

Society for Growing Australian Plants (Queensland Region) Inc.

Cairns Branch PO Box 199 Earlville Qld 4870

Newsletter No. 67 MAY 2007

Society Office Bearers

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Membership Subscriptions- Qld Region- Renewal \$35.00, New Members \$40, each additional member of household \$1.00

Cairns Branch Fees -\$10.00 Full Year

To access our Library for loan of books, please contact David Warmington

Dates to Remember

Cairns Branch Meetings and Excursion - third Saturday of each month.

19 May Dave & Mary Gandini's garden. 3 Moowooga St, Earlville. 10 a.m.



Directions: Near Stockland Earlville Shopping Centre, turn up Balaclava Road. At the top of Balaclava Road, turn left into Bauhinia St, cross a bridge, then left into Croucher St, and right into Moowooga. At the end of Moowooga there's a steep concrete driveway – continue up here, and take the right fork. There's heaps of parking. You're welcome to bring cane knives and chainsaws to help clean up cyclone damage.

BYO lunch, etc. Mary will fire up the barbecue if you want to chuck on some snags.

Tablelands Branch – Sunday following the meeting on the 4th Wednesday of the month.

6 May Meet at the Malanda Falls picnic area at

10.00 am for a 10.30 start. More details at the meeting.

27 May To be announced.

Any queries please phone Ian Evans 4096 5770.



Do you want to continue receiving newsletters? Please advise by return email, or 'phone me on 4039 3510 – if I don't hear from you in the next month or so, will remove you from the list.

Tropical Australian Plants

Kerry Walsh has supplied this article as an example of what can be done to rescue rare plants which are about to be destroyed by development.

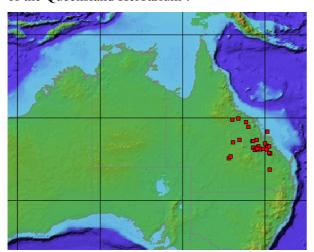
Article by Irene Champion, April 2007.

Cerbera dumicola

It's now three years since 8 Branch Members [from SGAP Mackay], (armed with a Recreational Wildlife Harvesting Licence) went on a 600+km round trip to collect propagating material of this rare species of *Cerbera*. Over the last 6 months a number of plants have been planted in three different locations at the Mackay Regional Botanic Gardens. And what have we learned about this species over the last 3 years? Nowhere near enough so there's still so much more to find out. The story so far -

Taxonomy

Although *Cerbera dumicola* was discovered in 1876 and was collected from time to time till the 1940 when its distinctiveness was recognised, it remained undescribed until 1992, largely due to insufficient or poor quality fertile specimens. Good flowering material collected from Middle Percy Isle in late 1989 by *Batianoff, Champion, Thompson & Dillewaard* finally allowed this species to be formally described by Paul Forster of the Queensland Herbarium¹.



Distribution of C. dumicola. Map provided by the Australian Virtual Herbarium.

Cerbera spp belong to the Apocynaceae Family so have milky sap, shiny spirally arranged leaves and perfumed tubular flowers with 5 spreading lobes. Four species occur in Queensland. North Queensland species, *C. floribunda, C. inflata* and

C. manghas, also occur outside Australia but C. dumicola is confined to coastal and sub-coastal Central Queensland. It is a bushy shrub or small tree to 4m high and is somewhat similar to the closely related to C. manghas but is a smaller plant and its white flowers don't have a red centre. It primarily occurs in inland Lancewood (Acacia shirleyi) communities but may be found in semi-evergreen vine thickets near the coast. It is not known to occur in any conservation area and even though it may be locally common, its current Conservation status is 'Rare' as it is



Habitat of C. dumicola

considered under threat from mining and agriculture.

In spite of having been known for so long, not much is know about the flowering frequency or the fruits of this species. Investigating its horticultural attributes and requirements are where the Mackay Branch comes in!

