



Acacia brunioides

Australian Native Plants Society (Australia) Inc.

ACACIA STUDY GROUP NEWSLETTER

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From The Leader

Dear Members

I should start by apologizing for the time since our last newsletter – normally I would have prepared this newsletter much sooner but I decided I should wait until I had sufficient content to make a newsletter worthwhile. Thank you to those members who have provided items for the newsletter, the newsletter does rely on member contributions. If you haven't made a recent contribution, perhaps you could do something for our next newsletter, even just a short note on your favourite wattle.

Many members of our Study Group will currently be in lockdown as a result of Covid, and I hope that you are keeping safe and well. In Melbourne, we are allowed out for an hour a day of exercise, and today Sue and I went for a walk in a nearby reserve – and admired some of our local Acacias in flower, including *A. genistifolia* ssp *genistifolia*, *A. paradoxa* and *A. pycnantha*. Many Acacias in our own garden are flowering well at the moment, it appears that it is going to be great flowering season.

Finally, please note that Study Group memberships fell due for renewal on 1 July. Thank you to those members who have already renewed their memberships. If you have not yet renewed your membership, it would be appreciated if you could attend to this. Details regarding membership renewal are shown on page 16.

Bill Aitchison

Note: If you wish to view or download previous Study Group Newsletters, they are available on the Study Group website.

The address is:

<http://anpsa.org.au/acaciaSG>

Welcome

A special welcome to the following new members to the Study Group.

Kate Detchon, WA
Nicky Zanen, Boronia, Vic

Vale

Sadly, we have recently lost two members of the Acacia Study Group.

Barbara Henderson

Barbara Henderson passed away on 27 February 2021. Barbara had been a member of the Acacia Study Group since 1994. She had been Leader of the Wallum and Coastal Heathland Study Group for many years,

I met Barbara a couple of times when visiting Queensland, and always remember how enthusiastic and passionate she was about her local coastal flora, and its conservation.

Barbara never really got into computers, but she was a great telephone conversationalist, and I recall fondly her phone calls, where we discussed matters relating to Study Groups, current happenings in Queensland and Victoria, and of course, Acacias. I remember one of our conversations relating to *Acacia baueri*.

I also recall Barbara telling me about a small town near Toowoomba in Queensland, called Thornville. Barbara explained that she understood that it was named Thornville because of a nearby patch of the thorny *Acacia paradoxa*. Barbara was going to write a note on this for our newsletter, but that did not eventuate. Perhaps one of the Queensland members of our Study Group may be able to expand further on Barbara's story re the naming of this town.

Natalie Peate

Natalie passed away in April, just short of her 90th birthday. She had been a member of the Acacia Study Group since 2012.

Natalie made a wonderful contribution to Australian plants over many years through her nursery activities and also the books that she wrote. She was one of the authors of the "Grow What Where" series of books.

I visited her at her house in Blackburn (an eastern suburb of Melbourne) on a number of occasions and always took note of the low growing form of *Acacia redolens* that she had on her nature strip. I recall one day measuring the size of this plant with Natalie and a tape measure, and finding that this

single plant was 6m x 4m. A very dense ground cover that served as an excellent weed suppressant!

From Members and Readers

Nicky Zanen (Boronia, Vic) has drawn attention to work being done by Kakadu National Park Staff and traditional custodians to safeguard *Acacia equisetifolia* (the Graveside Gorge Wattle). The Parks Australia website notes the following:

"Only named in 2014, the Graveside Gorge wattle (*Acacia equisetifolia*) is listed in the Environment Protection and Biodiversity Conservation (EPBC) Act 1999 as critically endangered, and exclusively grows in Kakadu National Park.

It is a member of the legume family and is a shrub that grows up to 1 metre tall. The yellow flowers are clustered in round flower heads and the leaves are arranged in regular crowded whorls.

It is known from two small populations located on separate bluffs above Graveside Gorge in a remote area of the park, about 1 kilometre apart. The populations are under threat from changed fire regimes.

Kakadu National Park staff and traditional custodians monitor the populations regularly and, as part of the monitoring, have collected a full genetic representation of the species.

Fire management in Kakadu National Park, which includes fuel reduction burns in a mosaic pattern, aims to reduce the likelihood of large-scale fires and provide longer intervals between fires.

As a safeguard against extinction, seed of Graveside Gorge wattle is stored at the National Seed Bank at the Australian National Botanic Gardens. Future plant conservation recovery projects include propagation and translocation of plants."

This species was only named in 2014. A note regarding the species and a photograph appeared in our Newsletter No. 125 (June 2014).

Reference: <https://parksaustralia.gov.au/news/saving-six-unique-plants-in-six-unique-locations/>

In a separate communication, **Nicky** advised that she recently visited the Bamboo Creek Tin Mine, near Darwin, where she spotted a wattle, *Acacia holosericea*, with an interesting spiral seedpod. On closer inspection, there were green ants moving up and down the branches.

She was told the ants would be eaten by the locals, but wasn't prepared to try that. The Aboriginal people also ate

the white larvae found inside the leafy nests; it has a lemon taste. The ants and larvae were also pounded and mixed with water to produce a lime flavoured drink to relieve colds, headaches and sore throats.



Acacia holosericea

Photo Nicky Zanen

Where one finds green ants, you often find butterflies like oak-blues of the genus *Arhopala*. The caterpillars are attended by the green ants that keep them protected from predators in return for sweet secretions. Mature caterpillars curl up inside fresh young leaves, spin their cocoon and pupate.

In May 2020 the ABC Australia reported that “the native Australian ant is a surprising ingredient in new food and drinks. From cheese to gin, they are adding zing. But they are tricky to harvest – and pack a punch when they bite! And they are selling for up to \$650 a kilogram.” They added that Chris Lloyd from Adelaide Hills won a gold medal at the World Cheese Awards with goats cheese wrapped in lemon myrtle topped with green ants.

So there is much to be said about the interaction between our flora and fauna.

Wendy Grimm has asked whether any Study Group members have experience growing *Acacia saligna* “Springtime Cascade” and know if it is sterile or would spread readily by seed under Sydney conditions? She notes that local councils have difficulty controlling the species in northern Sydney. If you can help Wendy with this query, let me know and I can put you on touch with her.

Shortly after receiving Wendy’s query, I happened to be talking to **Alan Gibb**, and asked him if he had any thoughts on her question. Alan noted that he doesn’t have any first hand knowledge of the weediness or otherwise of Springtime Cascade. He did comment that he did have a prostrate form of *Acacia saligna* (probably not Springtime Cascade) in his garden, it lasted about 4 years but then got too dry and it died. There was never any sign of it

spreading. But Alan did note that *Acacia saligna* (the normal form) is a pretty widespread weed in Victoria.

