

SOCIETY FOR GROWING AUSTRALIAN PLANTS (QLD REGION) INC
CAIRNS BRANCH
PO BOX 199E
EARLVILLE QLD 4870

NEWSLETTER

AUGUST 1999

CLUB OFFICE BEARERS

	Chairperson Mary Gandini 40542190		
Vice Chairperson	Tony Lawless 40391115	Secretary	Rob Jago 40552266
Treasurer	Dusty Bennett 40541448	Librarian	Val Clark 40554817
Newsletter Editor	Lorna Lavaring 0417606243	Display Co-ord	Don Lawie 40671577
Guest Speaker	Tony Roberts 40551292	Publicist	Tony Lawless 40391115
	Tuckerologist - 'by appointment'		

NEXT MEETING

7.30pm, 17th August 1999 - Flecker Botanic Gardens- Collins Avenue, Cairns.

Don't forget - bring a native for the plant raffle.

Double Don't forget - to record what is in flower and fruiting in the district in the 'what is in flower' book at the meeting.

Triple Don't forget - clean out those magazine racks and bookcases for the book auction, all proceeds to the club.

CHAIRPERSON'S REPORT

July was a busy month with the ASGAP Post conference Tour and the Cairns Show. We entertained 47 southerners to a BBQ lunch at Rob and Bianca Jago's then put them on Skyrail to Kuranda. All were very impressed by our cable way above the rainforest and the board walks in the forest. Pity the falls were reduced to a trickle after the magnificent display in the wet season. From Kuranda the visitors went on to Genazzano Center at Tinaroo where they stayed for the duration, going for trips into the rainforest to see ferns and orchids, into the dry country at Watsonville and to the Radke and Sankonwsky gardens. We entertained them with a Russell River cruise, the highlight of which was the large crocodile basking on the bank, a walk around the Boulders track and afternoon tea in the Gandini garden. Daikyo gave them a tour of the Cape York Gully and a pleasant lunch. We have since received a letter of thanks saying how much all they enjoyed the trip.

The Show Display nearly wasn't on! A severe lack of flowers caused a creative last minute change of design and we are grateful to the Botanic Gardens for lending the big and small plants to make a great forest display that was certainly different to previous efforts. Thanks to all members, who participated, but we would really like some input from some members. I have just found out that one of the neighbouring wine - makers sampled a Davidsonia Plum without knowing what it was. He phoned while I was away and asked what it was and if it would make good wine. Needless to say he was warned of his foolish action.

Next event is the Friends of the Botanic Gardens festival on the 5th of September. We will be having a stall with plant sales and display of flowers so get your green fingers out, tidy up the pots and get a few ready to sell. Growing season should be about to happen if the cold winds stay away. We will need helpers to man the stall. As I repeat each year this is a good way to improve your knowledge and get to talk to some plant enthusiasts. ask Don if he enjoys it.

MEETING NEWS : JULY

No monthly meeting was held due to the Cairns Show Display.

WHAT'S IN FLOWER?

Acacia amblygona	Acacia podalyriifolia - Old Silver Wattle
Baeckea sp. "Mt Tozer"	Bombax ceiba var. - Kapok Tree
Dendrobium canaliculatum - Tea Tree Orchid	Dendrobium teretifolium
Eucalyptus citriodora - Lemon-scented Gum	Eugenia reinwardtiana - Beach Cherry
Flindersia bourjotiana - Old Silver Ash	Gardenia scabrella - Star Flower
Grevillea sp. "Honey Gem"	Melaleuca linarifolia - Narrow Leaf Paperbark
Myristica insipida - Native Nutmeg	Phaleria clerodendron Scented Daphne
Schefflera actinophylla - Umbrella Tree	Syzygium wilsonii - Powder puff Lilly pillly

ITEM: PINK TRUMPET VINE:

Keep an eye out for the beautiful flowers of the Tecomanthe hillii -Pink Trumpet Vine, which sprouts in showy bunches from the woody stems in late winter. Also known as the Fraser Island Climber, this vine may twine around quite small trees in exposed sites, its flowers noticeable just a metre or two above the ground. It is an adaptable plant, found at shrub height among exposed rocks, in melaleuca swamps and in quite rich rainforest. It is also an ideal and easily controlled garden vine which winds itself decoratively around balconies and pergolas.
Source: QDEH

"PRIMITIVE PLANTS", LIVING LINKS WITH THE PAST.