The Salvage Site

The site on the alignment of a road to be built between Newlands Mine and the Bowen Development Road, south of Collinsville was relatively flat with deep red freely draining laterite soil, possibly derived from fine-grained sandstone. It had very little gravel and no surface rock and had previously been burnt by a hot fire probably less than 18 months prior to our visit

Multi-stemmed shrubs of *Cerbera dumicola* were widespread and very common in the shrub layer of Lancewood open forest. With their relatively large thin glossy dark green leaves, they looked somewhat out of place in a community of trees & shrubs with predominantly thick grey-green foliage. We saw no sign of either flowers or fruit. By the end of the salvage we estimated that >90% of the plants were regrowth root suckers since the fire. Only about 5 salvaged plants had fibrous roots indicating that they may have been seedlings while the rest had very thick woody underground

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¹ Forster (1992) A Taxonomic Revision of *Cerbera* L (Apocynaceae) in Australia and Papuasia. *Austrobaileya*: 3(4).

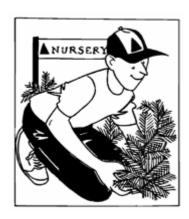
stems or roots, and virtually no lateral fibrous roots.

During the salvage, smaller 'plants' were targeted from the full width of road alignment, covering about 4 000 m², in the hope of collecting the widest genetic diversity

Propagation trials

On return, most of the 'plants' were potted into freely draining mix but a few were planted into garden beds. Numbers held at each pre-arranged location were recorded and another 20 bare-rooted 'plants' were distributed to other members for planting in their gardens.

At the time of the salvage, Mackay was in the grip of a severe drought that continued till early 2007. How much and how often to water was something of a conundrum. As well as having very freely draining soil, the salvage site is within the drier Brigalow Belt Bioregion and the plants have copious milky sap – all factors suggesting low water requirements. Therefore, watering was kept to a minimum until it became obvious that potted plants under watering systems were looking the best.



After initially dropping all their leaves many plants grew another flush later but this DID NOT indicate the development of new roots. Postmortems on those that subsequently collapsed and died revealed no signs

of new roots. Furthermore, root development was very meagre in 10 of the surviving potted plants that were examined.

By the end of 2004, about two thirds of the 127 salvaged 'plants', still showed signs of life although the majority of the potted plants were little more than sticks with a few green leaves at the top. Only a couple of the 25 or so that were planted into gardens still looked promising. There was one exception – a plant that was planted in heavy black clay and deeply watered every week for the first 6 months was 'thriving'.

Ten healthy-looking plants that were potted-on late in 2006 still had very poor root development. As previously noted, new roots were very fragile with only a few coming off the thickened underground stems and bare of any lateral branching for about half their length. This lack of

a well-branched root system contributes to their instability and increased risk of root damage during windy weather.

Late in 2006 three plants were provided to the Leader of the ASGAP Rainforest Study Group for non-commercial propagation trials.

The Botanic Gardens was finally ready to receive plants in late October 2006 when the first 8 were provided. Three were planted in the Orientation garden in a relatively well-drained site while the other 5 are planted in heavy, poorly drained soil. Another 10 plants went into heavy loam on the upper banks of the Brigalow Belt 'creek' during our working bee on 3rd March 2007.

With Mackay experiencing something like its usual 'wet season' earlier this year, we'll soon find out how *Cerbera dumicola* performs under differing conditions.

Irene Champion, April 2007

Obligations and restrictions on the use of the salvaged plants stipulated on our Recreational Wildlife Harvesting Licence Permit include: -

- submittal of regular returns;
- plants to be kept at designated locations;
- the majority of the plants to be relocated to the Mackay Regional Botanic Gardens;
- plants may be used for propagation trials with the aim of increasing the number of plants in cultivation and to distribute to society members;
- QPWS to be provided with results of propagation trials and records of the success failure rates and
- Plants not to be used for a commercial purpose.
- Members who had living plants at this time last year are now required to provide a brief written report to Irene on the present status of their plants - dead or alive.

Application for Cerbera dumicola plants

Now that the Botanic Gardens has all the plants required for the time being, we are in a position to distribute more plants to members.