Bob Lorensene (Mulgrave, Vic) is very proud of his *Acacia leprosa* ‘Scarlet Blaze’. He bought his plant about 5-6 years ago, and it is now a feature in his front garden, right next to the footpath where passers by can admire the plant, and at the present time its brilliant flowering.



Bob Lorensene’s *Acacia leprosa* ‘Scarlet Blaze’ Photo Bill Altchison

Sheryl Backhouse (Mt Samson, Qld) has drawn attention to a couple of wattle seed projects.

The first relates to a new project exploring Woorabinda’s wattle seed potential. The Woorabinda Aboriginal Shire Council is aiming to create a community owned and operated commercial-scale wattle seed plantation near the Woorabinda township in central Queensland.

Reference: https://www.greeningaustralia.org.au/new-project-explores-woorabindas-wattleseed-potential/?_cldee=c2hlcnlslmJhY2tob3VzZUBiaWdwb25kLmNvbQ%3d%3d&recipientid=contact-413264286c74e911a85b000d3a6a0a5e-46d958e02aec4b1482d4c86d32218ea4&esid=839d0bdb-bc56-eb11-a812-000d3a6b5fe3

Sheryl has also drawn attention to an article by the Australian Native Food & Botanicals (ANFAB). ANFAB is the peak national body which represents all interests in the rapidly growing Australian native food and botanical sector.

The article that Sheryl refers to is titled “Accelerating wattle seed production for the Australian Native Food Industry”. It notes that the Wattle Seed industry has the potential to be a game changer in the Australian agriculture sector, with over 100 edible wattle species recognised across Australia. It is estimated that the industry needs to triple its production

volumes over the next 5 years to reach a GVP of \$10m. It also identifies areas in which research is needed.

Reference:

https://anfab.org.au/main.asp?_=Accelerating%20wattle%20seed%20production%20for%20the%20Australian%20Native%20Food%20Industry

Peter Goldup (Mt Evelyn, Vic) comments (11 August 2021) on how prolific his Acacias have been with their flowering this year in milder conditions. He provided a photo of a red flowering *Acacia leprosa* x *howittii* (possibly x *cognata*). He notes that this hybrid comes into flower in mid – late July into August, and is a lovely flower colour, a little leggy but much hardier than other red forms, because of the hybridizing. The photo was taken early August 2021.

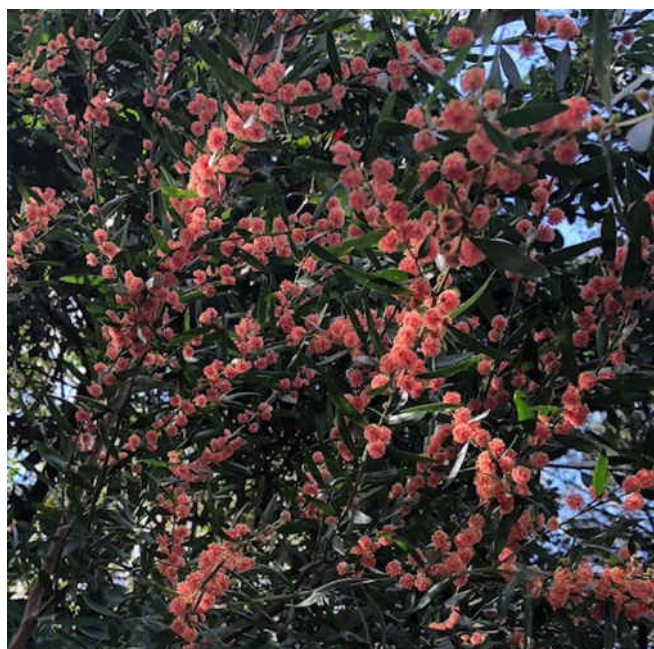


Photo: Peter Goldup

Jan Sked (Lawnton, Qld) reported (14 February 2021) on some challenges in her garden:

“At present I am planting wattles to take the place of the mature trees that I have lost due to some sort of poison in the soil. The first tree died in 2014 at 32 years of age, when it had been quite healthy. Overnight the leaves turned bright yellow and the tree was dead within three weeks. Since then I have lost 15 mature rainforest trees, all in the same section of the garden. About 6 of the wattles I have planted to replace them have also died. I usually lose the trees after heavy rain. I hope that the poisoning is not deliberate. Our property is part of what used to be a farm, so perhaps there is something buried in the soil, but we have been here for 55 years and the problems did not start until 7 years ago.

One of my favourite wattles, *Acacia grandifolia*, was the first wattle I lost in this section of the garden. It was

looking really good and about to flower when it suddenly succumbed. I grew it from seed from the Study Group seed bank. However, I have another one in a different section of the garden and it has flowered twice for me and appears to be in good health. I have a number of seedlings coming on in my seed box, which I shall prick out very shortly.

It always disappoints me that so few people plant wattles in their gardens. I started to plant wattles when I was a child, but did not have much success, as I did not realise that you had to take the seeds out of the pods before planting them. My favourite time of the year was when the wattles started flowering all along the sides of the roads. When we moved to Lawnton in 1966 and I had my first garden, the first plant I grew was *Acacia podalyriifolia*. The very kind nurseryman in our local Roseland Nursery obtained it for me from some source. Later I found a Forestry Department Nursery in the area where they grew a few wattles. Then I discovered the Society for Growing Australian Plants in 1969 and a whole new world was opened up to me.

Wattles are wonderful !”

Anne Keaney (Stanwell Park, NSW) has observed *Acacia pravissima* by the roadside in the southern end of the southern tablelands in NSW – such as near Cooma and Numeralla. She notes that these plants have orange buds. Can anyone offer an explanation for these orange buds?



Acacia pravissima

Photo Anne Keaney

Acacia cultriformis 'Cascade'

I have received a query from someone who would like to buy an *Acacia cultriformis* 'Cascade' (preferably in Victoria). The person concerned has been searching for the grafted standard, but it seems that it is not available anywhere. The only place that I have seen it growing is at the Cranbourne Botanic Gardens.

If anyone can help, please let me know and I will pass on any information to the enquirer.

Wattles at Maranoa Gardens - *Acacia vestita*

by Bill Aitchison

This is the second of what is planned to be a number of articles on Acacias growing at Maranoa Botanic Gardens in the eastern Melbourne suburb of Balwyn.

There are two features of the specimen of *Acacia vestita* at Maranoa Botanic Gardens that particularly impress me. Firstly, it is over 30 years old, and is now a very striking mature tree, spreading several metres across and with a large twisted trunk. Secondly, every year it flowers reliably and quite brilliantly, during July and into August. It puts on a real display at this time of year. It also has an attractive weeping habit.



