



2 | EDITORIAL

2 | ACTIVITY REPORT

NSW MEETING HELD ON 9/8 2020
AT HOME OF IAN COX, KENTHURST

3 | TAXONOMY

GREVILLEA HYSTRIX, A NEW
SPECIES FROM SOUTH-WEST
WESTERN AUSTRALIA

5 | GREVILLEA NEWS

NEW MEMBERS
MARY AND BASIL SMITH, FARMER
CONSERVATIONISTS
GREVILLEA PARALLELINERVIS
AND OTHER SPECIES IN SOUTH
AUSTRALIA
GREVILLEA LATROBEI
GREVILLEAS AFTER THE FIRES
PETER, THANK YOU

10 | PROPOGATION

SEED CURATOR UPDATE #2
GREVILLEA SEED BANK LIST
ORGANIC FERTILISER
SOME OBSERVATIONS ON
GREVILLEA GRAFT AND BUD
PROPAGATION

15 | IN YOUR GARDEN

GREVILLEA 'FLAMINGO'
GREVILLEA 'VELVET CARPET'
GREVILLEA BEADLEANA
CARPENTER BEES POLLINATE
GREVILLEA SERICEA

17 | IN THE WILD

GREVILLEA MONTANA FROM
THE WARKWORTH SANDS

18 | FINANCIALS

GSG NSW Programme 2020

Leader: **Peter Olde**, p 0432 110 463 | e peter.olde@exemail.com.au

For details about the NSW chapter please contact Peter, contact via email is preferred.

Sunday, 11 October 2020

VENUE: Home of Peter Olde, 140 Russell Lane Oakdale, commencing at 10am.

I have invited Euan Mills, chief propagator and grafting expert from the Australian Botanic Garden, Mt Annan to demonstrate his grafting methods and other propagation secrets employed at the Gardens. Although it is an outdoor event, we are limited to 20 people so it will be necessary to book with me if you wish to attend. Please bring a plant for the raffle if you can. We are raising money to keep the newsletter free. Bring your own morning tea - we are not supposed to share food unless someone is prepared to cut and serve. If you want to bring plants for sale, a donation of 10% of profits would be appreciated. Plants to give away are always welcome. Start propagating - cheap plants of any desirable species are always welcome. A garden tour will follow the meeting. You are welcome to stay on for lunch, bring your own, there is a BBQ.

Sunday, 13 December 2020

VENUE: Home of Peter Olde, 140 Russell Lane Oakdale, commencing at 10am.

Christmas gathering & programme for next year to be discussed. Garden tour & cuttings may be taken.

GSG Vic Programme 2020

Leader: **Neil Marriott**, 693 Panrock Reservoir Rd, Stawell, Vic. 3380

p 03 5356 2404 or 0458 177 989 | e neil@whitegumsaustralia.com

Contact Neil for queries about program for the year. Any members who would like to visit the official collection, obtain cutting material or seed, assist in its maintenance, and stay in our cottage for a few days are invited to contact Neil.

Melbourne Meeting/Get Together?

Our Victorian Chapter used to have annual get togethers in the Melbourne area, and it has been suggested that we should try and organise this for the coming year. The vast majority of our Societies members come from Melbourne, so it would be wonderful if we could organise a day of garden visits, get together and discussions/cutting swap and the like. If any members have ideas or suggestion on this idea please let myself or Max McDowall maxamcd@melbpc.org.au know and we will get on with the organising!! Likewise, if any members would like a Grevillea Crawl to a particular area let us know!

GSG SE Qld Programme 2020

We gather at 09:30 for shared morning tea and a meeting at 10:00. We usually have a BYO lunch about midday. Visitors are always welcome. For more info or to check venues etc please contact: **Ross Reddick** on 0405 510 459 or **Denis Cox** on (07) 5546 8590 as changes can occur.

Sunday, 25 October 2020

VENUE: Home of Alan Lee, 21-23 Lucas Rd, Tamborine.

Sunday, 29 November 2020

VENUE: Home of Jim & Fran Standing,
Mt Clunie Road, Koreelah (Via Woodenbong, NSW)

A FEW WORDS FROM PETER

Peter Olde, NSW

It was very edifying and educational to listen to James Indsto at the restarted Grevillea Study Group Meeting held at the home of Ian Cox in August. We filmed the talk and this can be purchased from me when I get around to copying it onto multiple memory sticks. I hope to have some available at our next meeting when Euan Mills from the Australian Botanic Garden, Mt Annan will address the study group and talk about his grafting successes and failures, his rootstocks and potting mix. Euan will also show his grafting technique and propagation methods. This meeting will take place at our farm, 140 Russell Lane, Oakdale on Sunday October 11, starting 10 am for morning tea. We have a BBQ for those wishing to come on a garden tour after the meeting and stay for lunch.

At our December meeting, we will have a Christmas party and chat about next year's programme, and set dates. We are looking for subjects and venues. If you would like the study group to visit next year, please contact me and let me know.

Over the last few weeks I have been studying Grevilleas in the wild around Sydney. In the first instance Kevin Stokes and I travelled in the Cessnock area and Werakata National Park with Kevin Stokes, where we discovered a delightful pink-flowered population. More to be done there, for sure. The next day we met Ryan Sims, Botanist/ Vegetation Ecologist, Key Botany at Bundabah to examine population of *G. parviflora*/*G. humilis* on private land. Later, Ryan took us to see a new (to me) population of *Grevillea virgata*, much of which seems to have been destroyed by highway 'improvements' south of Bulahdelah. It seems that the widened Pacific Highway went right through the population instead of around it. Later that day we noticed *Grevillea guthrieana* on private land which Ryan informed

us was part of a translocation to rescue plants endangered by roadworks. These plants were seeding in their new home.

An ongoing study of *G. macleayana* with John Knight and Mark Noake has identified one of the populations for closer examination taxonomically. A day trip to Point Perpendicular and regenerating specimens at the Eurobodalla Botanic Garden have tended to confirm our view that we could well be dealing with a new species. We hope to travel to the Bundanoon area soon in search of more variation.

