



AUSTRALIAN
PLANTS SOCIETY
— Geelong —

Correa Mail

Newsletter No. 319– July 2016

June Meeting - The Canning Stock Route

Graham and Maree Goodes travelled from East Wail, north of Horsham to tell us about their experiences travelling the Canning Stock Route.

The Canning Stock Route is an overland track stretching 1850 km from Halls Creek in the Kimberley south to Wiluna in central Western Australia. As the name suggests, it was originally a stock route to get cattle from the east Kimberley to break a monopoly that west Kimberley cattle men held in the early 20th Century.

The basis of the monopoly was a tick-borne disease called *Babesiosis*, which east Kimberley cattle suffered. Infected cattle were not permitted to be shipped south for fear that the ticks would survive the short sea journey and infect the southern cattle herds. West Kimberley cattle were free of the disease, and so the cattlemen had a monopoly trade to the south. It was thought that the ticks could not survive an overland trip, and so plans for the stock route were laid.



It was first surveyed by the Carnegie Expedition and the Calvert Expedition, both in 1896. Both concluded that it was 'barren and destitute of vegetation' and the route was considered impractical.

In 1906, Alfred Canning, a WA Government surveyor, was contracted to find a route with sufficient feed and daily water for 800 head of cattle. He used and abused local aborigines in his search for water, chaining them, and forcing them to lead him to (sometimes sacred) soaks.

A Royal Commission was conducted into his treatment of the aborigines, but all members were exonerated of the charges, despite the Commissioner condemning the use of chains.

In 1908 he travelled the route again, constructing 48 wells, for a total cost of £22,000, around \$3,000,000 in today's currency.

Droving of small herds of horses began in 1910, with cattle following in 1911. The aborigines had vandalised many of the wells, which were constructed in such a way as make it impossible for them to gain water. Drovers were afraid to use the track, and only eight mobs of cattle made it south in the first 20 years.

In 1929 William Snell was commissioned to rebuild the wells to make them accessible to the local aborigines, but he stopped work after only 35 wells had been modified. Canning himself completed the work in 1931.



Well 15 – Canning Stock Route

President: Matt Baars - baars16@bigpond.com Secretary: Bruce McGinness – bruce.mcginness@optusnet.com.au
Treasurer: Frank Scheelings – ftscheelings@gmail.com Editor: Ade Foster - adefoster@internode.on.net
Australian Plants Society – Geelong P.O. Box 2012, Geelong. 3220. Website: www.apsgeelong.org

Surprisingly, despite the improvements, only 20 more mobs used the route until droving ceased in 1959.

Today it is a challenging, but fascinating 4WD track, featuring a host of plant and bird species as it changes from sandy desert to sub-tropical grassland. It is essential to plan well, and be prepared to carry sufficient food, water and spares for the journey. Fuel can be arranged through the Capricorn Roadhouse, now Outback Fuel Distributors, to be left at the fuel dump at Well 23.

Graham and Maree started their journey from Hall's Creek, travelling south along the CSR, the theory being that this would have the sun behind them, making it easier to see interesting plants as they drove.

Their presentation showed us many interesting and unusual plants, many of the dry country birds and reptiles, and some fascinating landscapes that were encountered on their 31 day trip.

have been close to vertical, as the crater is almost perfectly symmetrical. A depression in the base holds a little more water than the surrounding area and was an oasis of *Ptilopus nobilis* when Graham and Maree were there.



Wolfe Creek Crater



***Bergia henshallii* – Photo courtesy Mark Marathon.**

Bergia henshallii is a low-growing, spreading plant which was commonly encountered, despite being listed as endangered in WA and NT.

There were many Acacias along the track, including *A. stipuligera*, *A. monticola*, *A. daviesioides*, *A. coriacea*, *A. inaequilatrea* and *A. rhodophloia*

One of the more common trees along the route is *Allocasuarina decaisneana*, the Desert Oak. Many of the Eucalypts, Acacias, Grevilleas and other once common trees are heavily browsed by feral camels, and young plants have little or no chance of survival. However, the Desert Oak seems to be unpalatable to the camels and it is flourishing.

Wolfe Creek crater has been made famous by the horror movie, but it is a very interesting feature of the CSR. The meteor impact which caused the crater must

Graham and Maree are also involved with scientific surveys through the Desert Discovery Project. Teams survey plant, mammal, bird, reptile and invertebrate populations. They have sent many hundreds of samples to the WA Herbarium and have been actively involved in Bilby surveys, working to create suitable habitat in the hope of increasing numbers of this beautiful little animal.