Peter Shanahan, the Interpretive Officer at the Flecker Botanic Gardens, co-ordinated a display at the Tropical Gardens Show May 1999. A series of diagrams, information signs, text boards, living examples of the plants and fossils guided the public through time to the "Primitive Plants". A series of articles based upon the display are reproduced featuring primitive plants and their place in the evolution of modern plants. Emphasis will be placed upon those primitive plants found in the Wet tropics of Australia with the Wollemi pine being used as an example of a recently discovered primitive plant. This month.

The Evolution of Modern plants

Primitive Plants An Introduction. During the evolutionary history of the earth plants moved from the seas onto the land and thus began the development of all the species that exist today. Apart from the algae and the fungi the first true land plants appeared in the early Devonian period; these were the Brvophyta or Bryophytes (Hornworts, Mosses and Liverworts).

The next group of plants to appear were the Tracheophyta or vascular plants, so called because of the presence of vascular tissue which consists of the water carrying xylem and phloem that transports organic materials such as carbohydrates.

These are divided into two separate groups (a) the lower vascular plants and (b) the higher vascular plants. (Lower vascular plants reproduce by spreading spores).

The Psilophyta or psilopsids are mostly represented today as tropical epiphytes but are well represented in the fossil record. These are true vascular plants, but they lack both leaves and roots. The part of the stem that is underground functions as a root while the above ground part functions as a photosynthetic organ. modern living forms of these are found mostly as tropical epiphytes. (Psilotum nudum (Skeleton Fork Fern) and Psilotum compalnatum (Flat Fork Fern) are two living representatives of these found in North Queensland.)

The Lycophyta or lycopods are a group of plants whose fossil record extends back to the early Devonian period. They developed a large number of species during the time of the Carboniferous coal-swamp forests and ranged from small plants to large treelike species. They flourished until the great swamps decreased in the Permian period and in some cases developed into selaginella like trees 45 metres tall and 1.8 metres in diameter. Today there are only five genera of herbaceous lycopods in existence. These are worldwide in distribution and are commonly found on the floors of forests. (Tassel Ferns and The Pine Tree fern are two members of this group found in the Wet tropics of Queensland.)

The Sphenophyta or sphenopsids flourished in the cool forests of the Carboniferous period and ranged in size from very small plants to good sized trees. They declined during the Permian period until today there is only one genus "Equisetum" which contains some 25 species that are found worldwide, except for a few isolated islands and Australia. (These are commonly called "Horsetails" or "Scouring rushes".)

The Pterophyta (The ferns) appeared in the late Devonian period and early Permian period from approximately 360 million years ago. They were followed by the seed ferns (Pteridosperms) which flourished in the period from the Carboniferous period to the Cretaceous period. All known species are fossils only.

The Gymnosperms or naked seed plants are composed of four groups: Cycadophyta, Ginkgophyta, Gnetophyta and the Conifergophyta.

The Cycadophyta (Cycads) reached their peak of development and number of species in the Jurassic period but since then they have steadily declined. Today there are only some 270 species found worldwide. These resemble palms and tree ferns, most being small to moderate in height, although some can reach heights of 18 metres. Their leaves are tough and leathery, sometimes with sharp edges.

The Ginkgophyta are represented by one living species only, the Ginkgo or Maiden Hair Tree, Ginkgo biloba. Native to South East China these attractive trees are planted in many gardens and streetscapes around the world. Despite their vast physical differences Ginkgos and Cycads share the same unique reproductive cycle which includes fertilisation by flagellated swimming sperm.