Members who would like to help find out more about this species and its requirements are invited to apply to Irene for plants. The number of plants available to each interested member will depend on the number of applications received. Of course annual reports on treatment, successes or failures will be required from members receiving plants.

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"Plant Me Instead"

After a final brief meeting in April, Ellen Weber has submitted a grant application for NHT funding to support printing and preparation of "Plant Me Instead".

Whether or not the funding application is successful, it is likely this project will go ahead – with the goal of producing a book that promotes native replacements to commonly cultivated (and often weedy) exotics.

We're very excited about this project, and look forward to involving the whole of far north Queensland's SGAP to get it underway.

Trip Report

Emerald Creek Falls, 21 April 2007

A fine day greeted our trip to Emerald Creek Falls. Guest speaker, Kerry Walsh, permitting officer from the EPA, provided an overview of recent changes to legislation concerning native plant collection and propagation.

The law is complex, and the rules are very situation-dependent. However, for many plant species, if you've got the permission of the landholder, it's legal to take plants and propagate for private purposes. You're not allowed to take many species of orchids, cycads or tassel ferns without a permit. And, if you want to propagate for commercial sale (even fundraisers), that's subject to permitting too. A lot of information is contained within the "Code of practice for the taking and use of protected plants."², or in the relevant legislation – the *Nature Conservation Act* 1992 and the Nature Conservation (Protected Plants) Conservation Plant 2000³. Any questions should be directed to Kerry Walsh at the EPA on 4046 6602.

After lunch, we headed up the track to the falls lookout. The water was crystal clear and very inviting, but perhaps a little too chilly for most. Bob put together a very comprehensive species list along the way.

My apologies for providing incorrect directions in the last newsletter.

¹









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² http://www.epa.qld.gov.au/publications?id=1955

http://www.legislation.qld.gov.au/Acts_SLs/Acts_SL_N.htm



Photo Captions:

- 1 Emerald Creek Falls
- 2 Two flowers Bianca Jago and Wedelia spilanthoides.
- 3 Abelmoschus moschatus
- 4 Cajanus acutifolius
- 5 Melaleuca viridiflora
- 6 Dendrophthoe glabrescens

If you have any book reviews, pictures, notes on growing tropical Australian plants or trip reports you'd like published in this newsletter, please send them to me: Stuart Worboys – email worboys1968@yahoo.com.au

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Plants Observed at Emerald Creek Falls, 21 April 2007

CONIFERS & ALLIES

Cupressaceae

Callitris sp. aff. endlicheri Cypress Pine **FERNS & ALLIES**

Adiantaceae

Cheilanthes brownii

Cheilanthes nitida

Davalliaceae

Davallia denticulata

Lycopodiaceae

Lycopodiella cernua Queensland Coral Fern

Polypodiaceae

Drynaria rigidula Basket Fern

Psilotaceae

Psilotum nudum

FLOWERING PLANTS

Acanthaceae Pseuderanthemum variabile

Rostellularia adscendens var. hispida

Anacardiaceae

Blepharocarya involucrigera Rose Butternut
Euroschinus falcata var. angustifolius Blush Cudgerie or Pink Poplar