Acacia vestita at Maranoa Botanic Gardens Photo Bill Aitchison

It occurs naturally in NSW, mainly on the western side of the Great Divide from Dunedoo south to Yass. It has also become naturalised in some areas (although the plant in the Maranoa Botanic Gardens has not shown any inclination to spread – but if you live near a bushland area, it may be desirable to avoid planting it).

The species name means “covered with hairs”, in reference to the dense fine hairs on the phyllodes and branchlets. This

explains its common name of hairy wattle, other common names applied to it are Weeping Boree,



Rainbow Lorikeets in *Acacia vestita* at Maranoa Botanic Gardens

I have been observing this particular tree for a number of years, in fact since about 2007. One aspect that I find interesting is that it produces seed in December, but my impression is that the amount of seed it produces varies from year to year. I am guessing that there could be a number of explanations of this. Firstly, I could be simply wrong in having come to this subjective view. Secondly, is it possible that as the tree ages, it produces less seed? Or thirdly, could the activities of birds like the rainbow lorikeets have an impact on seed production? Or is there some other explanation?

Perhaps a warning in relation to this species is to be wary of seed collected from garden grown plants. In previous Study Group newsletters, Warren Sheather reported that seed collected from an *Acacia covenyi* was not pure *Acacia covenyi*, but was a hybrid with *Acacia vestita*. Given that there are many different wattles growing at Maranoa Botanic Gardens, I assume that one may need to be wary of any seed collected in this situation?

But the aging tree at Maranoa Botanic Gardens is still a very impressive specimen.

Australia's Imperilled Plants

A report has recently been released under the title “Action Plan for Australia's Imperilled Plants 2021”. The report was funded by the National Environment Science Program through the Threatened Species Recovery Hub, based at The University of Queensland, and the Department of Environment and Science, Queensland.

In Australia, there are more than 22,500 native vascular plant species. The report presents detailed profiles for the 50 Australian plant species identified as having the highest imminent extinction risk – and has termed these “imperilled

plants". The species were identified through extensive literature review and more than 100 expert interviews.

Of the 50 species profiled as part of this review, there are 3 *Acacia* species (all from WA), as follows:

Acacia leptoneura (Slender-nerved *Acacia*) – This is known from only 2 individuals, separated by 1km in a very restricted area northeast of Dowerin in the Avon Wheatbelt region of south western WA.

Acacia pharangites (Wongan gully wattle) – This is known from two subpopulations in the Wongan Hills and has undergone a recent decline as mature individuals senesce in the absence of recruitment.

Acacia volubilis (Tangled wattle) – This is known from a very restricted distribution in the Cunderdin-Tammin area of the Avon Wheatbelt region. It occurs in small fragmented subpopulations predominantly along degraded roadsides, a tenuous habitat.

Reference:

<https://www.nespthreatenedspecies.edu.au/media/wksjzmcsl/2-4-action-plan-for-australia-s-imperilled-plants-2021.pdf>

Acacia cyclops

In our Newsletter No. 145, we included a report from **Kate Detchon** on an area north of Perth where *Acacia cyclops* is showing signs of disease (an area where this species occurs naturally). More generally, Kate expressed concern that in this area there has been a big decline in *Acacias* in the last 10 years, with very little seedling recruitment and no suckering, even of *Acacia rostellifera*.



Yellowing phyllodes of *Acacia cyclops*

Photo Kate Detchon

In an attempt to uncover what is going on, Kate has more recently taken some samples of soil and leaf material from 2 healthy plants, and 4 unhealthy ones, and sent them to the plant pathology people at the WA Department of Primary Industries and Regional Development (DPIRD).

Their results showed that

- (a) no *Phytophthora* was detected in the samples submitted

- (b) *Pythium* was detected in the 4 unhealthy soil samples, but not in the 2 healthy soil samples
- (c) no *Phytoplasma* was detected in the leaf samples submitted.

The DPIRD report suggested that due to the climactic conditions which have occurred this year, the trees may have been more stressed and therefore susceptible to a *Pythium* root rot. This may possibly be causing the symptoms of wilting observed in the trees.

I asked **Kevin Handreck** if he would have a look at Kate's notes and her photos of the yellowing *Acacia cyclops* and other species. Kevin kindly provided the following comments:

"All the closeup symptoms look like iron deficiency, either because the sand has too high a pH for these particular plants, or because somehow too much phosphorus has been added to the soil, or perhaps both. With a sandy soil it would not take much extra phosphorus to provide too much to sensitive plants.

Acacias cyclops, *rostellifera* and *saligna* are not sensitive to P, and *xanthina* is only moderately sensitive, so I think that excess P is not involved.

This seems to be a disturbed site, so some calcareous material could have been mixed with parts of the area to give a pH that is too high for these plants. Either you cut losses and grow something else that is tolerant of high pH, or you repeatedly spray the plants with iron chelate, or you could try inserting iron-rich potting mix into holes dug into the rootzone under each of the affected plants, if you have enough time or some slaves (volunteers). Mix 1 cup of ferrous sulphate into each 10 L of potting mix. You will need 4-5 holes under each shrub, dug into its rootzone and stuffed with the potting mix. The idea is that the plants' roots will grow into the acidic mix and so be able to extract iron from it.

Samples of soil from across the area could be tested for lime content (fizzing when hydrochloric acid is added) or pH checked as confirmation of my suggestion."

Acacia pruinosa – Frosty Wattle

By Ros and Ben Walcott, Canberra (26 February 2021)

We planted an *Acacia pruinosa* in November 2011 obtained from APS Adelaide. This tree has quickly grown to 5m high and matches in height the nearby *Araucaria bidwillii*, Bunya Pine, which was planted much earlier in 2003. I must admit that I had misgivings that this wattle would grow at all in our frosty climate, let alone as vigorously as it has. This small tree is native to northeastern NSW and southeastern Queensland. The greyish-green ferny foliage is very attractive and our tree has bloomed reliably every Christmas since 2013 with sprays of golden ball flowers. The only

exception to this was 2020 in the dire heat, drought and smoke of our start to that year, when the bloom was delayed until March. This year our tree resumed its reliable Xmas bloom, then celebrated La Nina by blooming again in February in gratitude for the extra rain. The flowers of this wattle have become a valued part of our Canberra Christmas.



