

BUDAWANGIA*

AN E-NEWSLETTER FOR ALL THOSE INTERESTED IN THE NATIVE PLANTS OF THE NSW SOUTH COAST

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Aims: To connect those interested in the native flora of the NSW South Coast, to share up to date information on the flora of the region and to broaden the appreciation of the region's native plants.

Editorial

Reader's responses following last month's newsletter were fantastic and just what I have always hoped for, facilitating interaction between the region's plant people; a page of notes from readers is included below. The middle month of winter saw some cold winds with a little rain interspersed with pleasant sunny days. Whale-watching from the Kiama coastal walks was a great way to spend those sunny days.

This edition contains a piece on native succulent plants, often over-looked as a group in the native flora. A new mystery weed is presented and there is a piece on a recent visit to the Giant Stinging Tree mentioned earlier in the year - now we have some measurements for this huge tree. We also came across another huge tree in the same area; this one is a Churnwood tree. A recent find of the rare tree Illawarra Socketwood *Daphnandra johnsonii* finishes off this edition.

The tree wattles are beginning to flower and the highway around Tomerong south of Nowra is lined with canopies of bright yellow; many of these are *Acacia decurrens* that originate from the seed mix spread along the highway following its upgrade some years ago. The word *wattle* comes from Anglo-Saxon and refers to a cheap and readily available building method. Saplings, in our case of spindly young wattle trees, were woven to create panels called *wattles*. These panels were then spread with mud to fill the gaps and used to construct huts that could be built quickly and cheaply in early colonial days, known as the *wattle and daub*. The genus name *Acacia* seems to come from the Greek word 'ake' meaning a point and refers to the plants in northern Africa that produce long sharp spines and were the first of the genus to be named.

I would be pleased to receive appropriate articles, however small, on interesting observations, new discoveries, plant name changes, etc., up to two A4 pages, including some photographs. Deadline is one week before the end of the calendar month.

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* *Budawangia* is a monotypic, endemic genus restricted to the Budawang Range on the western edge of the South Coast region. The genus was named by Telford in 1992; the species *Budawangia gnidioides* (Ericaceae) was previously *Rupicola gnidioides*.

Native Succulents

Succulents are popular garden and house plants and those seen in cultivation in Australia are all introduced from other parts of the world. Although perhaps not commonly realised, there are plenty of native succulents. These plants usually grow in extreme environments such as exposed coastal sites and very dry places such as deserts and rocky outcrops. The name 'succulent' is used to identify plants that have quite thick, fleshy leaves and/or stems that are adapted to retain water, hence their success in extreme environments.



Disphyma crassifolium subsp. *clavellatum*
(Aizoaceae)



Enchylaena tomentosa
(Chenopodiaceae)



Carpobrotus glaucescens (Aizoaceae)



Portulaca oleracea (Portulacaceae)



Crassula sieberiana (Crassulaceae)



Calandrinia pickeringii (Portulacaceae)

The word succulent comes from the Early 17th century Latin *succulentus* from *succus* meaning 'juice'. Some of the local succulents are pictured above. Most succulent species are found growing in rather extreme habitats in terms of water availability, and interestingly some South Coast species are shared with far western NSW. Typical environments are deserts, from where many of the popular exotic succulents in Australia originate, such as those from the Americas and Africa. The succulents found on the South Coast come from coastal beaches, sand dunes and headlands, and from inland rock outcrops, where very dry conditions are common place. Examples of the coastal species are *Carpobrotus glaucescens* and *Enchylaena tomentosa* and the rock outcrop species *Crassula sieberiana* and *Calandrinia pickeringii*; see photographs above.

There are also a few naturalised succulent species in the region, one of which, *Portulaca pilosa*, was featured in *Budawangia* No. 30. The naturalised succulent species may be featured in a future newsletter.

Readers Feedback

Janet (Foxground) writes: “On reading the section in *Budawangia* on buttresses, a suggestion that was made to me some years ago by a student at Wollongong Uni. doing a thesis on why trees buttressed was that within the configuration made by buttressing vegetation became trapped and thereby added to the nutrients available to the tree. Possible?”. Any other suggestions?