I have also been looking at some exciting new populations of Grevillea in the Hawkesbury and Blue Mountains LGAs with Chris Cheetham. Chris has located a new population of *G. arenaria* near Glossodia in the Hawkesbury LGA, the only known extant population near where George Caley made the initial type collection. In June he took me along to see three plants growing on a road verge. In September Chris and I travelled to the Megalong Valley to check out a very unusual population of *G. mucronulata*, with very short pistils and very dark green leaves. This population had been thriving up until recently but is currently undergoing significant regression with numerous plants now dead or dying for uncertain reasons. We later travelled to the north side of the Grose River in search of plants that match the type of *G. cinerea*, which Brown described, and which were collected on the Grose River. The plants we found were difficult to locate but unfortunately did not match the morphology of *G. cinerea*.

Mark Noake has been busy writing our Lucid key during COVID. Neat huh? His report is included in this newsletter. Our thanks and deepest appreciation is enjoyed by him.

ACTIVITY REPORT

NSW MEETING HELD ON 9 AUGUST 2020 AT THE HOME OF IAN COX, KENTHURST

Christine Guthrie, NSW

The meeting commenced at 10 am with morning tea in the outdoor courtyard and was attended by 20 people, a restriction imposed by COVID requirements.

James Indsto gave a presentation and demonstrated his technique of grafting known as 'budding'. James has used this technique for citrus and other exotic plants but is now having success with Grevilleas. Good quality budding tape and clean sharp blades are essential. See James's article 'Some observations on Grevillea graft and bud propagation' in this newsletter.

The future themes, frequency and conduct of the meetings, excursions and programmes was discussed and it was agreed to have a meeting every two months. If they are well attended, the programme will continue. The specimen table was laden, mostly with beautiful and unusual Grevilleas from Peter's garden. There was plenty of cutting material.

A tour of Ian's extensive garden was conducted, with a backdrop of many local species flowering in the surrounding bush. What a beautiful location. Thanks to Ian for hosting the meeting and contributing to morning tea.

***GREVILLEA HYSTRIX*, A NEW SPECIES FROM SOUTH-WEST WESTERN AUSTRALIA**

Peter Olde, NSW

Grevillea hystrix, a new species from South-west Western Australia, has been described by Rob Davis from the Perth herbarium and published in the current WA taxonomic journal, *Nuytsia* 31: 79–82 (2020). It was previously known as *Grevillea* sp. Koolyanobbing W.P. Muir WPM 3344 and was only discovered in 2013 during an industry-funded survey of the Coolgardie Bioregion. At present it is known from a single population of around 20 plants that appear to be senescing as rainfall reduces. This seems to be an evolutionary adaptation to dry climate because healthy shoots emerge from the apparently dead stems in higher rainfall conditions. Further field work may reveal more populations in what is extensive, unsearched sand-plain habitat. It can be very difficult to spot in its natural habitat when not flowering. It is a low-growing shrub, rarely exceeding 50 cm in height and has arching branches. Like a number of species now included in Group 35 (fide Mast et al. 2015), it does not have red stripes or blotches on the fruit. Here a treatment is presented in the format of the *Grevillea* Book.

***Grevillea hystrix* R.W.Davis, *Nuytsia* 31: 79–82 (2020)**

Diagnosis: *Grevillea hystrix* can be distinguished from all other members of the genus by the following combination of characters: a low shrub to 1 m high, with densely hairy, spreading to gently arching branches; leaves twice-tripartite, to 8 mm long, the lobes sharply pungent; pedicels 2.5–3.5 mm long; perianth red, 6–6.5 mm long, glabrous on the inner surface.

Type: Western Australia: E of Koolyanobbing, ca 170 m north of rail line, J.A. Wege & K.A. Shepherd JAW 2036, 30 Sep 2017 (holo: PERTH 08961093; iso: MEL, NSW)

*Grevillea hystrix* plant*Grevillea hystrix* flower*Grevillea hystrix* – Photo R. Davis

CONTINUED >

***Grevillea* sp. Koolyanobbing W.P. Muir WPM 3344**

Description: A bright green, stenobasic, possibly lignotuberous or rhizomatous shrub 0.35–0.5 m high, 0.6 m wide, killed by fire, with spreading branches low to the ground; branchlets c. 2 mm diam., white tomentose-villous to lanate, terete in cross-section, usually with numerous dried leaves of previous seasonal growth units persistent. New growth white-villous. Mature leaves divided, 0.5–0.8 cm long, 0.8–1 cm wide, spreading, subsessile and appearing fasciculate, dorsiventral, palmately tripartite with second- and some third order division; second-order division 3–5-partite; third order division bi- or tri-partite but restricted to one or two second-order lateral lobes, the division of each order -sect or almost so; ultimate leaf lobes 0.3–0.5 cm long 0.7 mm wide, 0.3 mm thick, linear to narrow-elliptic or narrowly subtriangular, usually recurved, sometimes slightly twisted; basal internode (i.e. stalk below the primary lobes) 0–1.5 mm long, straight, patent to appressed; leaf lobes also with bases c. 1.5 mm long; margins smoothly revolute, enclosing most of the abaxial surface to the midvein; leaf apex pungent, the spine erect, brittle; adaxial surface glabrous or with scattered appressed trichomes, shiny green, the midvein and intramarginal veins prominently raised; abaxial surface silky-villous in the grooves, the midvein prominent; texture coriaceous. Conflorescences 30–40 mm long, 40–60 mm wide, erect, subsessile to very shortly pedunculate, terminal or subterminal, simple, 6–10- or few-flowered secund cluster, acropetal; buds globose; peduncles when present loosely villous; floral rachises 5–7 mm long, white-villous; common bracts 0.7 mm long, 1.5 mm wide, broadly obovoid, loosely villous outside, glabrous inside, persistent to fruiting. Flower colour perianth red, limb grey; style red or yellow; pollen-presenter green. Flowers zygomorphic, acroscopic, ornithophilous, inodorous; pedicels 2.5–3.5 mm long, loosely villous, patent; torus 0.8 mm wide, transverse; nectary conspicuous, linguiform, extending laterally 0.2–0.3 mm from the torus, vertically and abruptly refracted from c. halfway, the apical margin truncate, denticulate; pistils 21–23(–25) mm long; ovary 0.9–1 mm long, 0.8–0.9 mm wide, subsessile, densely sericeous; gynophore c. 0.2 mm long, glabrous; style glabrous or with scattered spreading hairs, incurved, gradually thickened from c. 1 mm below the style-end; style-end discoloured, clavate, glabrous; pollen-presenter 1–1.2 mm long, 0.6–0.8 mm wide, convex, oblique at c. 45°, surrounded by a thin, bonnet-like collar c. 0.1 mm wide with wavy margin; perianth 6–6.5 mm long, 2.5–3 mm wide at base, ovoid-saccate, the tepals coherent except along the dorsal suture, excising as a single unit; abaxial surface loosely subsericeous to pilose, adaxial surface glabrous; limb revolute, densely white villous the underlying lamina dark; anthers yellow, drying purple; pollen yellow. Fruits 10–12 mm long, c. 4 mm wide, 6 mm deep, basifixed, oblong-ventricose, glandular-villous, the style erect, straight extending from the dorsal side, fragile, the ventral suture c. 0.3 mm thick; texture crustaceous. Seeds 7 mm long, 3 mm wide, oblong to narrow-ellipsoid;