Acacia pruinoso

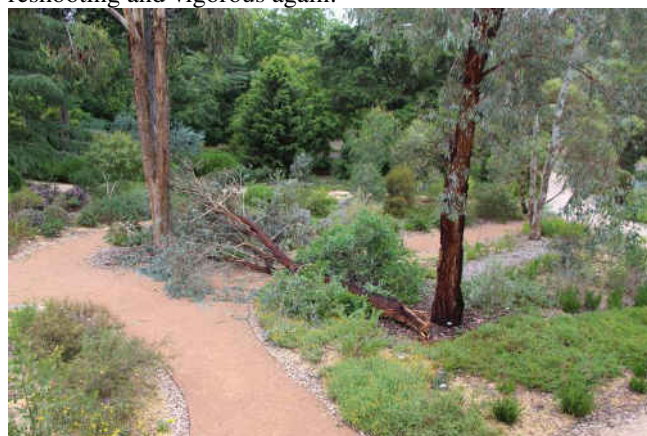
Photo Ros and Ben Walcott



Acacia cremiflora

Photo Ros and Ben Walcott

We have planted five *Acacia glaucoptera*, or Clay Wattle, supposedly 1m high x 1m wide, but more like 1.5m high x 3m wide in our garden. Only one survives after various garden catastrophes. This plant has wing-like blue green foliage, reddish when young and deep yellow globular flowers emerging from central stems in spring. The recommendation is to plant in partial sun, but our plant is thriving in full sun and frost. This plant was growing beautifully before being squashed flat by the fall of a heavy limb of *Eucalyptus sideroxylon* in December 2020. This plant was cut back severely and is now, six months later, reshooting and vigorous again.



Acacia glaucoptera squashed by a Eucalypt

The Three Best Wattles in our Garden

By Ros and Ben Walcott, Canberra (2 July 2021)
 Website: walcottgarden.com

The three best performing wattles in our garden, (my considered opinion this month), are *Acacia cremiflora*, *Acacia glaucoptera* and *Acacia subulata*. Last year, 2020, *Acacia cremiflora* flowered from March to September, then bloomed again in December. *Acacia glaucoptera* flowered from September to November and *Acacia subulata* was in bloom every month of the year except February.

We have planted three *Acacia cremiflora*, in 2016-17, obtained from Bilby Blooms near Coonabarabran, NSW. These rounded shrubs, 1-1.5m high x 2m wide, with green circular foliage on arching branches and cream globular flowers, are hardy in a range of soil types in full sun or part shade. This wattle is native to the slopes and tablelands west of Sydney. The prominent seed pods that form after flowering are brown in colour and have an oblong shape, and are straight, or sometimes curved with a length of 40 to 80 mm. The species was first formally described by botanists Barry John Conn and Terrence Michael Tame in 1996.



Acacia glaucoptera, now recovered

We have planted three *Acacia subulata*, or Awl Wattle, but only one survives, planted in August 2016. This small tree or tall shrub, 1.5 – 4m high x 1-2m wide, which has a slender habit, narrow graceful foliage and showy yellow ball flowers, grows in moist or dry sites in full or partial sun. This plant tolerates heavy soils and is native to northeastern NSW along the slopes and ranges.



Acacia subulata

Bob Lorensene’s Wattle Wood Collection

Bob Lorensene (Mulgrave, Vic) is a member of our Study Group and a talented wood turner. Over a number of years, he has collected wood samples from various *Acacia* species, and has turned these samples into decorative pieces in the shape of “mushrooms”. He has recently donated his collection (currently in excess of 30 pieces) to **Suzette Searle**, who is President of the Wattle Day Association. The collection will be known as the 'Bob Lorensene's Wattle Wood Collection'.

Suzette has commented on how unique and wonderful the collection is, and how instructive it is in showing differences in *Acacia* wood colour and basic wood density. She anticipates that she will be able to use the collection in future Wattle Day Association displays.



Part of Bob Lorensene’s Wattle Wood Collection Photo Suzette Searle

Bob has indicated that he is happy to turn additional “mushrooms” if he is able to secure samples of wood from additional species, and thereby add to the existing collection. If you have any samples of wood (eg from pruning of your garden plants) and would be happy to donate these samples to Bob, could you let me know (acaciastudygroup@gmail.com), and I can liaise with Bob and Suzette.

Suzette tells me that on receiving Bob’s collection, she was reminded of a research paper that she co-authored with John Owen (published in 2005), titled “Variation in basic wood density and percentage heartwood in temperate Australian *Acacia* species.” This research involved sampling two large *Acacia* species trials planted near Canberra for their wood density. They cut hundreds of wood samples from 18 *Acacia* species (8 samples per tree from 220 trees).

This paper is freely available at https://www.researchgate.net/publication/242513453_Variation_in_basic_wood_density_and_percentage_heartwood_in_temperate_Australian_Acacia_species



The photo above shows Suzette in the *Acacia* species trial at a place called Uriarra near Canberra next to a good

looking *Acacia mearnsii*. Just a month after they finished sampling in December 2002, the entire trial was destroyed by the fires of January 2003 that burnt into Canberra.

Reference:

Searle, S.D. and Owen, J.V. (2005) Variation in basic wood density and percentage heartwood in temperate Australian *Acacia* species *Australian Forestry* 68, 126-136.

***Acacia* sp. Hollands Rock**

Some time ago we referred in our Newsletter to an *Acacia* referred to as *Acacia* sp. Hollands Rock (refer Newsletter No. 125, June 2014). The background to this *Acacia* was that many years ago (in 1992 or before), a seed collector for Nindethana collected some seed from, most likely, an area called Holland Rocks, which is about 40 kms north east of Pingrup in the Shire of Kent in WA. However, the species was not identified at the time and so the seed was recorded by Nindethana under the name *Acacia* sp. Hollands Rock (it is no longer listed in the Nindethana catalogue).

I am aware that a number of Study Group members have tried propagating it from the seed from Nindethana (of which we also had some in our Seed Bank). One of those members was **John Boevink (Port Sorell, Tas)**. John's plant has flowered, and he has provided the following photo. He notes that it flowered just about till the start of winter, with his image showing the start of flowering.



At one of the native plant sales in Melbourne, I had the opportunity to buy a plant that was labelled as *Acacia* sp. Hollands Rock, presumably being a plant that had been propagated from the Nindethana seed.

Based on the plant I bought, and from John's photo (and also knowing the location where the seed came from), I keyed out the species and it keyed out as *Acacia assimilis* ssp *atroviridis*. As it happened, we already had in our garden a specimen of this wattle, so I was able to compare the existing plant in our garden with the plant bought as Hollands Rock – and they appeared pretty identical. We then planted the Hollands Rock plant immediately adjacent to the existing plant in the garden.

Acacia imbricata

By **Bill Aitchison**

One of my favourite *Acacias* has to be *Acacia imbricata*, with its very attractive foliage and great flowering in late winter and early spring. We have had a plant in our garden for many years. But a couple of years ago, a large limb broke off, leaving maybe just half the plant, although it was still attractive and flowered well.

We then noticed that the plant was shooting from near the base, probably in response to the loss of a significant part of the plant. Interestingly, the new shoots then exhibited fasciation in three areas. I can't say that I have ever understood what causes fasciation, although in this case it may have been a result of the stress caused by the loss of the large limb?