The Gnetophyta are a small but highly unusual group of plants with three divergent genera. Ephedra is a shrub of desert regions found in both the Northern and Southern hemispheres; Gnetum is a tropical shrub and Welwitschia is a strange desert plant from western South Africa.

The Coniferophyta (Conifers) extend from the late Carboniferous period to the present and are well known by most people. They include all the modern Pines, Firs, Spruces, Hemlocks, Larches, Junipers, Douglas firs, Yews, Redwoods and the Araucaria. Most have needle or scale like leaves, although a few species in Australia and New Zealand have broad leaves. Most have cones bearing the seeds, the junipers have fleshy scales and the yews have a berry like portion at the base of the seed.

Next month we continue with Evolution! Confusion Leads to understanding.

PLANT OF THE MONTH: EUCALYPTUS CITRIDORA

Eucalyptus citriodora the Lemon - scented Gum is a very large tree, up to 40 or 50m high, with a straight trunk and sparse canopy. Distribution: Eastern Qld, in two areas, from west of Atherton Tablelands to White Mountains, and Mackay to Marybough. Leaves: Narrow lance - shaped, strongly lemon - scented, lateral veins faint, at 35° - 50°, stalk fattened, 8 - 16 cm x .5 - 2 cm. Bark: White, powdery, sometimes pinkish or blue - grey. Flowers: White, about 2cm diameter, borne in clusters of three, several clusters forming panicles. Flowering period: June to August. Fruit: Capsules, egg shaped or urn shaped, often warty, 7- 15mm long, 7- 11mm wide, valves deeply enclosed. Cultivation: propagate from seed. The tree can suffer from *Eucalyptus* Shoot Blight, a fungus disease which attacks the new growth. Buyer beware, there is a strain available on the Tablelands that appears to be resistant. Will attract nectar and seed feeding native birds.

Notes: A vast growing tree which is considered far too large for smaller suburban gardens, but is a very attractive specimen for larger areas. The leaves provide only light shade, so it does not inhibit the growth of other plants. The gum can, with suitable pruning, be kept shorter and more leafy. Needs good drainage but will grow in a wide range of soils. Warning the branches can become quite brittle which may snap off without warning, particularly in windy weather. The timber is widely used for bridge building, construction, tool handles, landslip and erosion control, street tree planting, and a source of nectar for honey. Citronella oil is distilled from the leaves for perfumes and menthol. The leaf oil contains 65-85% of citronella, the richest source of that chemical in the world. Citronella is in demand for production of menthol and the rose-scented citronella used in perfumery. However, Australia-produced oil cannot compete on the world market with that produced from the same species in Brazilian plantations, where ten million trees are cultivated to produce about 140 tones of oil per annum. The pleasant lemon scent of the leaves makes this species a suitable one for perfuming the linen cupboard; for that purpose leaves should be dried and enclosed in a small cloth sachet. During the last century they were regarded as a good repellent for cockroaches and silverfish. Probably it will be found necessary to rub the leaves together in the sachet from time to time to release the scent. *Eucalyptus* tobacco was promoted earlier this century, a blend of dried leaves was used to make what was described as 'a quite smokable cigarette tobacco with a soft, bush fragrance flavour'. The cigarettes were market with the advertising slogan 'Take a whiff of the gum forests into your home'. The *E. citriodora*, *E. dives*, and *E. cinerea*, were blended to give a lemon, peppermint and stringybark, typical eucalyptus scent, mixture sounds very pleasant, at least before it is smoked, when perhaps it might, 'take a whiff of the bushfire into your home'.

Fact: When fresh, 120 seed to each 'fruit' and 104 000 seed to pound (weight).

