

CALEYI



NORTHERN BEACHES GROUP

austplants.com.au/northern-beaches



June 2020

Australian Plants Society Northern Beaches
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CALENDAR

CANCELLED APS Northern Beaches Meetings and other activities have been cancelled due to restrictions on public gatherings as a consequence of the corona virus outbreak.

APS NSW GTG Southern Highland Group, 14-15 November 2020.

ANPSA Biennial Conference 12-17 September 2021: Australian flora -past present future. In 2021, the conference is being hosted by the Australian Plants Society NSW at the Kiama Pavilion in the beautiful village of Kiama on the pristine south coast. To register an expression of interest, click the '<https://austplants.com.au/event-3403188>' button and you will be informed of events as they are confirmed.

Many thanks to **Conny Harris, Anne Gray, Jan Carnes, David Drage and Penny Hunstead** for their wonderful contributions to CaleyI this month.

If you have any articles or photographs (jpgs as attachments please) that you think will interest our members please send them to me.

Editor march@ozemail.com.au 0407 220 380

MESSAGE FROM APS NORTHERN BEACHES PRESIDENT CONNY HARRIS.

Our monthly meeting in June will sadly have to be missed again, as we continue to distance ourselves from others. I hope you are well and don't get too lonely. Perhaps you even enjoy the clean air, with 20% carbon emission reduction!

I do get out daily and on my few small walks in the bush I really enjoyed the flowers of *Styphelia tubiflora*. *Epacris longiflora* is also in full bloom, but it is just about all year to be seen, whereas *Styphelia* lasts only about one month. *Styphelia tubiflora* seems restricted to few locations. Have you seen it?



The other plant to mention is *Banksia ericifolia*. *B. ericifolia* flowers are opening up and the yellow tailed cockatoos are loving it. On a nice sunny day, you can get easily sweet nectar from it by running your hands down the candlesticks. My granddaughter loves it. She also learned about *Smilax glycyphylla* leaves which she regularly picks and chews and the poor plant is soon without leaves I fear.

Stay well and see you hopefully soon,
Conny

APS Northern Beaches Group members send our deepest sympathy to Caroline Gunter whose husband John died recently. Long time members John and Caroline were among the people on the fated Ruby Princess. Our thoughts are with Caroline at this sad time.

ANNE GRAY AND GINNY BURDIS IN TASMANIA.

These photos were taken on the 3 Capes Track in Tasmania March 3 - March 6. Mostly they were photos taken by my English friend Ginny Burdis.
Cheers, Anne



Astroloma humifusum Native Cranberry. Pic: Anne Gray



Correa backhouseana var. *backhouseana*. Pic: Ginny Burdis



Pimelia nivea. Bushmans Bootlace. Pic: Anne



Leptecophylla oxycedrus Coast Pinkberry. Pic: Ginny.



Eucryphia lucida. Leatherwood. Pic: Ginny.



Anne Gray. Pic: Ginny Burdis



Leptospermum rupestre Mountain Teatree. Pic: Ginny



Epacris impressa. Pic: Ginny



Bennett's wallaby. Pic: Ginny.



Billardia longiflora. Purple Appleberry. Pic: Anne

PENNY'S RAINFOREST GARDEN

My garden at Newport is on a north-facing block a few hundred metres from the sea. The original vegetation was Cliff-face Open-heath.

My Grandfather cleared this vegetation in the early 1950s and planted exotic trees and shrubs. When I inherited the property in 1981, I gradually replaced the exotic shrubs with species found in the rainforest of Lamington National Park.

My husband, Richard, daughter Anna and I had enjoyed many holidays, staying at Binna Burra and wandering along the rainforest walks.