outer face convex, smooth, the main body surrounded by a compressed margin, the apex broadly convex, terminated by a short wavy elaiosome 0.7 mm long; inner face vulviform, the central elliptic portion flat, tessellated, the margins raised on both sides and with waxy exudate.

Distribution: Western Australia: Known only from the type locality.

Phenology: Flowers from late August through September and early October. Fruits appear from late September. Rainfall average annual c. 30 mm.

Ecology and habitat: Occurs in low open shrubland on gently sloping sandplains on yellow clayey sand, and is associated with *Triodia* sp., *Melaleuca cordata*, *Thryptomene* sp., *Chrysitrix distigmatosa* and *Melichrus* sp. Bungalbin Hill (F.H. & M.P. Mollemans 3069).

Major distinguishing features: Branchlets white villous, terete; leaves palmately tripartite, twice or three-times divided, subsessile; lobes linear-elliptic, extremely pungent, the basal internode very short to absent; leaf upper surface with prominent venation; undersurface bisulcate, mostly enclosed by margins; conflorescence usually terminating short side branchlets, erect, subsessile, the buds globose, rachises 5–7 mm long; pedicels 2–3.5 mm long, loosely villous; nectary lingiform; perianth zygomorphic, hairy outside glabrous inside; pistils 21–23 mm long; ovary densely sericeous, subsessile; style with scattered hairs; fruits glandular, lacking red markings.

Related or confusing species. Group 35. No confusing species. *G. secunda* differs in its longer leaves (4–9.5 cm long) and leaf lobes (5–40 mm long), the basal internode longer, the venation obscure on the upper lobe surface, its conflorescences conico-secund, 30–80 mm long, its pistils, pedicels and styles also slightly longer. There is below the limb on the ventral tepals at the base of the curve of *G. secunda* a cushion-like swelling c. 1 mm long, 0.5 mm high. *G. batrachioides* is a much taller shrub with longer pedicels (12–13 mm long) pistils 37 mm long, and the perianth has hairs behind the anthers.

Conservation status: A few plants only known (20). This species is declared DRF Priority One.

Variation: There are differences in flower colour only observed to date.

Cultivation: *G. hystrix* should grow well in sunny, well-drained sandy clay provided rainfall does not exceed 100 mm per annum and summer humidity remains low.

Propagation: Untested. Has grafted readily on to *G. robusta*.

Specimens seen: E of Koolyanobbing at 100.7° North side of railway line, ca 170 m north of line, W.P. Muir WPM3344, 25 Sep 2015 (PERTH08514534); ditto, Olde 19/116, Oct. 2019 (NSW).

NEW MEMBERS

Ivy Wang, Cremorne, NSW

My husband Steve and I just recently joined the APS membership and I went to two walks with North Shore Group on the last two Mondays and loved them very much. We both don't know much about grevillea or many native plants, but we'd like to learn. I have worked as a

tour guide and Australian tour director for over 7 years so came across many native plants when I travelled with the groups. I have a very basic knowledge about plants to mention to my visitors and understand it is important to gain more knowledge from experts.

MARY AND BASIL SMITH, FARMER CONSERVATIONISTS

Peter Olde, NSW

Many botanists who have trawled through herbarium specimens will have come upon the collections of specimens gathered by Basil and/or Mary Smith, Manmanning, Western Australia. During my research in the genus *Grevillea* I came upon several. The Smiths were iconic collectors, travelling around with a keen eye, and submitting often the first and only collection of some species to the WA Herbarium. In 1986, my wife and 4 children decided to visit the Smiths at their home in Manmanning, just to have a chat about local grevilleas and share common interests. I was a bit nervous because this childless couple were reputed not to enjoy the company of children too much. The visit was only for a couple of hours. I cannot remember what we talked about, probably the grevilleas around Manmanning, but I was left with a wonderful memory of meeting such a selfless couple with whom I personally shared so much, in particular a love of Western Australian flora. The Smiths gave me the location of *Grevillea dryandroides* which we found and wrote up in the GSG newsletter. We were particularly interested in *Grevillea nana*. There again they came to the rescue with a location near Manmanning (Cullimben Reserve). Basil Smith also collected the specimen selected as type for *Grevillea haplantha* subsp. *recedens* Olde & Marriott among many others listed on the Australian Virtual Herbarium. There are 198 *Grevillea* records including many duplicates.

Since that meeting, the Smiths receded into the background of my life but they (and Ken Newbey) inspired my devotion to collecting plants, an inspiration about which, of course, they knew nothing. We were social distancing even then.

Basil Herbert Smith (1925–2012) was a practical wheat farmer, botanical collector, conservationist. He was born at Northam, W.A. and had a young brother Trevor (1918–1922), who died before Basil was born. Nothing is known [to me] about his early life except that he met and married Mary McCashney (1928–2012) in 1951. From that day onward they were inseparable, joined at the hip as they say. Others have recounted experiences they had with the Smiths subsequently, who were very hospitable to like-minded people. (See refs. J. Coleby-Williams (2012), and M. Crisp (2019) with notes by Alex George. This was until a

group of orchid enthusiasts began digging up tubers. After that, the shutters went up. I was very thankful to read the informative accounts about these marvellous people and their friendships with plant lovers and taxonomists. They were good friends to a number of botanists, including Jim Ross at the National Herbarium of Victoria, where they began sending their botanical specimens. I have seen photos of a much younger Barry Conn with them also. Mary was good friends with Elizabeth George with whom she shared a love of *Verticordia*, many species of which she cultivated and one she discovered near Mt Holland (*V. gracilis*). Elizabeth and Alex George were married at their home.