Source : A.B & J.W. Cribb. Wild Medicine in Australia, Collins 1981
A.B & J.W. Cribb. Useful Wild Plants, Collins 1982
I. Holliday. A Field Guide to Australian Trees Hamlyn 1969
K. Townsend. Across The Top, SGAP 1994

ITEM: BOSISTOA BRASSII

Scattered about the ground within the Mossman Gorge are narrow white petals, each about four centimeters long. The structures are in fact cast-off guards for leaves of the *Bosistoa brassii*. For eleven months of the year these leaf guards are inconspicuous covers on small green buds. But in winter the small green buds swell and elongate in a very short space of time. When the guards are thrown off, the ends of each twig is adorned with a new pair of handsome leaves, between which nestles another set of buds ready for action twelve months hence. Source: QDEH

FORESTRY NOTES: HAZARDS OF CHAINSAW OPERATIONS

There is a number of home gardeners who have access to a chainsaw, either one tucked away in the shed or the borrowing of a mates for the weekend. A chainsaw is an excellent tool in aiding clean up of an area or pruning a large tree. Handy as they are, there are a number of dangers associated with the use of a chainsaw.

1. The chain runs at up to 100 km/hour with an average of 600 teeth passing a given point in one second.
2. The saw swings downwards towards the body during cutting.
3. The chain continues to rotate and the operator touches the blade.
4. Push back throws the saw back towards the operator.
5. Pull in draws the operator towards the saw.
6. Malfunction of the saw such as a broken chain.
7. Loss of control of the saw.
8. Fall while using or carrying the chainsaw.
9. The operator being struck by a falling object.
10. A log or branch moving or rolling after being cut.

Other Causes: Operators being bitten by wasps, snakes, etc.
Contact with sharp chain, hot exhaust, etc.
Trips and falls
Manual handling
Noise
Fumes and Dust
Vibration

The Most Serious Hazard: **Kick Back** It is caused when the upper section of the guide bar contacts an object. This contact causes a reactionary force which forces the chainsaw rearward and upward and may be uncontrollable.

*Courses in Chainsaw Operations Both Level One and Two are available through TAFE - Mareeba Campus on 40928800 *training courses builds competent operators**

Following on from where we left off last month at Edmonton.

Cryptolepis grayi This woody liane is listed as rare, it occurs in rainforest on the lower slopes of Mt. Isley.

Rockinghamia brevipes This small understory tree is common on the higher slopes of Mt. Isley

The only feed back I have had on this series of articles is a request for additional information on some of the species mentioned. Rather than attempt to describe each species in detail, I will at some future stage, list the reference to be consulted in regard to each species mentioned. The following is from my data base on the Flora of the Cairns Region. Please let me know if any additional information is required.

Cryptolepis grayi P.I. Forst.

Ref. Fl. Aust. 28 : 205 -206 (1996) P. I. Forster.

Austrobaileya 3 : 273 - 289 (1990) P.I. Forster.

Austrobaileya 4 : 67 - 73 (1993) P.I. Forster.

Conservation status:- Rare

A woody liane, poorly known from within the study area, very uncommon in rainforest and along rainforest margins.

Mount Isley west of Edmonton, R.L. Jago 5334

Near Goldsborough Valley State Forest Park R.L. Jago & P.I. Forster, 5320

State Forest Reserve 310, Goldfield Logging Area, L.W. Jessup, G.T. M. 1693.

Whitfield No species listed as rare are known to occur in this area, this is more a lack of knowledge than any thing else. The area of Mt. Whitfield included in this suburb undoubtedly contains several just waiting to be recorded.

Brinsmead

Amomum dallachyi*, *Archidendron lucy*, *Pseuduvaria mulgraveana* & *Xanthostemum whitei all of which are listed as rare. All four species occur in the rainforest around the base of Mt. Whitfield.

Kamerunga

The area around the Cairns Rainforest Estate is particularly rich in plant species listed as rare. The following species are known to occur.

Annonaceae *Pseuduvaria mulgraveana* var. *glabrescens* this shrub is listed as rare.