Fasciation on *Acacia imbricata*

Just a couple of weeks ago, we had a major storm in Melbourne, and the result of this was that the remaining large limb broke off, leaving just the newer shoots remaining (looking very healthy, despite the fasciation).

Most of the fallen limb was put through our mulcher, but I took the larger section of it to **Bob Lorensene**, thinking that he could make some use of it in his wood turning work (see

note above). Bob was happy to receive this wood, and immediately used a length of it to produce one of his “mushrooms” (see photo below). He commented that the wood was quite heavy and hard, with a beautiful colour. Being very fresh wood, it would be likely to lose some of its weight as it dries out.



Acacia imbricata

Acacia wattsiiana

By Bill Aitchison

The most recent issue of *The Victorian Naturalist* (June 2021) included a biography of Henry Watts (1828-1889). It notes that Henry Watts was a microscopist, botanist, marine biologist and a manufacturer of perfumes made from distilling flowers. Interestingly, the article notes that von Mueller named a species of wattle after him (*Acacia wattsiiana*). This caught my attention, as other references I have refer to this wattle being named after an Alfred Watts.

For example

- (a) Normal Hall, in *Botanists of Australian Acacias*, stated that *A. wattsiiana* is possibly named after Alfred J Watts, and provided biographical details of this person.
- (b) In *Acacias of South Australia*, by D J E Whibley (1980), Whibley states that the species name probably commemorates Alfred Watts, one of the two members of the Legislative Council elected in

1855 (died 1884).

- (c) In *Acacias of Australia* (Volume 2), Marion Simmons stated that the wattle is “possibly named for Alfred Watts”.
- (d) In the *Encyclopaedia of Australian Plants Vol 2* (1982), Elliot and Jones state that the derivation of the species name is obscure, but probably named after Alfred Watts.

One of the references in the recent June 2021 article was to an article in *The Victorian Naturalist* in 1908 by Joseph Henry Maiden. This article related to Records of Victorian Botanists, one of whom was Henry Watts. In this article, Maiden stated that Henry Watts is “commemorated by *Acacia wattsiiana*”.

Note that a check of the original 1864 description of the species in *Flora Australiensis*, von Mueller did not include any information in relation to the source of the name.

In view of the uncertainty conveyed in each of the 4 references above suggesting that the wattle has been named after Alfred Watts, and given Joseph Maiden’s fairly definite assertion that it is named after Henry Watts, my inclination is to think that this species does indeed commemorate Henry Watts.

But I am not an expert in the area of botanical nomenclature – perhaps there may be someone who can comment further on the naming of *Acacia wattsiiana*?

The recent article in *The Victorian Naturalist* includes a reference to an 1866 note in *The Australasian*, which included information on how Watts manufactured perfume (including, from wattles). This article read as follows:

“We have written a word or two respecting colonial perfumery, of which there are several small exhibits in different ways, but only one demonstrating the establishment of a regular manufacture and trade. This has been accomplished by Mr. Henry Watts, of Warrnambool, who has striven to familiarise the public mind with the excellence of his colonial scents, both by his display of samples, and by dispensing freely from his glass jar of “millefleurs” to all visitors who come to him. Ladies are thus always carrying away with them from the Exhibition evidences of his success. His process of extracting the scent from the natural products differs according to the nature of the plants he deals with. The stronger plants or leaves undergo the process of distillation in the usual way, but with flowers of more delicate odour—such as the violet, rose, narcissus, wattle, &c – he adopts a more elaborate and searching system, by means of maceration. The flowers to be used are placed in oil thirty or forty hours, and, after pressure, replaced by other flowers till the oil is full of the required odour. Pure Warrenhelp spirit is then mixed with the oil till it is charged with the odour, and a simple extract, forms the scent. As might be expected, Mr Watts makes the extract of the wattle the basis of them all. The material is

abundant at Warrnambool, and during the flowering season as many as twenty boys are engaged gathering the blossoms for 6d. per lb. 200 gallons of Mr. Watts' manufacture have now been used; he has gained prizes from the Horticultural Society of Victoria and Ballarat, and a £50 premium for his establishment of a new industry which supplies a colonial article at the price of that imported from Europe. Mr Watts, who is a microscopist, also exhibits in the fine arts gallery a collection of 100 species of polynoa, from the Warrnambool coast, similar to those which, at the request of the director of the National Museum, he is about to furnish to that Institution."

References:

Anon (1866) Oils, Gums and Perfumes. *The Australasian* 29 December 1866

Maiden, J.H. (1908) Records of Victorian botanists. *The Victorian Naturalist* 25: 101-117

Wallis, R.L. and Mondon, J. (2021) Henry Watts (1828-1889): "the pioneer of freshwater phycology in Victoria" *The Victorian Naturalist* 138, 93-96

Acacia genistifolia

Acacia genistifolia is quite common and widespread in south eastern Australia. In NSW and the ACT it is mostly scattered along the Great Dividing Range, from Dubbo south to Nadgee Nature Reserve. It is also prevalent in Victoria, occurring through the Grampians, central Victoria, Melbourne and near coastal Gippsland. It is also found in Tasmania, and has been recorded from South Australia (with very limited collections).

It is quite variable across its geographic range, and a recent review of the species has resulted in three subspecies now being recognized – being *A. genistifolia* ssp. *genistifolia*, *A. genistifolia* ssp. *attenuata* and *A. genistifolia* ssp. *platyphylla*.

A key to the different subspecies is included in Muellera (see reference below). The main differences between the three subspecies relate to the size and shape of the phyllodes, and to the mature pods. The subspecies also have varying geographic distributions. *A. genistifolia* ssp. *genistifolia* has a widespread distribution, in SA, NSW, the ACT and central Victoria including the Grampians and immediately north-east of Melbourne. *A. genistifolia* ssp. *platyphylla* is found in Victoria in the Grampians, Otways and Wilsons Promontory region, and Tasmania. *A. genistifolia* ssp. *attenuata* is found in south eastern NSW and Gippsland.

Reference:

Webb, A., Ohlsen, D., and Walsh, N. (2021). A phenetic analysis of morphological variation in *Acacia genistifolia* (Fabaceae subf. Mimosoideae), with recognition of three subspecies. *Muelleria* 39: 113-126.

Recent Acacia Research

Acacia purpureopetala

Acacia purpureopetala is the iconic but threatened *Acacia* with mauve flowers, restricted to a few disjunct populations in far north Queensland. Although seed production is poor and germination sporadic, the species occurs in abundance at some field sites. The species is listed as Critically Endangered under the Environment Protection and Biodiversity Conservation Act.

This recent research found that there is limited genetic diversity within the various sub-populations of the species.

Whilst the current abundance of the individuals of the species at each location indicates that the species is likely to be downlisted from Critically Endangered to Vulnerable and therefore unlikely to get conservation priority, the low levels of genetic diversity within each sub-population ring alarm bells for the long term future of the species.