The Smiths began sending specimens in 1970 and continued to the end of their lives, driving the backroads in Basil's old ute. They owned two bush blocks in the era when the WA Government required all farm land to be cleared. They got around this by chaining the properties but then allowing them to re-grow. Thus we have still today precious natural bushland in a sea of cleared fields. I am uncertain of the status of their land since they passed away.

Basil Smith is associated with the discovery of *Eucalyptus synandra* which was named by Mike Crisp as well as *Verticordia hughanii*, which the Smiths rediscovered. Jeremy Coleby-Williams has also been very fulsome in his praise of them and it is worth reading his blog. Among the species of *Grevillea*, of which they made early collections, are *G. extorris*, *G. georgeana*, *G. granulosa*, *G. nana* (Mt Marshall), *G. rosieri*, *G. subtiliflora*.

No-one wants to talk about the way they died, on the same day in September 2012. I will respect that here. 2012 was a bad year for botanists. Don McGillivray died in August and Elizabeth George died in November. However, whatever the cause(s), it seems to have been the reason why nobody has recorded their lives more fully in the botanical journals or ephemera. This is a shame. They partly inspired me to a post-career life of plant collection and discovery, taxonomy and botanical history, horticulture and education. I here extend my gratitude to them for their sheer love and willingness to act without monetary compensation.

CONTINUED >

Eponomy

Templetonia smithiana J.H.Ross, *Muelleria* 5: 278–280 (1984).

Daviesia smithiorum Crisp, *Aust. Syst. Bot.* 8(6):1235 (1995).

Bossiaea smithiorum J.H.Ross, *Muelleria* 23: 77–8 (2006).

Melaleuca smithiorum Craven (ined.) = *M. fabri* Craven

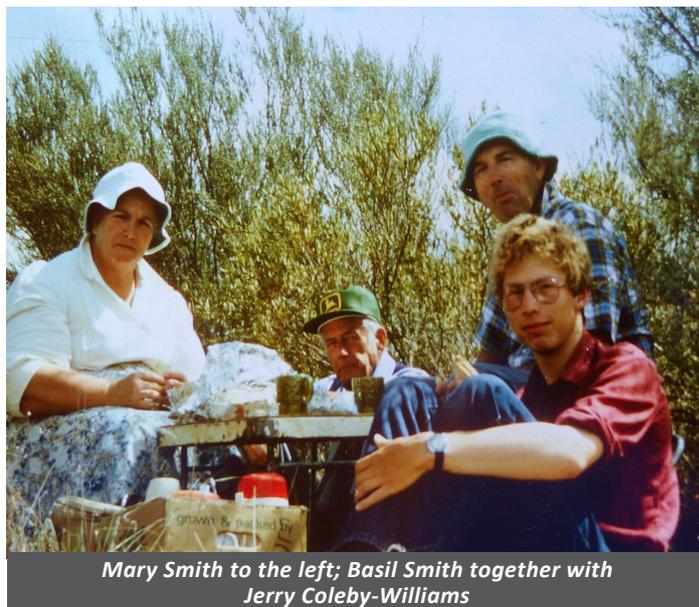
References

Bradley N (2020) Martin and associated families in Australia (1830–2020). <http://members.iinet.net.au/~nbradley/Martin-o/index.htm>

Coleby-Williams J (2012) Farewell friends. Accessed 1 May 2020.

<https://jerry-coleby-williams.net/2012/09/22/farewell-friends/>

Crisp M (2019) – *In memoriam*, Basil and Mary Smith of Manmanning, Western Australia, deceased September 2012. *ASBS Newsletter* 181: 73–75. (Free online).



Mary Smith to the left; Basil Smith together with Jerry Coleby-Williams

GREVILLEA PARALLELINERVIS AND OTHER SPECIES IN SOUTH AUSTRALIA

Ken Warnes

From Ken Warnes to Peter Olde, 27 July 2020:

I just returned from 3 days with the Northern Yorke APS Group to Hiltaba Station in the western Gawler Ranges. It was bought by a Conservation Group in 2012. Some hard climbing but well worth the effort although it has taken several days to recover. One of the common plants was *Grevillea parallelinervis*, whole drifts of them on the hill-tops. They spread strongly from stolons (below the surface runners) and from my observations set very little seed. They spread for roughly 100 km East to West and every plant looks identical, no variation in foliage or flower. Could it be possible that they are really a single clone which has spread over a vast period of time? We have on Kangaroo Island a *Hakea* covering an area about 30 km across which has never been known to set seed and is considered to be single clone and there are other examples of similar occurrences recorded around the world. I think you have another *Hakea* in NSW which also sets no fruits. It had never occurred to me until this trip but the consistency of form is remarkable. The related *G. aspera* from perhaps 80 km to the South shows considerable variation in both leaf and flower. I have a certain proprietorial interest in the species having collected it on Yardea Stn in 1967 and taking a mate back in 1968 to collect what became the Type specimens. We also saw *G. anethifolia* and *G. umbellifera* (now apparently *G. sarissa* ssp *umbellifera*) looking very drought stressed.

From Peter:

Further to your notes Ken. You are not listed as co-collector of *G. parallelinervis*, an oversight that needs correction I feel, especially as you were the guide as you tell me. Yes,

it is entirely possible that *G. parallelinervis* is one clone. Your observations were 'sets very little seed' by which you mean 'sets no seed that I have observed?'

Is this clone connected to Yardea Station population or part or it? *G. parallelinervis* could be a species that reproduces asexually. If the populations are disjunct though we would have to infer a reason, perhaps that they were once sexually reproductive but lost the ability over time. If they are continuously distributed and there is never any seed, then they could be part of a single rhizomatous population.

From Ken Warnes, 25 August 2020:

I'm not sure how or when Carrick had access to fruit, perhaps there was some on the submitted Type Specimen but I have no recollection now. Perhaps someone else had specimens in the Herbarium which had never been properly studied until we pushed our collection under their noses. I'm prepared to stand by my view that it must set relatively low numbers which is perhaps related to its stoloniferous habit and spread. The distribution would appear to be continuous from about 10 km East of Yardea H.S. to at least Hiltaba H.S. in the porphyry granite left over from the old volcanic times. I suppose I'm taking this somewhat on trust but the range is continuous to the South of Lake Acraman and it's been on every hill that I have climbed.