Pastel Flower

Burdekin Plum

Pennywort

Northern Holly

Taro

Pleiogynium timorensis

Anthericaceae Tricoryne anceps

Apiaceae

Centella asiatica

 $\label{eq:polyaceae} \mbox{Platysace valida} \\ \mbox{$Apocynaceae}$

Alyxia spicata Chain Fruit

Parsonsia lanceolata

Colocasia esculenta

Parsonsia longipetiolata Green-leaved Silkpod

Aquifoliaceae

Ilex arnhemensis subsp. ferdinandi

Araliaceae

Araceae

Polyscias australiana Ivory Basswood

Schefflera actinophylla Umbrella Tree

Asclepiadaceae

Asclepias curassavica Red-headed Cottonbush

Hoya australis subsp. tenuipes Native Hoya

Asteraceae

Acmella grandiflora var. brachyglossa

* Ageratum conyzoides

* Crassocephalum crepidioides Thickhead
Cyanthillium cinereum Purple Fleabane

Peripleura diffusa Phacellothrix cladochaeta

Praxelis clematidea Praxelis

Pterocaulon serrulatum

Pterocaulon sphacelatum
Tridax procumbens
Tridax Daisy

Wedelia spilanthoides

Bignoniaceae

Pandorea pandorana Wonga Vine

Burseraceae

Canarium australianum var. australianum Scrub Turpentine

Campanulaceae

Lobelia leucotos

Dolichandrone heterophylla

Wahlenbergia caryophylloides

 ${\it Caryophyllaceae}$

Drymaria cordata subsp. cordata Tropical Chickweed

Polycarpaea spirostylis

Casuarinaceae
Allocasuarina torulosa Rose She Oak

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River She Oak Casuarina cunninghamiana

Celastraceae Black Olive Plum Elaeodendron melanocarpum

Colchicaceae

Iphigenia indica Commelinaceae

Commelina ensifolia Sailor's Purse

Murdannia graminea Convallariaceae

Schelhammera multiflora Cunoniaceae Pullea stutzeri Hard Alder

Cyperaceae

Carex maculata Cyperus aquatilis

Cyperus polystachyos subsp. polystachos

Fimbristylis dichotoma Gahnia aspera Isolepis inundata Rhynchospora leae Scleria mackaviensis

Dilleniaceae Hibbertia longifolia

Dioscoreaceae Cheeky Yam Dioscorea bulbifera

Eriocaulaceae

Eriocaulon australe Euphorbiaceae

> Alchornea thozetiana Brevnia cernua Fart Tree Cleistanthus semiopacus Rusty Cleistanthus Drypetes deplanchei Grey Boxwood

Glochidion harveyanum var. harveyanum Harvey's Buttonwood

Mallotus polyadenos Kamala

Phyllanthus fuernrohrii Phyllanthus virgatus

Fabaceae Cajanus acutifolius

Crotalaria aridicola Crotalaria brevis Crotalaria calycina Crotalaria lanceolata Crotalaria montana

Derris sp. (Daintree D. E. Boyland + 469)

Bat's Wing Coral Tree Erythrina vespertilio

Indigofera linifolia Indigofera linneai Indigofera pratensis Jacksonia thesioides Rhynchosia minima

Stylostanthes humilis Stylo

Tephrosia astragaloides Tephrosia filipes Uraria picta

Zornia muriculata subsp muriculata

Flintwood Scolopia braunii

Geniostomaceae Geniostoma rupestre var. australianum

Haemodoraceae **Blood Lily** Haemodorum coccineum

Haloragaceae

Juncus usitatus

Gonocarpus acanthocarpus Juncaceae

Lamiaceae

Flacourtiaceae

Lauraceae

Plectranthus mirus

Cassytha filiformis Dodder Lecythidaceae

Planchonia careya Cocky Apple Loganaceae

Mitrasacme connata MAY 2007

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Loranthaceae

Dendrophtoe glabrescens Mistletoe

Malvaceae

Abelmoschus moschatus subsp tuberosus

Hibiscus meraukensis Native Hibiscus

Hibiscus normanii Urena lobata Urena Burr

Melastomataceae

Melastoma affine Melastoma

Mimosaceae

Black Wattle Acacia aulacocarpa

Acacia bidwillii

Acacia calyculata Acacia flavescens Red Wattle

Acacia melanoxylon Acacia simsii Acacia umbellata Acacia whitei

Moraceae

Ficus congesta var. congesta Ficus obliqua var. petiolaris Red Leaf Fig Rock Breaker Fig

Ficus platypoda

Myrsinaceae

Myrsine porosa

Myrsine subsessilis subsp. cryptostemon

Myrtaceae

Callistemon viminalis Red Bottlebrush

Corymbia citriodora Corymbia dallachiana Corymbia erythrophloia

Eucalyptus crebra Red Ironbark Eucalyptus leptophleba Red Molloy Box

Eucalyptus portuensis Eucalyptus tereticornis Northern White Mahogany Forest Red Gum