Apocynaceae *Parsonsia lenticellata* This vine is pending listing as rare.

Araceae *Typhonium wilbertii* Probably a rare species but very poorly known i.e., only one specimen held at the Queensland Herbarium

Asclepiadaceae *Marsdenia longipedicellata* This vine is pending listing

Marsdenia rare also pending listing

Heterostemma acuminatum Listed as rare

Lycopodiaceae *Huperzia phlegmaria* Listed as rare.

Mimosaceae *Archidendron lucyi* This small tree is listed as rare.

Melastomataceae *Medinilla ballsheadleyi* This vine is listed as rare.

Rhamnaceae *Gouania australiana* This vine is listed as rare.

Zingiberaceae *Amomum dallachyi* This ginger is listed as rare.

The type specimen for *Marsdenia araujacea* was collected at Kamerunga in 1893 by E. Cowley. This vine has not been seen since. It grows or grew in rainforest as it is now listed as presumed extinct. I personally believe that no clearing of rainforest any where in the Cairns area should be undertaken with out at least some sort of search for this vine as there has been very little botanical collecting in the Cairns area since Cowley's time.

Ref.

Heterostemma acuminatum Decne.

Ref. Fl. Aust. 28 : 278 - 280 (1996) P.I. Forster

Aust. Syst. Bot. 5 : 74 (1992) P.I. Forster

Conservation status:- Rare

A herbaceous liane of rainforests and there margins. Known only from the Kamerunga, Stoney Creek area within the study area. This area has in recent times been subject to housing development.

Kamerunga E. Cowley 4 (1891)

Marsdenia araujacea F. Muell.

Ref. Fl. Aust. 28 : 258 (1996) P.I. Forster

Aust. Syst. Bot. 8 : 732 - 734 (1995) P.I. Forster

Conservation status:- Presumed extinct

A liane, reportedly occuring in rainforest, not seen since 1893 when collected by E. Cowley at Kamerunga, Barron River. This area has been subjected to extensive clearing for agriculture and in recent times for housing developments.

Marsdenia longipedicellata P.I. Forst.

Ref. Fl. Aust. 28 : 251 (1996) P.I. Forster

Aust. Syst. Bot. 8 : 814 (1995) P.I. Forster

Conservation status:- No legal protection but regarded as rare with a suggested code of 2R (c.f. Briggs & Leigh 1988)

A woody vine, known only from the Cairns region where it occurs in notophyll rainforest on soils derived from a metamorphic substrate at Stoney Creek and on soils derived from a basalt substrate at Goldsborough Valley. The Stoney Creek population is at risk due to recent housing development in this area.

Stoney Creek R.L. Jago 812 (1992), Goldsborough Road P.I. Forster 13089 + Bean (1993)

Marsdenia rara P.I. Forst.

Ref. Fl. Aust. 28 : 265 (1996) P.I. Forster

Aust. Syst. Bot. 8 : 782 (1995) P.I. Forster

Conservation status:- No legal protection but regarded as rare with a suggested code of 1V (c.f. Briggs & Leigh 1988)

A wiry vine known only from the Cairns region where it occurs as an understory twiner in open eucalyptus forest communities on shallow soils derived from a granite substrate, usually with *Eucalyptus crebra* & *Eucalyptus uvida*. Two small populations are represented by herbarium voucher specimens. Sterile specimens which may belong to this species have been observed on Mount Lumley Hill, Mt. Whitfield Conservation Park, Smith's Track, Barron Gorge National Park & in the hills behind Ellis Beach.

Nisbet Range C. Lyons 149 (1993)

Bessie Point R.L. Jago 795 (1992)

Massie Creek south of Gordonvale R.L. Jago & R. Jensen 3801 (1996)

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CALENDER OF UP AND COMING EVENTS

Tuesdays &
Sundays

Mt Whitfield Range - contact Tony Roberts on 40551292

21 - 22 Aug 99

Australia's Open Garden Scheme, El Arish Botanic Gardens, Shell Pocket Rd, El Arish. 10 am - 4.30pm cost \$4 .