The porphyry largely cuts out around Hiltaba where the underlying even more ancient grey granite is dominant with the porphyry more scattered among a large variety of what I would loosely still call granites.

CONTINUED >

You can see that I am no geologist. But the Grevillea is still widely scattered right through to Toondoolya Bluff on Kondoolka which borders Hiltaba to the NW and West although I didn't see it around the Kondoolka H.S. and the adjacent Mt. Wallaby. There's a lot of open country on Kondoolka but right out in the N.W. corner there is a group of isolated hills coming under the name of Yarrana Hill where it is common, then an open plain of about a kilometre before it grows on the last little stony hill before the Dog Fence and the Great Victoria Desert. How would it have crossed this open country without the benefit of seed would be something of a mystery but the country is far from flat and there may be reefs which have been drifted over. One such barely discernible rise has a healthy population of *Prostanthera florifera* growing in sand, otherwise it is confined to stony hills which suggests that today's surface wasn't always like it now is.

Next time you are headed to WA allow a couple of days and I can arrange to take you out there. Just keep on past where we went to see the *Eremophila interstans* and end up out on the Eyre Highway at Wirrulla. We can also take in the *G. sarissa*, *G. anethifolia* (eichleri) and *G. aspera* on the way, and look for the small leaf *G. aspera* 1 km on from the *E. interstans* on Mt Ive, provided the goats have left some. I think Neil was successful in growing it for a while from a few small pieces on Mt. Ive where there was once a good population. This was over 30 years ago. A bit further north from the Kondoolka turn-off there is a population of *G. huegelii*, 2m tall with ash-grey foliage, rather handsome specimens. While speaking of *G. aspera*, I found it growing below Rawnsleys Bluff in the Flinders a couple of weeks ago, the normal long leaf form. The Gawler Range, N.P form has a much shorter, broader leaf and I have it via Russell Wait and Peter Lang from suckers transplanted and re-rooted.

You mention demonstrations of grafting so this is probably old news but Keith Pitman used what he called mummy grafts, small scions with no leaves and a single dormant shoot which he inserted in the tip of the stock, in his case *G. robusta* and wrapped the whole thing in Parafilm. The shoot when activated just forced its way through the Parafilm. I successfully grafted *G. sarissa* by this method but then the stock died on me. Not that I had lost much, I reckon a minimum of 5 years to develop growth mature enough to set flowers, even when grafted and it is a spiky brute at best.

To the finding of what became *G. parallelinervis* back in 1967: I was taken out there by the father of my best friend and we found it on a hill about 6 km West of Yardea HS. The Key to Black's Flora of SA if loosely applied placed it in *G. aspera*, but me being a know-all 26 year old, I wasn't happy with this, just too different. Bruce Copley from Bute had somewhat adopted me as a useful addition to his frantic life-style and he was an active collector for the SA Herbarium. We arranged to meet up in 1968 as he was

going through to Coober Pedy and I took him to the same hill, which the 1:250,000 Survey maps name Peltabinna Hill although the locals don't recognise this name. He collected, prepared and lodged the necessary specimens keeping one each for himself and me. With no Grevillea expert in Adelaide I understand that Eichler directed Carrick to have a look at it and the rest is history. I still have my sheet which I suppose would rate as a lectotype or some such fancy name. Bruce died many years ago from a brain tumour at the age of 51 so I don't know what became of his private collections. I don't need any recognition, I'm happy for B.J.Copley to be the recognised collector. I have an unnamed *Prostanthera* lodged as K.B.Warnes No.1 awaiting my moment of fame. Not holding my breath, it's been there since 1969. I think it is in the new Flora as unnamed species A.

I'm dinkum about being available to show you around my second back yard. Perhaps the GSG could have a bash on Eyre Peninsula and slip down to Port Lincoln to round things off with a few down that way.

Further to my trip to Hiltaba I have just spent several days on Eyre Peninsula based around Streaky Bay and Port Lincoln. Some was new country, some a nostalgia trip where I had been with Bruce Copley nearly 50 years ago. Only *G. huegelii* up the top but coming down the west side I fluked a single upright plant of *G. pauciflora* around Port Kenny. Tod Highway which comes up to Cummins from the south proved rich pickings with loads of *G. pauciflora* around wet areas, a small leaved *G. ilicifolia* was widespread as I travelled into drier country. Flowers were large but inconspicuous with a dull purple perianth and green style. I've put some cuttings in but had nothing to try grafting on. In a laterite zone NE of Cummins, there was quite a lot of *G. aspera*, the narrow leaved, upright form with showy red and yellow flowers.

Travelling back north of Cowell I kept a lookout for *G. pterosperma* and thought that I saw a couple of plants but too early for flowers. I've seen it there before.

In relation to your curiosity regarding fruits of *G. parallelinervis*, I attach a close up partial photo of the type specimen. You can clearly see the fruit.



GREVILLEA LATROBEI

Helen Botham, La Trobe's Cottage Garden Coordinator, Vic

I manage the garden at La Trobe's Cottage in Melbourne, see <http://www.foltc.latrobesociety.org.au/garden.html> and we have a lovely specimen of *Grevillea latrobei*. I'm doing a talk about the garden soon, and I feel I'd like to know more about how it was originally named.

I googled *Grevillea latrobei* in the hope of finding out who named it this, and why it was changed to *G. rosmarinifolia*, and a March 2011 Newsletter of the Grevillea Study Group popped up, in which I read:

In November 2009, Peter Olde asked me to contact plant people around Melbourne for information about the locations of local remnant natural populations of what were currently considered to be forms of the variable species Grevillea rosmarinifolia, some of which had been recognized previously as separate taxa. Taxonomic revision of the group was urgently needed to assign the proper taxonomic name to each population and so to ensure the appropriate conservation status. All the populations we visited are probably referable to the earlier name of Grevillea latrobei, which Peter Olde intends to reinstate.