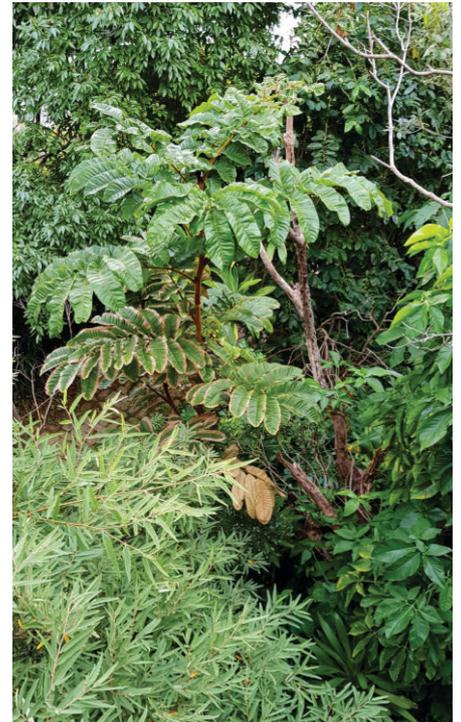
In my creation of a mini-rainforest I aimed to maintain my family's memories of a very beautiful place.

The species in the photos include :

Acronychia oblongifolia
Alpinia caerulea
Asplenium nidus
Blechnum cartilagineum
Cordyline petiolaris
Cupaniopsis parvifolia
Diploglottis Australia
Eupomatia Karina
Lepidozamia peroffskyana
Linospadix monostachyos
Macrozamia moorei
Pollia crispata.

Penny Hunstead

All photographs Penny Hunstead



NSW GOVERNMENT SELLS OUT KOSCIUSZKO NATIONAL PARK

National Parks Association of NSW May 21, 2020 Gary Dunnett



Approval of Snowy 2.0 EIS sets appalling precedents, and all for an inferior project.

"Today's approval of the Snowy 2.0 construction project in Kosciuszko National Park marks a new low in the NSW Government's refusal to protect threatened species and natural landscapes" stated Gary Dunnett, Executive Officer of the National Parks Association of NSW.

"Approving a massive industrial construction in Kosciuszko National Park sets appalling environmental and legal precedents and reduces Australia from an international leader in national park management to the bottom of the pack."

"Never before has a National Park been used as a dump for millions of tonnes of contaminated waste. Never before has approval been granted to spread pest fish and diseases across the Snowy Mountains and headwaters of the Murray, Snowy and Murrumbidgee river systems. Never before has a development been allowed to drive a critically-endangered species, the Stocky Galaxias, into extinction. Never before has approval been granted to raze hundreds of hectares of threatened species habitat and native vegetation in a National Park. Never before has approval been given for a project that will result in infrastructure and landscape scars over 35 kilometres of a National Park"

Mr Dunnett added, "The approval flies in the face of the fundamental principles of environmental planning, particularly the need to consider feasible alternatives and assess the cumulative impacts of all stages of a development. This approval has been issued before the EIS for the transmission lines that will be bulldozed through the Park has even been exhibited."

"The NSW Government ignored the 50 energy, engineering, economic and environmental experts and organisations whose analysis utterly discredited the claimed benefits of Snowy 2.0. Their Open Letter to the NSW Premier and Prime Minister states "It is now evident that Snowy 2.0 will cost many times its initial estimate, not deliver its claimed benefits and permanently damage Kosciuszko National Park to an unprecedented extent. Snowy 2.0 is not as it has been publicly portrayed. There are many alternatives that are more efficient, cheaper, quicker to construct, and incur less emissions and environmental impacts."

"The NSW Government has ignored the expert's advice and urging for an independent review of Snowy Hydro's misleading claims for the project. Today's decision will go down in history as an appalling assault on one of Australia's most fragile and precious of natural icons, Kosciuszko National Park."