Steve (Bundanoon) emailed: “Re the camphor laurel, I suspect it is one of those 'sleeper weeds' in much of the Illawarra where it is beginning to become more established after what seems to have been many decades of relative harmlessness. Increasing CO2 favours woody species, so might be giving it a boost, as might warming temps. I don't think the temps of the Illawarra are much of a limiting factor for this species, as I've seen it be quite weedy in Hornsby Shire and recently in Camden, where I added it to the list of weeds threatening 'Elderslie Banksia Scrub' (it will be called Nepean Sands Scrub & Forest under the EPBC Act listing). I believe we haven't seen much of its full potential for invasiveness, and it may become much more of an issue as conditions begin to favour it, but especially if there are disturbance events that give it a chance to get established while the canopy is down/depleted. It is obviously much better to suppress it now before it causes serious problems. PS The timber is used in musical instrument construction, including African style drums, and there's quite a business making good use of felled trees up north. I also noticed that camphor laurel is listed as a priority weed in the Plan of Management for Worrigeer Nature Reserve.”

And a follow-up email from Rob (Jamberoo): “I agree about camphor laurel. We have found small ones in the rainforest at Ben Ricketts Environmental Preserve. Not many at this stage. They are potentially a really bad weed for the Illawarra as the seeds are spread by birds and a lot of people would have trouble identifying them. They are a terrible weed in the bushland of northern Sydney. They have been spreading along Jamberoo Mountain Road especially near Burra Creek.”

Apiarist Bob (Canberra) writes “An issue that may be of interest to readers is the seasonal adjustment that occurs in the flowering cycles of various forest tree species of interest to beekeepers. As a beekeeper, I have noticed at times changes to flowering times occurring with changes to weather events and then a subsequent readjustment as the weather resumes ‘normality’.”

“The various forest species flower according to a natural cycle. Some flower annually while others flower more than once in the year. For example, Spotted Gum only flowers every three years, with a prominent flowering every four to five years and a bumper flowering approximately every 10 years.”

“As an example of a change to these normal patterns of events, in the mid 1990s, the southeast coast of NSW was in a severe drought that had a great impact on vegetation density over much of the landscape. There was a significant thinning out of the forest and in particular this was very visible in the loss of understorey. No doubt the drought also affected the reproduction cycle of many flowering plants making up the ground cover. At that time not only was the time of flowering ‘adjusted’, when normality resumed following rain the flowering that had been delayed by several months took about two years to return to a normal cycle.

“We are currently experiencing a similar situation that seems to be due to the changes in rain patterns and other more erratic conditions like strong winds. These changes must therefore affect the breeding cycles of various species that rely on the nectar produced with flowering and on other elements that contribute to the biodiversity of the landscape.”

Lastly, Bob (Jamberoo) writes “perhaps the most seen buttress on the south coast is the wonderful specimen at the Kiama library. I just have to feel that buttress every time I walk past it.”

New Mystery Weed

A new mystery weed for your contemplation. It is not what it may seem!



Revisiting the Giant Stinging Tree

The note about the Giant Stinging Tree in newsletter No. 37 prompted Derek McIntosh, creator of the *National Register of Big Trees*, to contact me to visit the tree and take measurements. Retracing my steps from earlier in the year, we readily located the tree. Careful inspection found that the tree had three distinct trunks, closely spaced and with narrow gaps between them up to four metres above the ground, where the trunks coalesced into a single trunk again. The circumference of the total tree was measured at 9.7 metres; the largest single trunk was 6.5 metres in circumference. The height was estimated at 32 metres.

A bonus find on the walk was the discovery of another huge tree, a Churnwood *Citronella moorei*. This tree measured 7.6 metres in circumference and was about 35 metres tall. Both trees exhibited huge buttresses; see piece in last month’s newsletter. How many other giant trees are out there?

The Churnwood has now been placed on the *National Register of Big Trees* and the details and a photo can be found there. Visit this web site and see a few other trees in our region and perhaps nominate some other trees you know about.



Lower trunk of the giant *Dendrocnide excelsa*.



A magnificent specimen of *Citronella moorei*.
(That's Derek beside the tree.)

Rare find by the Minnamurra Rainforest Weeders

While undertaking weeding recently, the Friends of Minnamurra volunteers at the Minnamurra Rainforest Centre in Budderoo National Park came across a rare find. Removing a patch of Lantana, the team found a stand of the Illawarra endemic and endangered tree known as Illawarra Socketwood *Daphnandra johnsonii* (Atherospermataceae). This species only grows in the rainforest remnants in the Wollongong to Kiama area. The species is usually found in small groups of suckering trees, sometimes many small sucker shoots around one larger tree. As can be seen in the photograph at right, one large tree is surrounded by over 100 small sucker shoots. Now the Lantana has been removed (more awaits the team's attention to the left in the photograph) these suckers can grow. This tree is the largest specimen of this species I have come across; approx. measurements are: height 12 m, trunk circumference 1.65 m, spread 9 m. The type specimen of this species was gathered near Spring Creek, west of Kiama in 1960.