I've since gone into our own web page <http://www.foltc.latrobesociety.org.au/documents/GardenGenusLatrobea.pdf> where it says that La Trobe sent his specimens to Meisner so I'd guess that it was he who named the plant!

Peter Olde supplied the following information:

The type specimen of *G. latrobei* was sent by Charles La Trobe to Neuchatel University herbarium where it was seen by Meisner. There is an uncertain relationship with Swiss botanist and entomologist Ch. H. Godet.

In October 1824, La Trobe went to Neuchâtel, Switzerland, as tutor to the family of the Count de Pourtalès who was also of Huguenot extraction. He remained there until February 1827, becoming a noted mountaineer: a pioneer member of the Alpine Club, he climbed mountains and passes without the help of guides and porters. La Trobe's first book, *The Alpenstock: Or Sketches of Swiss Scenery and Manners*, was published in 1829 and his second, *The Pedestrian: A Summer's Ramble in the Tyrol*, came out in 1832. As tutor or mentor La Trobe accompanied the dashing young Count Albert de Pourtalès during a tour of America which began in 1832. On his return from America, La Trobe stayed at the country house of Frédéric Auguste de Montmollin, a Swiss councillor of state, and there became engaged to one of the Montmollin daughters, Sophie. They were married in the British Legation at Berne on 16 September 1835. The year after his first wife died, LaTrobe married her sister.

Ultimately LaTrobe returned to England after his stint in Australia where he died. His widow retired to Switzerland, where a small church, the Chapelle de l'Hermitage, was built as a memorial to him.

Grevillea latrobei was placed in synonymy under *Grevillea ericifolia* by Benthams, not long after Meisner published the original description. Later Don McGillivray (1993) placed it in synonymy under *Grevillea rosmarinifolia*. I cannot agree with either of these decisions and believe I can show *G. latrobei* warrants reinstatement as a species endemic to Victoria where it is a widespread, root-suckering species.

Response from Helen:

Thanks so much for your reply which is of great interest to us.

I have visited the Botanic Institute at the University of Neuchatel, where Professor Jason Grant showed us the specimens La Trobe sent to Neuchatel. I attach a picture here of La Trobe's specimen of what was then labelled '*Greveilla latrobei*' dated 1842. 'Meisn' is added after this name.

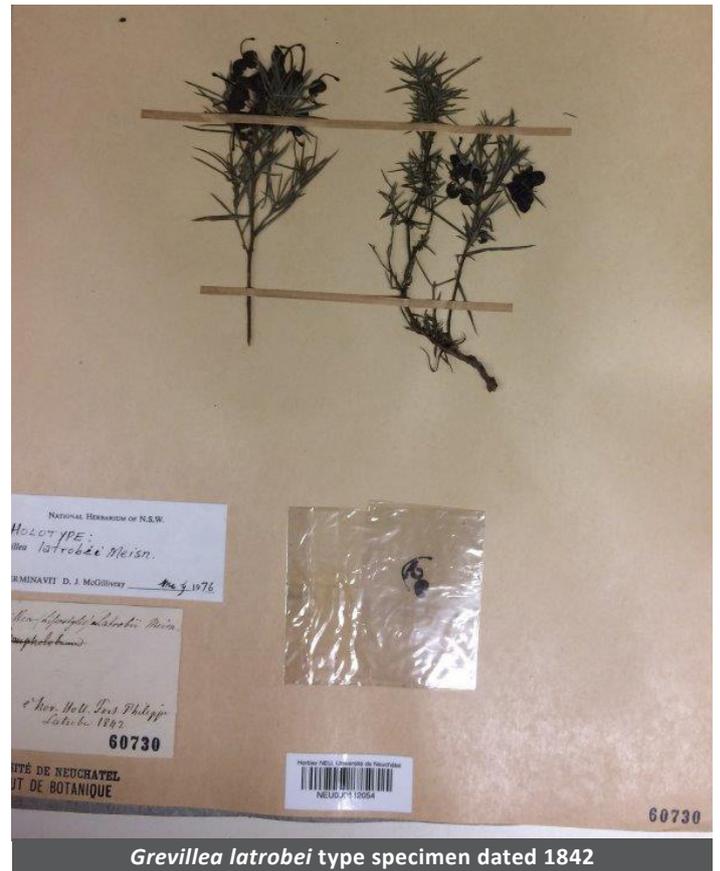
I'm very interested that you believe that the species described then is different from what we now know as *G. rosmarinifolia*. *G. rosmarinifolia* is in the *Catalogue of plants cultivated in the Botanic Garden, Sydney, January 1828*, and I gather from what you say that this is not the same species as that La Trobe collected later in Port Phillip.

We aim to have in the La Trobe's Cottage garden, see <http://www.foltc.latrobesociety.org.au/garden.html> plants that La Trobe is likely to have had there in the 1840s and 1850s. And we have examples of other plants named latrobei - *Acacia latrobei* syn. *A. acinacea*, *Eremophila latrobei* and *Correa lawrenceana* var. *latrobeana*. We have *G. rosmarinifolia* but we'd be very keen now to have an example of the true *Greveilla latrobei*. Can you tell me if we can purchase a plant at any nursery? Where would we be likely to see it growing in its natural environment?

Is there anything I can do to support you in your campaign to have *Greveilla latrobei* accepted as a distinct species? The C.J. La Trobe Society Inc., which aims to promote understanding and appreciation of the life, work and times of Charles Joseph La Trobe, see <http://www.latrobesociety.org.au/about-the-society.html> would support me in this. It would be wonderful to have the correct recognition of this species.

Would you be able to write an article for the Society's journal, *La Trobeana*? We could help with background information about La Trobe and his time here, and elsewhere. Helen Cohn, then Librarian at Melbourne's Royal Botanic Gardens, wrote an article about *Greveilla latrobei* in this journal in 2004, see <http://www.latrobesociety.org.au/LaTrobeana/LaTrobeanaV2n2.pdf>, pp.5-7, where she wrote 'It is generally acknowledged by Australia's Grevillea experts that this species complex needs further study'. Even a short article laying out the issues you describe in your email, i.e. the naming issues of Bentham and McGillivray, and your interest in establishing it as a distinct species, would be of great interest.

Please let me know if there is anything I, or the C.J. La Trobe Society, can do. Also do please let me know where we might be able to source an example of *Greveilla latrobei* so that we can plant it in the La Trobe's Cottage garden.