Reference: van der Merwe, M.M., Yap, J.-Y.S., Wilson, P.D., Murphy, H.T., Ford, A. All Populations Matter: Conservation Genomics of Australia's Iconic Purple Wattle, *Acacia purpureopetala*. *Diversity* 2021, 13, 139. <https://doi.org/10.3390/d13040139>

Acacia meiantha

This endangered species was referred to in our Newsletter 141 (June 2018). It was noted there that it is endemic to NSW, being limited to three disjunct populations.

A recent paper published in *Cunninghamia* provides the results of recent field surveys, and concludes that the threatened species listing as Endangered under both State and Commonwealth legislation is warranted. It is noted that the species does not occur on any conservation lands, has restricted distribution and is vulnerable to ongoing threats.

The paper notes that "tantalising questions remain as to why this species is so restricted in the landscape when it occurs in contrasting geological and soil habitats and a range of vegetation communities". It is noted that taxonomically the species appears robust, but nothing is known of its genetic diversity either within or between subpopulations. The recruitment behaviour, reproductive biology and fire ecology of the species all remain data deficient.

Reference: Medd, Richard W. (2020) Distribution, ecology and conservation of the endangered shrub, *Acacia meiantha* (Fabaceae) in Central West New South Wales. *Cunninghamia* 20: 183-192

Acacia longifolia

In our Newsletter No. 137 (June 2017) we referred to *Acacia longifolia* and how it has become an invasive weed in the Grampians in Victoria, especially after fires in 1999 and 2014. We noted that Parks Victoria (the Government agency responsible for looking after the Grampians National Park) had received recognition for its work in fighting this invasive wattle. In particular, it had been recognized for its novel approach of taking 3D photographs of an area that were then used to help in mapping the wattle (by using special computer software and 3D glasses).

A recent paper has reviewed work that has been done in Portugal, where aerial imagery has been used to detect this invasive wattle. The paper notes that *Acacia longifolia* was introduced to Portugal for controlling dune erosion. However, due to its proliferation from excessive seed production (roughly 12,000 seeds per sq m, per year), it is now considered an invasive species.

The paper discusses the method used in undertaking this aerial imagery.

Reference: C. Gonçalves, P. Santana, T. Brandao et al., Automatic detection of *Acacia longifolia* invasive species based on UAV- acquired aerial imagery, Information Processing in Agriculture, <https://doi.org/10.1016/j.inpa.2021.04.007>

Spectacular Minni Ritchi barks

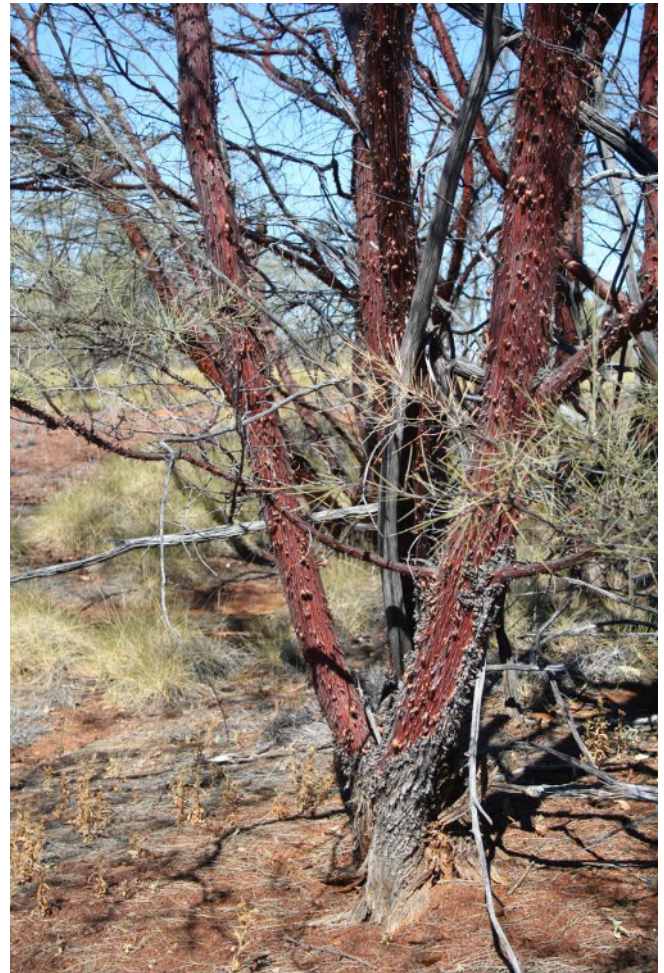
Article and photos by Trevor Blake

The appeal of so much of our flora is centered around the flowers and their spectacular attributes. Have we taken as much notice of the barks? Well let me introduce you to a group of fascinating species in the *Acacia* family. This group all has one thing in common- 'Minni Ritchi Bark', it peels and curls away from the trunks and branches in a spectacular fashion and generally the curls are in the red/orange range.

Found in semi-arid regions I have come across *Acacia cyperophylla* var. *cyperophylla* near Dalhousie Springs, on the edge of the Simpson Desert, up out of Winton and on the Bush Heritage property of Cravens Peak, close to the NT. border. It swings across the country into the Carnarvon area of WA. where a variety is located entitled *Ac. cyperophylla* var. *omearana*. These are hefty trees growing to 10 m. branching low on the trunk. Beautiful wood with spectacular wood turning and furniture making qualities; it is dense and very heavy. The leaves are needle-like and the flowers are golden rods.

Another with this unusual bark that has a bushy habit and generally grows between 2-4m. with a typical shrubby habit is *Acacia rhodophloia* commonly known as the Red Mulga. The leaves are sickle-shaped and flat, flowers golden and

either globular or rod-shaped. Mainly located and widespread in arid areas of NT and central WA with odd occurrences in SA., Qld., and NSW. Aboriginal Traditional Elders informed us that diggings at the base of these bushes usually indicated the presence of Bilbies, our infrared cameras confirmed this information.