Gary Dunnett, Executive Officer NPA reproduction approved)

PHILLIP ISLAND HIBISCUS

Jan Carnes

On arriving at our house at Smithtown near Kempsey in March, we were greeted by a shrub completely covered in bud. It was a Phillip Island Hibiscus that I had bought at Gladstone markets the year before and was doing very well in our beautiful chocolate mud cake soil. The people who sold it to me thought it came from Victoria but we have been to Norfolk Island and knew of the amazing tale of conservation of this extremely rare plant. Jerry Coleby has written a lovely article about *Hibiscus insularis* which he has used as a hedge on his property. Here's a link:



<https://jerry-coleby-williams.net/2014/08/23/the-ultimate-hibiscus/>

The buds are exquisite and then the flowers are a pale cream with a tall gazebo of red stamens beloved of all birds. They then fade to a beautiful dusky pink. Our shrub seems to be putting on a spectacular display as per Jerry's article, thriving even as the temperatures plummet with no sign of giving up blossoming. I'm wondering if any of our members have one in their Northern Beaches gardens as I'd love to try one in mine.

FROM KITCHEN TO GARDEN.

David Drage

The handles on our steamer ceased to function properly so we bought a posh new one. Unwilling to just throw the old one in the bin, I decided to take advantage of its superb drainage potential (you all know what a steamer looks like) and make a mini succulent garden.

So, with little more than coarse sand and some shade cloth in the bottom of the steamer (to stop the sand falling through the holes (and a pensioned-off dinner plate to stand it on) it was ready for plants. I had two exotic species in small pots hanging around; a *Sedum* sp, (now dead), and a *Euphorbia milii*. The latter is a native of Madagascar and is commonly known as "Corona de Cristo" or "Crown of Thorns" and is very, very spiky. Both common names are rather ominous. *E. milii* can grow to 1.8m so it will not last too long in the mini succulent garden. Once it gets too big for the mini garden it will be up for grabs. Anyone interested, let me know.



The only suitable Australian native species I have available, at the moment, is a *Disphyma crassifolium* (presumably *spp clavellatum* but, the label doesn't say). This species is located in the same family as *Carpobrotus glaucescens*, 'pig face' i.e. *Aizoaceae*, and is a smaller version of *C glaucescens* with round rather than triangular leaves. Described as a ground cover the specimen I have is starting to put out trailing stems already.

If anyone has any information on other small, succulent species I could try, please let me know.

JOSEPH BANKS: TRAVELLER, BOTANIST AND AGENT OF THE BRITISH EMPIRE

Theconversation.com April 28, 2020 David Andress, Professor of Modern History, University of Portsmouth



Joseph Banks portrait by Joshua Reynolds (circa 1771-1773). National Portrait Gallery

Sir Joseph Banks is justly celebrated as a “naturalist, botanist, and patron of the natural sciences.” His role as an expedition scientist on Captain Cook’s first voyage set a benchmark for rigour, and helped to lift him to election as president of the Royal Society in 1778. From that position, he directed and encouraged multinational scientific endeavours for more than four decades. Less well-known is how he used that science to pursue imperial power.

The role of science in the “Age of Enlightenment” has sometimes been imagined as a bubble of purity, where the hunt for new knowledge outweighed all other considerations. It is certainly true that warring European powers granted safe passage for elite scientific correspondence, and sometimes for individual scholars, or whole expeditions. But the context for this was a consensus on the value of scientific discovery for the pursuit of imperial aggrandisement.

Banks was a hereditary member of the English establishment. Born in 1743, his father and grandfather had been members of parliament and he inherited extensive Lincolnshire estates at an early age. He blended formal education with self-funded studies, and by his mid-20s, was already a member of the Royal Society, undertaking an expedition to the north-eastern shores of Canada, where he identified the Great Auk for science.

Great Southern Continent

Cook’s first voyage was ostensibly to observe the “transit of Venus” across the face of the sun in 1769: thus forming part of a multinational scientific effort to map the size of the solar system. But a deeper goal had already been voiced.

The first person the Royal Society suggested to command the voyage was Alexander Dalrymple, an eminent Scottish geographer and vocal proponent of the theory that a “Great Southern Continent” awaited

discovery. He saw this as an opportunity equivalent to the discovery of the Americas, so great, as he wrote in his 1770/71 volume *An Historical Collection of the Several Voyages and Discoveries in the South Pacific Ocean*, that even: the scraps from this table would be sufficient to maintain the power, dominion, and sovereignty of Britain.