Grevillea latrobei type specimen dated 1842

GREVILLEAS AFTER THE FIRES

Phil Trickett

Catriona and I spent last Sunday on Nerriga Rd looking for Isopogons & Petrophiles and their response to fire. One of the roads we explored was Touga Rd on the way to Bulee. It has just been graded so was like a highway. Only a few roadside areas escaped the fire but these included this grevillea in flower. I thought it was *Grevillea patulifolia*. There was quite a bit of it along the road in flower.

We also visited the Corang River spot we visited on the Grevillea Study Group trip but it has been demolished by the fire. We could see no sign of any grevillea.

Further back from Corang River we found just two small plants of *G. juniperina* ssp. *amphitricha* resprouting from lignotuber and *G. renwickiana* looking OK.



Grevillea patulifolia

PETER, THANK YOU

Shirley Pipitone

I particularly enjoyed reading the contribution of our new seed curator Jeremy Tcharke. Welcome, Jeremy. It is wonderful for the GSG to have the benefit of your youth, passion and knowledge about Grevilleas. And I loved your photo of the seedbank - it reminds me of my study floor!

My garden is fence to fence weeds, with a scattering of real plants here and there. I spent a lot of time after my retirement studying landscape architecture, doing a huge study of the social value of Lake Burley Griffin in Canberra, running the Garden Design Study Group Canberra branch for a few years, and then starting up Open Gardens Canberra in 2015, while my own garden languished under gross neglect. I retired early with widespread chronic pain so everything I do has to be done slowly eg prune half a *Grevillea australis*/ today and come back in two days to prune the other half.

I am hoping to get my garden looking lovely again before I die - I do have a detailed plan - but it doesn't really matter if I don't because it always looks lovely in my mind's eye. I find joy in the small things - right now it's the flowers of *Grevillea*/ 'Molonglo'.

With a bit of luck I'll be writing again in a year or so with photos of the lovely new Grevilleas I will have planted. Ever the optimist!

Translation of that wonderful article by Maximilian Painter (GSG Newsletter No. 116, page 14) must have been a difficult task but I stumbled over the word Orchideous! My quirky brain could only pronounce it as orc-hideous

Then I googled it and found that, yes it can mean 'relating to, or belonging to the Orchidaceae'. And in Harry Potter's 'Hogwarts Mystery' it means 'the incantation of a transfiguration spell that conjured a bouquet of flowers from the tip of the caster's wand. The movement for this spell was to move one's wand in a circle in the air.'

The Australian Concise Oxford Dictionary doesn't mention orchideous. Instead it gives us orchidaceous, which I must say I prefer.

For your amusement, Shirley Pipitone

PROPAGATION

SEED CURATOR UPDATE #2

Jeremy Tcharke

If there is one thing that the Victorian lockdown has been good for, it's for finding time to do those medial tasks that take time, attention and detail.

Since my last update, I have managed to sort, weigh and catalogue most of the existing seed bank. It looks promising that I may have secured a "fit for purpose" seed storage location for our seed bank. The local department building has a seed storage facility that is used by Greening Australia, and Vic forests. Early discussions indicate that this space should also have room to accommodate us.

I have also been able to run some seed viability trials on heat beds in the nursery. Many thanks to those of you that also offered this service. Whilst cataloguing the seed, it became apparent that most of our seed is garden collected - and hence the "purity" of the seed cannot be taken for granted. There may yet be some amazing hybrids grown from these seeds.

Of the field collected seed, most is old, and quantities are low. Viability testing has so far had very poor results, although, I'm not yet ready to make the call on final success.

Attached to this update, I have sent our publishers the most up to date database of our seed. I suggest that this can be made available on request. This is still a work in progress, and due to recent hand surgery, its completion has been delayed more than I hoped, and this update is also shorter than I would have liked it to be.

If you have fresh seed that you wish to contribute to the seed bank:

Please collect, AND CLEAN the seed and label as follows:

1. Species (common name and botanical)
2. Location collected - if garden - please state this
3. Date collected
4. Name of collector.
5. Seed weight (if you can)

Place the seed in a brown paper bag (ensuring its dry) and tape up both ends to ensure it cannot escape.

Post it to:

Jeremy Tcharke
PO Box 521
Bairnsdale VIC 3875.

I am still looking for a Library flip file as pictured below for the groups seed bank. If you have one not in use that you can donate to the study group, please let me know.