28 - 29 Aug 99

Australia's Open Garden Scheme, Harvey Creek Exotics, Lot 1 Munro Rd, Bellenden Ker. 10 am - 4.30pm cost \$4 .

Australia's Open Garden Scheme, Roth Garden Bruce Hwy, Bellenden Ker. 10 - 4.30pm cost \$4 .

11 - 12 Sept 99

Australia's Open Garden Scheme, Whippoorwill, Lot 11 Jarawee St, Kuranda. 10 - 4.30pm cost \$4.

5 Sept 99

SGAP Plant Stall at the Botanic Gardens Festival -so get propagating -

Any articles, submissions, stories or classifieds for the trading post can be left at the Flecker Botanical Gardens Office on Collins Avenue. Please enclose in an envelope and marked clearly "attention A.Lavaring - SGAP", with your contact details if any items requires clarification.

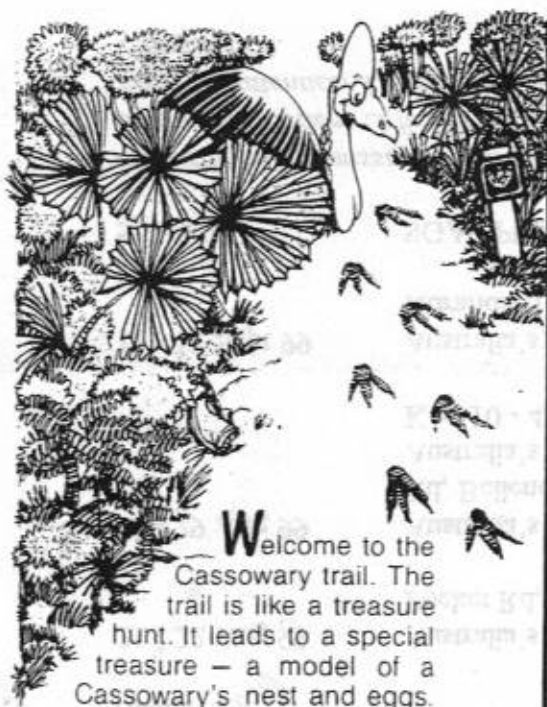


If you would like to know more about Cassowaries you can visit the Cassowary Information Office in Mission Beach.

- Cassowary Care**
- If you meet a real Cassowary in the bush you should
 - stand very still
 - not chase it
 - not feed it
 - stand behind a tree if it appears aggressive



Cassowaries for Kids



Welcome to the Cassowary trail. The trail is like a treasure hunt. It leads to a special treasure — a model of a Cassowary's nest and eggs.

To help find the nest there are Cassowary footprints along the trail. Small signs will help you to find these.

Follow the footprints to the nest.

Cassowary Signs

Nests & Eggs

Cassowaries hide their nests deep in the forest where you will not see them.

The Cassowary cannot fly so it makes a nest on the ground. The mother lays four green eggs. The father sits on the eggs and raises the Cassowary chicks.

If you do see a real Cassowary nest do not go near. The male Cassowary can be very protective.

We hope you find our model nest. Good hunting!



Footprints

Look at the size of a Cassowary's footprints. The prints on the track are lifesize.

How many toes does a Cassowary have? The toes have sharp claws for scratching and defence.



Dung

Cassowary dung piles are very obvious. Look for piles of fruit and seeds along the track.

Can you tell what the Cassowary has been eating?



Cassowaries change colour as they grow. Chicks have black and cream striped bodies. They look like the leaves on the forest floor. At 6 months they lose their stripes and have dull brown feathers until they are 3 years old.

Adult Cassowaries have glossy black feathers and a very colourful head. The helmet and eyes are brown. The face, head and neck are blue. A Cassowary's wattles are red. Can you colour the Cassowary on the front cover?