2016 ANNUAL GENERAL MEETING.

Our Annual General Meeting will be held on 19th July at the Ballroom, Hamlyn Park. The meeting will commence at 7.30 pm with our speaker, followed by the AGM. All Committee positions will be declared vacant, and nominations will be accepted from the floor.

Most of the current committee members have indicated their intention to nominate again, but we need 'new blood' so that the Committee does not become fixed in its thinking. Please give serious thought to nominating for a position.

With the AGM comes the start of the new year and your fees are due. The committee has decided to leave the fees unchanged for the second year in a row. They are remarkably low, just sufficient to cover our costs. A new Membership Form is attached. Please fill it in and return it as soon as possible.

ON THE TABLE

with Bruce McGinness.

Bruce took the floor again for the plant table discussion, and dealt with the heckling in his usual calm, no-nonsense manner. It was a very colourful table.

Among the more interesting specimens was *Hakea clavata*, a succulent member of the genus, from coastal Western Australia near Esperance. ‘Clavata’ refers to the thickened, club like leaves. It is a spreading shrub, covering 2.5m with masses of reddish pink and white spherical flowers. Other Hakeas included *H. cristata*, *h. multilineata*, *H. orthorrhyncha*, *H. francissiana*, and *H. ‘Burrendong Beauty’*.



***Hakea clavata* – Coastal Hakea**

Our speaker, Maree, whose speciality is Eremophilas helped us solve an ID riddle which has plagued the group for some time. Matt has an Eremophila which he has always believed was *E. maculata*, while another member (un-named to protect his identity) claimed it was *E. brevifolia*. Maree assured the group that the plant was in fact *E. maculata* ssp. *brevifolia*. So, in essence, both were right 😊 Other eremophilas on the table were *E. maculata* – a deep reddish purple form, *E. mackinlayi*, *E. drummondii*, and a hybrid *E. racemosa* x *E. maculata*, known as ‘Fairy Floss’.

Banksias featured again, and among them was *Banksia candolleana*, the Propeller Banksia. It is a low spreading shrub, 1m x 2.5 m from the sand plain country, north of Perth, WA. It has small, deep gold inflorescences. The common name refers to the long serrated leaves which spread radially, reminiscent of the blades of a propeller. Others in the genus included ‘High Noon’ a cultivar of *B. praemorsa*, *B. spinulosa*, *B. ashbeyi*, *B. menziesii*, *B. praemorsa* ‘Moonlight’ and two colour forms of *B. ericifolia* – one deep gold, and one red/orange.



***Banksia candolleana* – Propeller banksia**

There were many hybrid Grevilleas, but among the true species was *Grevillea tetragonoloba*, another Western Australian species, which occurs between Esperance and Albany in sandy soils. Depending on its location, it may be an erect shrub to 2.5m or a low spreading shrub. It has deep red toothbrush flowers, and sharply pointed leaves. The other true species were *G. paradoxa*, *G. trueriana*, *G. nivea*, *G. bronwenae*, *G. tenuiloba* and two colour forms of *G. dielsiana*.

There was a specimen of *Eucalyptus albopurpurea*, formerly *E. lansdowneana* subsp. *albopurpurea*. Known as the Coffin Bay Mallee, it is endemic to South Australia, found only on the southern tip of the Eyre Peninsula and on Kangaroo Island, on coastal sands. Flowers vary in colour from white to pale pink and shades of mauve. Our specimen had quite deep mauve/purple flowers. Another interesting specimen was *Eucalyptus platypus* var. *platypus*, also known as the moort or round-leaved moort. It is a small tree which occurs in an area between Albany and Esperance in Western Australia. This one was the rare red-flowered form – the usual colour being a greenish yellow, although white and cream coloured flowers are not unknown.



***Eucalyptus albopurpurea* – Photo Russel Dahms**

PLANT OF THE MONTH - Grevillea Peaches 'n' Cream

Bill Clarke won the door prize, and selected Grevillea Peaches'n' Cream as the Plant of the Month ...

Grevillea 'Peaches and Cream' is a spectacular and very popular grevillea cultivar which has become widely available in Australia in recent years. It is a shrub that grows to 1.5 by 1.5 metres has bright green deeply divided leaves, which tend to take on a bronze sheen in winter. The large flowers, 15 cm x 9 cm, are a soft yellow when they first open, but take on various shades of pink and orange as they age.

Peaches 'n' Cream is a hybrid of a white-flowered form of *Grevillea banksii*, from Queensland, and *G. bipinnatifida* from Western Australia. It was selected from a plant which appeared in a garden in Logan Village, a suburb to the south of Brisbane, in 1997. It was propagated by Queensland horticulturists and SGAP members Dennis Cox and Janice Glazebrook, and was finally registered in 2006. It is of the same parentage as 'Superb' and 'Robyn Gordon' and like these more common varieties it is a prolific and long-flowering plant.