Lophostemon grandiflorus

Tea Tree Melaleuca leucadendra Melaleuca viridiflora Broad Leaf Tea Tree

Syzygium australe

Tristaniopsis exiliflora Kanuka Box

Oleaceae

Chionanthus ramiflora Native Olive

Ligustrum australianum

Onagraceae

Willow Primrose Ludwigia octovalvis

Orchidaceae

Dendrobium canaliculatum var. caniculatum Tea Tree Orchid

Pandanaceae

Freycinetia scandens

Pandanus cookii Cook's Pandan

Philesiaceae

Geitonoplesium cymosum Scrambling Lily

Phormiaceae

Dianella caerulea var. vannata Blue Flax Lily

Pittosporaceae

Bursaria incana

Bursaria tenuifolia Slender Bursaria

Pittosporum venulosum

Poaceae

Aristida latifolia Arundinella setosa

Capillipedium spicigerum Scented Top Grass

Cleistochloa subjuncea Chrysopogon oliganthus Cymbopogon queenslandicus Dactyloctenium aegyptium Ectrosia nervilemma Entolasia stricta Eragrostis brownii

Eriachne ciliata Slender Wanderrie Grass

Eriachne pallescens var. pallescens

Heteropogon contortus Heteropogon triticeus

Melinis repens Red Natal Grass

Mnesithea rottboellioides Oplimenus aemulus

MAY 2007 Page 8 of 9 Panicum mitchellii

* Paspalum conjugatum Sour Grass
* Paspalum paniculatum Russell River Grass

Pogonantherum crinitum
Pseudopogonatherum contortum

Sacciolepis indica

Sarga plumosum Plume Sorghum Schizachyrium fragile Fire Grass Schizachyrium pseudeulalia

Setaria pumila

Sporobolus jacquemontii

Themeda quadrivalvis Grader Grass
Themeda triandra Kangaroo Grass
Tripogon Ioliiformis Five Minute Grass

Polygalaceae

Polygala paniculata

Polygonaceae

Persicaria subsessilis Smart Weed

Proteaceae

Banksia aquilonia Grevillea glauca Grevillea parallela Hakea persiehana Helicia australasica

Persoonia falcata Northern Geebung Stenocarpus sinnatus Wheel-of-fire Tree Xylomelum scottianum Woody Pear

Honeysuckle Silky Oak

Brown Gardenia

Rhamnaceae

Alphitonia excelsa Red Ash

Rubiaceae

Atractocarpus fitzalanii subsp fitzalanii

Pogonolobus reticulatus Psychotria fitzalanii Spermacoce brachystema Timonius timon var. timon

Santalaceae

Exocarpus latifolius Native Cherry Santalum lanceolatum Sandalwood

Sapindaceae

Dodonaea lanceolata Hop Bush Guioa acutifolia Glossy Tamarind

Sapotaceae

Pouteria sericea

Smilaceae

Smilax australis Sarsaparilla Vine

Sterculiaceae

Keraudrenia sp.

Taccaceae

Tacca leontopetaloides Native Arrowroot

Thymelaeaceae

Pimelea sericostachya subsp. sericostachya

Wikstroemia indica

Tiliaceae

Grewia retusifolia

Urticaceae

Pipturus argenteus

Verbenaceae

Lantana camara

Lantana

Violaceae

Hybanthus enneaspermus Hybanthus stellarioides

Vitaceae

Cayratia trifolia

Xanthorrhoeaceae

Lomandra hystrix Creek Mat Rush
Lomandra multiflora Mat Rush

The above plant species list covers all plants observed in the gallery rainforest along the creek, which contained as dominant species *Callistemon viminalis*, *Callitris sp. aff. C. endlicheri*, *Melaleuca leucadendra*, *Tristaniopsis exiliiflora*, *Banksia aquilona* and *Bursaria tenuifolia* and the adjacent open forest mainly dominated by *Eucalyptus leptophleba* and *Eucalyptus crebra*. Two plant families in particular were overlooked. The Fabaceae and the Poaceae further visits and collection of specimens for identification would be necessary for these difficult to identify in the field families.

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