa* (Western Myall)

Since the site has been fenced off to keep out stock and rabbits, there has been some regeneration of these trees, which is a very encouraging sight. On the western boundary a railway line runs along its entire length. Along this area there are low lying clay pans, dominated by:

- *Atriplex vesicaria* ssp. *variabilis* (Bladder Saltbush)
- *Disphyma crassifolium* ssp. *clavellatum* (Round Leaved Pigface)

The soil here is a clay / loam, with a pH of 8-9. On rare occasions these areas are inundated and become very boggy mud and standing water. On part of the eastern boundary there is a area of coastal gulf inter tidal fringe which is dominated by:

- *Avicennia marina* ssp. *marina* (Grey Mangrove)
- *Sarcocornia quinqueflora* (Beaded Glasswort)

The most abundant area is the low, chenopod, shrub land plains, dominated by:

- *Maireana pyramidata* (Black Bluebush)

The soils here are a calcareous sandy/ loam, pH 8-9. The site pH ranges from 7 (neutral), in the sand hills, to 9 (alkaline), in the lower areas. There are no rock formations or surface strew on the site.

ELEVATION

The elevation of the site ranges from 0m. at the gulf beach, to 25m on the highest sand hills. The survey area lies within the co-ordinates of, Eastings 75710 to 75850, and Northings 640410 to 640550.

CLIMATE

The climate is arid, with a annual rainfall of 250mm. (appendix 5). The summers are hot and dry, with temperatures climbing to above 40°C frequently. The winters are cold and most rainfall occurs during this time. Temperatures can drop to below freezing and severe frosts can occur, but are not common.



Young Bearded Dragon (*Pogona vitticeps*)



Scorpion



Sand Centipede



Striped Skink (*Ctenotus brooksi*)



Smooth Knob-tailed Gecko (*Nephurus levis*)

A Visit to North West Cape WA

In 2010 Ronda and I visited North West Cape for the first time. On the road into Exmouth one of the first plants you will notice is *Acacia gregorii*, a low growing wattle to about 0.5x1.2m. It forms mounds in amongst the Spinifex and is very eye-catching. Another common wattle is *Acacia pyrifolia* or Kanji Bush, an outstanding plant with its grey phyllodes (leaves) and bright yellow flowers. The name *pyrifolia* refers to its pear shaped phyllodes. Aborigines used to drop the green seed pods into burning Spinifex and lightly roast them before eating. In summer a sweet gum which exudes from the stems was also eaten. It was a mild laxative and antiseptic. *Acacia pyrifolia* is widespread in the Pilbara. When young pods begin to form on the plant Aborigines knew that galahs were nesting. By the time the pods were brown the young birds were ready to fly.

Another plant on the road into Exmouth is *Pimelea ammocharis* (Silky Pimelea). This plants contrast greatly with its harsh surroundings with its soft silvery grey leaves and pendulous branches with large flower heads. It is a very dense shrub to about 1.5m.

If you visit North West Cape you must go to Charles Knife Canyon in the Cape Range National Park. It is very spectacular and very rugged.



Osprey

You drive along the top of deep gorges looking down on the rock formations with the sea not far away in the background. A plant that you will spot, if you can take your eyes off the scenery, is *Eremophila forrestii ssp capensis*; this *Eremophila* only grows on the North West Cape. It grows to a height of about 1.5m and has velvety oval shaped leaves covered with golden hairs which contrast with the pink bird attracting flowers.

Also you will see *Hibbertia spicata ssp spicata* standing out from the rocks with its dark green leaves and bright yellow flowers. It grows to about 0.5x1.5m. Also worth a visit is Shot Hole Canyon where you drive along the bottom of the canyon and look up at the very different scenery. There were some unusual coloured Sturt Peas growing in the area when we were there.

After driving to the other side of North West Cape from Exmouth you will see *Brachychiton obtusilobus* the Cape Range Kurrajong, a species restricted to Cape Range. It has large dark green shiny palmate leaves, grows to about 6x5m, has creamy flowers, is very dense and stands out in the area that it is growing in. Coastal hibiscus, *Alyogyne cuneiformis* is also found on this side of the Cape. It grows to about 3x2.5m, has pale lilac flowers and was cultivated as a glasshouse plant in England in the 1870s. *Solanum diversifolium* (Bush Tomato) also is found in this area. It was called Karlumbu or Warurla by the Aborigines who roasted the fruit and ate it or sun dried it and stored it for later.

You might see Osprey perching and nesting on power poles around the Cape. The Western Bower Bird is also found around North West Cape and inland to about the Northern Territory border. If you have a chance to visit this part of Western Australia do so, and remember Ningaloo Reef is also in the area.

Peter Hall
Photos by Peter Hall



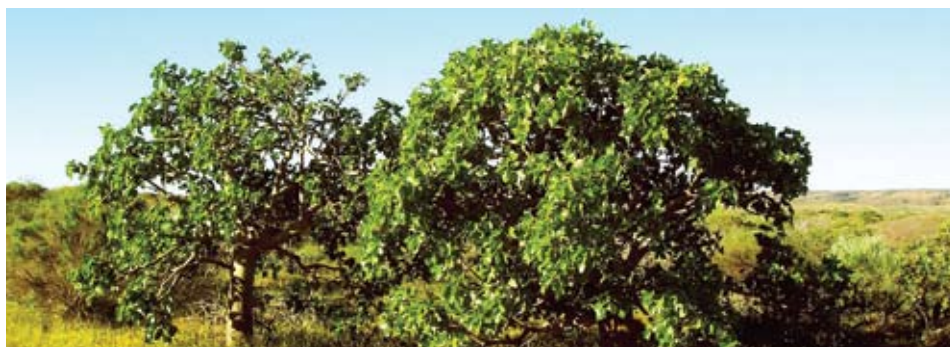
Alyogyne cuneiformis (Coastal Hibiscus)



Acacia pyrifolia (Kanji Bush)



Pimelea ammocharis (Silky Pimelea)



Brachychiton obtusilobus (Cape Range Kurrajong)



Swainsona formosa (Sturt Desert Pea) with unusual colouring

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