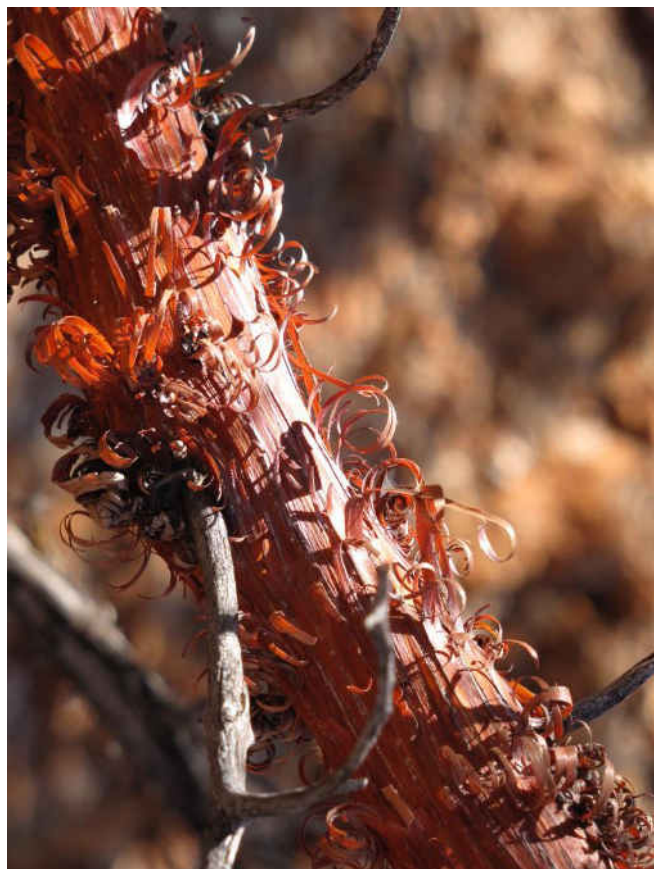
Acacia cyperophylla

Acacia doreta grows between 2-5m. and is widespread in desert areas extending from the eastern WA through most of the deserts into south central dry country of the Territory and north west SA. and thrives in rocky hills and stony plains.

Acacia lysiphloia is a species found mainly in tropical areas growing from 1-4m. as a bushy shrub with flat narrow leaves. The flowers are in golden rods on long pedicels. Its distribution extends from the Kimberley through NT. into Qld. in stony, hilly country in sands and clays. We have met this species in Kununurra and Uluru.

The Kimberley and Pilbara regions have *Acacia trachycarpa* and *Acacia gracillima* with this spectacular bark. The leaves of both species are long and narrow, the former growing as a bushy species of 1-4m., being found west of the Hamersley Range growing along watercourses

in sands and gravels flowering between April - October The latter is a more tropical tree reaching 9m. from the King Leopold Range where it inhabits steep rocky slopes and is endemic to Kimberley. It flowers between May and August with bright golden cylindrical flowers.



Acacia rhodophloia



Acacia lysiphloia

From the WA tropical areas and concentrated in the Kimberley is *Acacia delibrata* another with this Minni Ritchi defining attribute. Again found along watercourses relatively close to the coast in stony and sandy soils it is also found on some offshore islands. It can grow between 6-9m. flowering between May and August with pale rod flowers. The leaves are narrow, linear and flat.



Acacia doreta

Acacia chisholmii can be located as you progress from west to east in western Qld. areas around Cloncurry Mt Isa on stony lateritic plains and sands in grasslands and spinifex country. Flowering from May to August with long golden rod flowers. It is a bushy multi-stemmed shrub that grows up to 4m. with flat linear leaves.

Coming south into western Qld in the Miles Gurulmundi area and central NSW in the Bourke, Lake Cargelligo vicinities is *Acacia curranii* which can be found on weathered sandstone. This is a low multi-stemmed shrub that can reach 3m. with long fine linear leaves, golden elliptical flowers that are seen in August - September.

In the southern wheatbelt of WA. in the Wongan Hills, Hyden scrubland communities and granite outcrops grows a substantial Minni Ritchi-barked shrub to small tree -*Acacia fauntleroyi*. Like so many in this group the leaves are long and narrow; the flowers golden rod-shaped or more oval.

The last is a small branching shrub that varies in height from 0.5-2m. with narrow rigid leaves, *Acacia repandra*. Flowers are elliptical, bright yellow and it can be found amongst granite outcrops in sandy loams in the Wongan Hills, Holt Rock areas flowering from June to August.

Even if you can't grow one of these fascinating wattles they are well worth keeping an eye out for in your travels.

Yellow Wattle

Ian Campbell (Sydney, NSW) is the grandson of A J Campbell, who is recognized for his formation of a Wattle Club in Victoria in 1899 and for the first suggestion of a Wattle Day during a speech in 1908.

Ian recently reported on a walk that he took in his local neighbourhood:

“Happened this morning to chance upon a 'Sydney' acacia in full bloom this July morning as I rounded a street corner. (I normally don't walk on this route, hence the surprise). I was reminded of the review in 1921 of the photo essay my grandfather, A J. Campbell, had written in 1921, 'Yellow wattle', and the exquisite review by an unknown reviewer, at the time. Many years ago I converted some of the review into a kind of 'poem' with some additions of my own.”
Ian's poem is set out below.

Yellow wattle

It is the shining glory of our hills and streams:
when other flowers lie hidden, it radiates forth
its richest treasures of gold, shines through the wilderness,
illuminates the ragged breaks between the scrub.

floods will not drown it, nor fire destroy it;
after forest fires, seeds germinate more freely.
when neglected it flourishes, yet it takes kindly
to cultivation, in park and along the roadside verge.

poets and prophets have searched for epithets:
'apples of silver in baskets of gold'. it expresses
all moods. there is the silver wattle for gladness,

the weeping wattle for grief. the fortunate may rejoice
in its billowing splendour, the bereaved find gentle
solace as if gathered in as one, unto its tender grace.

Ian comments that some years ago he had a go at trying to convert the poem in English into a version in Indonesian, 'Acacia kuning'. He notes that it is a bit literal and does not quite reflect the conciseness of his English 'original' but it joins the range of poems he has written in not just English but also Indonesian language. I have not reproduced the Indonesian version in this newsletter, but if you would like to see the Indonesian version let me know and I will forward it to you.

In a subsequent email, Ian drew attention to a Museum Victoria (2011) video, about his paternal grandfather, AJ Campbell (1853 – 1929) - 'a passion captured'. The 2

minute video can be viewed at
<https://youtu.be/iWPxPEQxdWI>.

In a further email Ian refers to AJ Campbell's visits to Queensland – in 1885 to North Queensland, in 1891 to Tenterfield via 'The Big Scrub' to Southport and in 1916, to North Queensland including Dunk Island. Ian assumes that AJ Campbell met EJ Banfield, author of *The Confessions of a Beachcomber*, during his visit to Dunk Island, but he has no verification of this. But in 1908, Banfield sent a copy of his book to Campbell.

Acacias in the news

On Sunday 6 June 2021, ABC Radio National broadcast a program on Science Friction, called *The wattle war*. This program told the story of the debate that took place in the 2000s regarding the name Acacia, which finally culminated at the 2011 International Botanical Congress, where the decision taken had the effect of retaining the name Acacia for Australian Acacias. A podcast of the 25 minute podcast is available on the ABC website and may be accessed at: www.abc.net.au/radionational/programs/sciencefriction/acacia-name-africa-australia-wattle-war-botany-taxonomy/13372220

The program features a number of guests, including Australian botanists **Bruce Maslin** and **Kevin Thiele**.