Its smaller size makes it an ideal plant in a small garden, and it is bird attracting. My specimens are constantly visited by New Holland Honeyeaters, and Red Wattlebirds. It tolerant of a wide range of conditions, including humidity, low rainfall and frost down to -5 °C

I planted two on my nature-strip about five years ago. There had been a broken water main, and Barwon Water, after digging a hole about 1.5 m² x 2m deep to repair the mains, kindly back-filled with a lovely dark, sandy loam. The grevillea loved it! The one in planted over the burst main has flourished, bearing flowers all year, but most prolific in autumn and spring. The other is slightly smaller, and bears

fewer flowers, but is responding well to some Osmocote and a light pruning.



Grevilleas in this complex respond well to pruning, and should be cut back just behind the flower-head immediately after flowering. They can be cut back quite hard twice a year to encourage a denser foliage and more compact growth.

FUTURE MEETINGS

July 19th - Attila Kapitany and the AGM

Our July meeting, which is the Annual General Meeting, will take a slightly different tack this year. Normally we don't have a speaker at the AGM but we had the chance to get Attila to Geelong, and we couldn't turn it down. He will be talking to us about 'Road-side Surprises' – the little gems still found on roadside reserves.

August 16th -Members' Night and Photo Competition.

Members' night is an opportunity for members - particularly the ladies – to talk to us for a few minutes about anything that tickles their fancy. We will also have the photo competition held over from July.

September 20th – Bill Atchinson – Acacias

Bill will be familiar to most of you as the bookseller at our plant sale every April. Bill has a wide knowledge of Acacias, and will share some of that knowledge with us in September.

October 18th - 50th Birthday Celebrations.

October 18th is exactly 50 years since our first meeting, and we will be celebrating with a special evening. More details to follow.

November 15th – David Radbourn.

David is a renowned Landscape Architect who has been responsible for many gardens in and around Anglesea. We will follow his talk with an excursion to visit several of those gardens on Sunday 19th November.

RICE - *Oryza Sativa*

by Roger Wileman

The vast majority of us know that rice is a major part of our food source and the main food supply for 75% of the world's population. Rice was first domesticated near the Pearl River area of China at least eight thousand years ago and has been cultivated continuously since. It is now grown in every country on earth and has at least 40 thousand varieties, many of these being developed for specific locations and conditions.



Typical rice seed heads

Rice is a cereal and related to other grass plants such as wheat and barley. It is an annual and like wheat and barley completes its entire cycle from planting to harvesting within a year. Rice is a semi-aquatic, which means it grows partly on land and partly submerged. It is generally divided into two 'types' ... *Indica* for tropical climates like South East Asia and *Japonica* for more temperate climates like Australia. In most tropical climates rice is grown in man-made ponds known as paddies. This method produces a higher yield in a smaller area, but also requires much more manual labour to produce. One of the up sides of paddies is that the water stops the development of invasive weeds, but a down side is that the still water encourages the growth of *Anopholes* mosquitos which carry malaria. Rice does not have to be planted this way, but can be planted like wheat and barley in much larger paddocks, sown and harvested by machinery. But, this method has a much lower less yield than the paddy system.

The paddy system is fine for any country that has a high reliable rain fall, but here in Australia we live on the driest continent on earth and our rice production depends on excess water that can only be supplied in years of abundant rain fall, unfortunately, not consistent from year to year.

Australian rice growers are the most efficient in the world. They use 50% less water than any other country with the highest yield in the world, at one time producing 1,000,000 tons per year.

You are probably starting to think that rice, *Oryza sativa* is not a native plant, so why write an article about it? Australia does have native species of rice that have researchers worldwide very excited about its potential to be the super food of the future. One species is native to the alpine area. But, the species that is creating the most interest is native to the northern part of Australia and has been used by the aboriginal people for thousands of years. The thing that makes this native rice species so important and special is that all other native rice species worldwide have been cross pollinated with domesticated species and the original gene pool has been severely contaminated. The Australian native rice have been isolated from any others mainly due to Australia's isolation from the rest of the world.



Australian rice crop, Jerilderie. Photo Russell Ford

It requires far less water to produce a crop, so has the potential to be cultivated in more marginal areas where many other rice strains struggle to produce worthwhile yields due to lack of reliable water.

This new isolated gene pool also has the potential to be cross pollinated with existing varieties to breed new improved, higher yielding crops, with less water required per crop, which relates to broad acre planting, similar to wheat and barley.

Native rice seed is becoming available but at \$120 per kilo, there is still a long way to go.



Native rice grains – Photo Caddie Brain