Dalrymple, however, demanded a full naval captain’s commission, which the Admiralty would not grant to a man who was not a professional seaman. James Cook had the necessary background, and was content with lieutenant’s rank. Cook’s voyage, of course, disproved the theory of a great Terra Australis, while at the same time mapping the outlines of New Zealand and eastern Australia. Banks (who had paid out of his own pocket for eight other scientists and servants to accompany him) both diligently completed his core botanical duties, and returned with clear views on how British imperial power could be enhanced through Cook’s discoveries.

Banks firmly advocated the strategic use of colonisation, vigorously promoting the use of “Botany Bay” as a penal colony. He sought to have interloping American trading vessels excluded from New South Wales “with severity”, but was not averse to other nations setting up settlements elsewhere in Australia, because there was a “moral certainty” that such territories would fall “into our hands in time of war”.

The Bounty

Banks was also the guiding light behind the most notorious episode of attempted ecological imperialism in the 1780s: the voyage of the *Bounty*, which set sail from the south coast of England in 1787, bound for what its crew saw as the very furthest reaches of the world. Banks had personally overseen its refitting, including the transformation of its captain’s cabin into a greenhouse, where hundreds of breadfruit seedlings were to be nurtured.

The ship’s captain, William Bligh – who was only 35, not the grizzled veteran sometimes depicted – had been sailing-master on Cook’s fatal third voyage, and had come under Banks’ subsequent patronage. His mission failed dramatically, not least because of the huge pressure its goals put him under, and the *Bounty* was lost to Fletcher Christian and his fellow mutineers in April 1789. Bligh redeemed his naval reputation with a voyage of more than 3,600 nautical miles to safety in an open boat. Only two years later, he led a second voyage of two ships, which did bring breadfruit from Tahiti all the way to the Caribbean. The Royal Society awarded him a gold medal.

Breadfruit never became a self-sustaining food crop for Britain’s brutalised plantation slaves, which had been the grim objective at the heart of these voyages. But this was just one small part of Banks’ vision of imperial botany. He took a leading role in establishing the Royal Botanical Gardens at Kew as a centre for the systematic study of the world’s plants. He helped promote a network of such centres, from Calcutta to St Vincent in the Caribbean, and the exchange of species between them.

In the lead-up to Bligh’s departure, Banks had expounded in a letter on the benefits of transplantation. From his own previous voyages, he noted the potential value of New Zealand flax for rope-making, and the “Mangosteens, Jacks, Durians” that might be brought westwards from Malaya (now Malaysia). One letter listed more than 30 products of both hemispheres that might be profitably transplanted, from the “lichee” to Basmati rice, “Naugharbussee bamboo” – superior, he noted, to Philippine bamboos already brought to the Caribbean by the Spanish – and what he called the “Cajir Gauth”, a palm whose sap made an alcoholic drink.

Banks closed this letter by noting how happy and eager he was to take forward such plans “so highly fraught with disinterested benevolence” as they were. His correspondent, however, was His Majesty’s secretary for war Sir George Yonge. Sir Joseph Banks, like so many leading lights of his generation, drew no distinction between the advancement of humanity and the interests of the British Empire.

BOTANY AND THE COLONISATION OF AUSTRALIA IN 1770

Theconversation.com April 29, 2020 Bruce Buchan Associate Professor, Griffith University

James Cook and his companions aboard the Endeavour landed at a harbour on Australia's southeast coast in April of 1770. Cook named the place Botany Bay for "the great quantity of plants Mr. Banks and Dr. Solander found in this place".

Joseph Banks and Daniel Solander were aboard the Endeavour as gentleman botanists, collecting specimens and applying names in Latin to plants Europeans had not previously seen. The place name hints at the importance of plants to Britain's Empire, and to botany's pivotal place in Europe's Enlightenment and Australia's early colonisation.



Joseph Banks one of Britain's most influential scientists. National Library of Australia

'Nothing like people'

Cook has always loomed large in Australia's colonial history. White Australians have long commemorated and celebrated him as the symbolic link to the "civilisation" of Enlightenment and Empire. The two botanists have been less well remembered, yet Banks in particular was an influential figure in Australia's early colonisation.