Although somewhat old news by now, we have not previously referred in this newsletter to the release of Australia's new \$100 note, on 29 October 2020. This is the last of the new series of banknotes, all of which feature a different species of Acacia. Quite appropriately, the \$100 note features *Acacia pycnantha*, our national floral emblem.

In our previous newsletter (No. 149), we referred to an article that appeared in the *Blue Mountains Gazette* regarding wattle seeds being sent into space for six months, and then returned to earth where they will be planted by students in school grounds. **Patti Crowley** and **Nicky Zanen** have both drawn attention to a recent article on the same subject that appeared in *The Weekly Times* (12 May 2020). The article notes that since early December the wattle seed (50 gms) has been “hurtling around earth every 90 minutes, as cargo on the International Space Station”. It will be returned to earth in July for distribution to the lucky Australian school children charged with growing it.

Wattle Day

We are now approaching Wattle Day (1 September), although I suspect that some of the usual Wattle Day activities around the country will not go ahead.

For example, **Suzette Searle** has advised that because of the Canberra lockdown, the National Wattle Day activities in Canberra were cancelled.

In Melbourne, there is one event that should go ahead, a Zoom presentation by **Neville Walsh**, Senior Conservation Botanist at the RBG Victoria, on the subject of Celebrating, Understanding and Protecting Rare Wattles. The talk is being held from 5pm – 6pm on Wednesday 1 September, and is presented by the Friends of the Royal Botanic Gardens Melbourne (FRBGM). Further information and tickets can be purchased at <https://www.rbgfriendsmelbourne.org>.

On the same website, there is also information about The Acacia Project – Illustrating Rare, endangered and unusual Acacia. The Whirlies, Botanical Illustrators of the FRBGM recently completed a group project illustrating some of the rare, endangered and unusual Acacia species growing in the RBG Melbourne. A book has been produced showing the results of this project, all proceeds of which go to supporting Acacia research at the National Herbarium of Victoria (the book can be purchased through the website).

Books

Australian Bush Foods: A Handbook for the Home Cook

By Maria Hitchcock OAM

Published by Cool Natives Publishing 2020

Maria Hitchcock, who is a member of the Acacia Study Group, has been interested in bush foods for many years. This book is intended to assist readers in how to grow bush food plants in their gardens or pots, how to harvest the leaves or fruits, how to process them and use them in a variety of dishes. Twenty plant species are covered, and 31 recipes are given.

The book includes a section on wattles, with 2 recipes provided using wattle seed – tiramisu with wattle seed, and choc chip wattle seed biscuits.

Australian Weird and Wonderful Wattles **Written and published by Attila Kapitany** **Revised and expanded edition 2021**

This is a revised and expanded edition of a booklet originally published in 2012. It now contains 28 pages, and provides general information on wattles and sections covering leaf comparisons, flower comparisons, fruit and seeds, and conservation. The particular “weird and wonderful” Acacias covered in the book are *Acacia alata* var. *biglandulosa*, *A. aphylla*, *A. baileyana* 'Purpurea', *A. denticulosa*, *A. glaucoptera*, *A. leprosa* 'Scarlet Blaze' and *A. peuce*. The many photographs included in the booklet are outstandingly good.

Maranoa Botanic Gardens Florilegium

By Margaret Castle

Published by City of Boroondara 2020

The Maranoa Botanic Gardens Florilegium is a celebration of the plants in the Gardens, with full page illustrations of about 100 different species and each portrait accompanied by a biography of the subject. The biographies include full botanical name, common name and family, a description of the plant, usually information about who first discovered or described it, and something extra – perhaps its value to indigenous peoples. The illustrations have been done by a group of local artists, members of the Balwyn Botanical Art Group, under the leadership of Margaret Castle. Guest artist Dr Malcolm Calder contributed one illustration, and also wrote the Introduction to the book. The book's Foreword was written by Professor Tim Entwisle.

The illustrations included in the book include eight Acacias, being *A. aphylla*, *A. baileyana*, *A. caerulescens*, *A. denticulosa*, *A. glaucoptera*, *A. handonis*, *A. longifolia* and *A. pycnantha*.

The book has been published by the City of Boroondara, and can be purchased online at shop.boroondara.vic.gov.au.

Firewood Crops: Shrub and Tree Species for Energy Production

By National Research Council 1980

Published by The National Academies Press, Washington DC

<https://doi.org/10.17226/21317>

Sheryl Backhouse recently came across this book and noted that a number of Acacias are mentioned. It is freely downloadable as a pdf. I note that quite a few of the Acacias mentioned are not Australian ones.

Seed Bank

Although we do purchase some seed from commercial sources, we also rely upon donations of seed. If you are able to help with any seed donations they would be very welcome (we would ask you to post any donations to Bill Aitchison, who will forward them on to our Seed Bank Curator, Victoria Tanner). It also helps enormously if you are able to clean, sort and label the seed correctly. Also, we would like to have provenance information for all seed in the seed bank – so if you donate any seed, could you also provide any information you have in relation to provenance.

The procedure for requesting seed from the Seed Bank is as follows. Study Group members are entitled to lodge up to 3 orders per member per year, with 10 packets maximum in each order (negotiable). There is a charge of \$4 in relation to each order, to cover the cost of a padded post bag and

postage. The \$4 may be paid in stamps or by direct credit to our Group's bank account. Requests for seed may be lodged in either of the following ways:

1. By email to our Study Group email address, acaciastudygroup@gmail.com (emails to this address go directly to both Victoria and Bill Aitchison). If you make a request by email, you will also need to make the necessary payment by one of the above methods. If you are paying by stamps, these should be mailed to Bill Aitchison, 13 Conos Court, Donvale, Vic 3111
2. By mail (enclosing stamps if required). These requests should be posted to Bill Aitchison (address as in the previous paragraph). Bill will then advise Victoria of the request.

We would like to maintain some data on your results in propagating seed from the Seed Bank. We would therefore ask if you could provide a report on your results, recording information on species, number of seeds sown, number germinated and days after sowing.

We have had requests from members for seed of *Acacia excentrica* and *A. whibleyana*. If you can help with seed of either of these species, please let me know.

Study Group Membership

Acacia Study Group membership for 2021/22 is as follows:

\$7 (newsletter sent by email)

\$10 (hardcopy of newsletter posted in Australia – existing members only)

Subscriptions may be sent to:

Bill Aitchison, 13 Conos Court, Donvale, Victoria 3111

Subscriptions may also be paid directly to our Account at the Bendigo Bank. Account details are:

Account Name: ASGAP Acacia Study Group

BSB: 633-000

Account Number: 130786973

If you pay directly to the Bank Account, please advise us by email (acaciastudygroup@gmail.com).