When Banks and his friend Solander went ashore on April 29, 1770 to collect plants for naming and classification, the Englishman recollected they saw "nothing like people". Banks knew that the land on which he and Solander sought plants was inhabited (and in fact, as we now know, had been so for at least 65,000 years). Yet the two botanists were engaged in an activity that implied the land was blank and unknown.

They were both botanical adventurers. Solander was among the first and most favoured of the students of Carl Linnaeus, the Swedish botanist and colonial traveller who devised the method still used today for naming species. Both Solander and Banks were advocates for the Linnaean method of taxonomy: a systematic classification of newly named plants and animals.

When they stepped ashore at "Botany Bay" in 1770, the pair saw themselves as pioneers in a double sense: as Linnaean botanists in a new land, its places and plants unnamed by any other; as if they were in a veritable terra nullius. The plant specimens Joseph Banks collected were taken back to England, where they remain today in the Natural History Museum. Natural History Museum

Botany in 'nobody's land'

Terra nullius, meaning "nobody's land", refers to a legal doctrine derived from European traditions stretching back to the ancient Romans. The idea was that land could be declared "empty" and "unowned" if there were no signs of occupation such as cultivation of the soil, towns, cities, or sacred temples.

As a legal doctrine it was not applied in Australia until the late 1880s, and there is dispute about its effects in law until its final elimination by the High Court in *Mabo v Queensland (No. II)* in 1992. Cook never used this formulation, nor did Banks or Solander. Yet each in their way acted as if it were true. That the land, its plants, and animals, and even its peoples, were theirs to name and classify according to their own standards of "scientific" knowledge.

In the late eighteenth century, no form of scientific knowledge was more useful to empire than botany. It was the science par excellence of colonisation and empire. Botany promised a way to transform the "waste" of nature into economic productivity on a global scale.

Plant power

Wealth and power in Britain's eighteenth century empire came from harnessing economically useful crops: tobacco, sugar, tea, coffee, rice, potatoes, flax. Hence Banks and Solander's avid botanical activity was not merely a manifestation of Enlightenment "science". It was an integral feature of Britain's colonial and imperial ambitions.



Banksia ericifolia was one of the many species given a new name by Banks. Natural History Museum

Throughout the Endeavour's voyage, Banks, Solander, and their assistants collected more than 30,000 plant specimens, naming more than 1,400 species.

By doing so, they were claiming new ground for European knowledge, just as Cook meticulously charted the coastlines of territories he claimed for His Majesty, King George III. Together they extended a new dispensation, inscribed in new names for places and for plants written over the ones that were already there.

Long after the Endeavour returned to Britain, Banks testified before two House of Commons committees in 1779 and 1785 that "Botany Bay" would be an "advantageous" site for a new penal colony. Among his reasons for this conclusion were not only its botanical qualities – fertile soils, abundant trees and grasses – but its virtual emptiness.

Turning emptiness to empire

When Banks described in his own Endeavour journal the land Cook had named "New South Wales", he recalled: "This immense tract of Land ... is thinly inhabited even to admiration ...". It was the science of botany that connected emptiness and empire to the Enlightened pursuit of knowledge.

One of Banks's correspondents was the Scottish botanist and professor of natural history, John Walker. Botany, Walker wrote, was one of the "few Sciences" that "can promise any discovery or improvement". Botany was the scientific means to master the global emporium of commodities on which empire grew.

Botany was also the reason why it had not been necessary for Banks or Solander to affirm the land on which they trod was empty. For in a very real sense, their science presupposed it. The land, its plants and its people were theirs to name and thereby claim by "discovery".

When Walker reflected on his own botanical expeditions in the Scottish Highlands, he described them as akin to voyages of discovery to lands as "inanimate & unfrequented as any in the Terra australis".

As we reflect on the 250-year commemoration of Cook's landing in Australia, we ought also to consider his companions Banks and Solander, and their science of turning supposed emptiness to empire.

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