Grevillea Seed Bank List

GENUS	SPECIES	SUBSPECIE	PROVENANCE	DATE	GRAMS
<i>Grevillea</i>	<i>baileyana</i>		Unknown	Unknown	5.6
<i>Grevillea</i>	<i>banksii</i>	prostrate red	garden grown	Unknown	11.2
<i>Grevillea</i>	<i>banksii</i>	prostrate red	garden grown	Unknown	9
<i>Grevillea</i>	<i>banksii</i>	prostrate red	garden grown	Unknown	17.3
<i>Grevillea</i>	<i>banksii</i>	alba prostrate	Unknown	Unknown	3
<i>Grevillea</i>	<i>banksii</i>	prostrate red	Unknown	Unknown	20
<i>Grevillea</i>	<i>banksii</i>	prostrate red	Unknown	Unknown	20
<i>Grevillea</i>	<i>banksii</i>	prostrate red	Unknown	Unknown	18.4
<i>Grevillea</i>	<i>banksii</i>	prostrate red	Unknown	Unknown	23
<i>Grevillea</i>	<i>banksii</i>	prostrate white	Unknown	Unknown	13
<i>Grevillea</i>	<i>banksii</i>	prostrate white	Unknown	Unknown	24
<i>Grevillea</i>	<i>banksii</i>	prostrate white	Unknown	Unknown	25
<i>Grevillea</i>	<i>banksii</i>	prostrate white	Unknown	Unknown	23
<i>Grevillea</i>	<i>banksii</i>	prostrate red	1770	Unknown	18
<i>Grevillea</i>	<i>banksii</i>	prostrate red	1770	Unknown	13
<i>Grevillea</i>	<i>bon accord</i>		Kensington Gardens Shepparton	Dec-17	4.7
<i>Grevillea</i>	<i>bronwenae</i>		Kensington Gardens Shepparton	Dec-17	4
<i>Grevillea</i>	<i>candelabroides</i>		Garden grown - Greenfell NSW	Jan-17	7.8
<i>Grevillea</i>	<i>flexuosa</i>		Kialla	Dec-17	10
<i>Grevillea</i>	<i>glauca</i>		Henreys range rd	Feb-20	13.4
<i>Grevillea</i>	<i>johnsonii</i>	red	Unknown	Unknown	8.7
<i>Grevillea</i>	<i>johnsonii</i>	red	Unknown	Unknown	20
<i>Grevillea</i>	<i>johnsonii</i>	red	Unknown	Unknown	20
<i>Grevillea</i>	<i>juncifolia</i>	<i>juncifolia</i>	Garden grown - Greenfell NSW	Mar-17	3.2
<i>Grevillea</i>	<i>leucopteris</i>		Unknown	Unknown	7.2
<i>Grevillea</i>	<i>leucopteris</i>		ponde plantings	Mar-02	7
<i>Grevillea</i>	<i>magnifica</i>	??	Unknown	Unknown	3.5
<i>Grevillea</i>	<i>manglessii</i>		Unknown	Unknown	0.7
<i>Grevillea</i>	<i>monticola</i>		Unknown	Unknown	4.1
<i>Grevillea</i>	<i>occidentalis</i>		Unknown	Unknown	0.7
<i>Grevillea</i>	<i>paniculata</i>		Unknown	Unknown	5
<i>Grevillea</i>	<i>paradoxa</i>		Unknown	Unknown	1
<i>Grevillea</i>	<i>petrophaloides</i>	?	garden grown	2012	2
<i>Grevillea</i>	<i>plurijuga</i>	<i>plurijuga</i>	garden grown - St Peters	Unknown	5
<i>Grevillea</i>	<i>plurijuga</i>	<i>superba</i>	garden grown - St Peters	2008	3.4
<i>Grevillea</i>	<i>preissii</i>		Unknown	Unknown	2.4
<i>Grevillea</i>	<i>pteridifolia</i>		Garden - Pimlico	Feb-20	16.3
<i>Grevillea</i>	<i>pteridifolia</i>		Saunders Beach	Feb-20	15
<i>Grevillea</i>	<i>pteridifolia</i>	Northern Territory	Unknown	Unknown	14
<i>Grevillea</i>	<i>robusta</i>		Unknown	Unknown	14.6
<i>Grevillea</i>	<i>robusta</i>		Unknown	Unknown	5.8
<i>Grevillea</i>	<i>sessilis</i>		Paluma - Hidden Valley rd	Feb-20	9.4
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Jan-20	15
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Jan-17	14
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Jan-17	18
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Jan-17	14
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Jan-17	18
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Jan-17	15
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Jan-17	17
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Unknown	
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Unknown	
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Unknown	
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Unknown	
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Unknown	
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Unknown	
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Unknown	
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Unknown	
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Unknown	
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Unknown	
<i>Grevillea</i>	<i>stenobotrya</i>		garden grown 107 cowra rd Grenfell	Unknown	
<i>Grevillea</i>	<i>striata</i>		Unknown	Unknown	9

ORGANIC FERTILISER

David Mathews

This article was published in the Wildflower Industry Network Newsletter March-April 2020.

I am not an agronomist. These comments are based on my experience. A soil test and leaf analysis is the starting point and may have to be repeated until the leaf analysis indicates the target plants are growing satisfactorily.

The results will indicate soil deficiencies and should give the grower application rates to remedy the deficiencies.

Note, many soils in humid Australia are quite acidic – a pH of 4.5 or less. For many native plants to grow well over time, a soil pH of 5.0 to 6.0 is preferential. Lime or dolomite (depending on soil) is added in quantities as indicated by the soil test results to achieve the target. This may have to be repeated every few years, usually depending on the wetness of successive years. Often the proliferation of some coloniser plants, such as Sorrell, will indicate when soil pH has dropped.

Fertilizers are chosen

1. To remedy soil deficiencies. – leaf analysis results will indicate deficiencies relating to the target plants.
2. To promote growth required.

Many Australian plants that are grown for commercial purposes do not tolerate fertilizers that are high in phosphorous (P). A P rating of 1.5 or less is usually satisfactory.

Most slow release fertilizers (3 or more months) are now imported and most are not suitable for native flower growing as they have a higher than acceptable P content. In addition, they are very expensive.

Although organic fertilizers have a breakdown of their contents listed, I choose them primarily based on their NPK. A high N (nitrogen) applied in early spring will promote stem growth (and rapid weed growth), a relatively high K (potassium) will help with stem strength, applied later in spring and in autumn. Also, I choose a product which has, on the analysis chart on the bag, most of the other essential plant minerals suggested by the leaf analysis for my plant species.

Over the years I have used a variety of organic fertilizers, for different purposes. In the early years Dynamic Lifter and blood and bone (caution – there were/are different formulations), along with different foliar applications which are no longer available from my suppliers and worm castings (caution – can introduce new weeds). More recently, Katek Super Growth, a Qld product, is good, but not always available. There is also Yates Agri Boost, Terra Firma Lime Impact (Mitre 10) and Neutrog Bush Tucker, the most expensive of these more recent products.



SOME OBSERVATIONS ON GREVILLEA GRAFT AND BUD PROPAGATION

James Indsto

After many years I have finally purchased a complete set of The Grevillea Book, even though I have grown and grafted Grevilleas for over 20 years! I thought I should share some of my grafting and budding experiences. I first learnt to do 'shield budding' of roses and citrus (see attached pics). A shield-shaped bud is removed using a cut from below the bud and then it is removed with a cross-cut. A cut is made down the stem of the stock and then a cross-cut made leaving a little flap for inserting the bud. This is taped firmly and the plant grown as well as possible for about 30 days, before the tape is removed. Hopefully the bud will have taken nicely. This is easy.

Having come from a rose/citrus propagating background this method was my natural progression. People who have a background grafting stone fruits or ornamental trees would probably try a different approach. With my grafting approach I also don't need any special growing conditions: the grafting and subsequent growth is outside where the plants normally grow. Another consideration is weeping standards: if I was 2 metres up a ladder on a windy day doing grafting a tall standard, I expect my method might be a bit easier.

[CONTINUED >](#)

I tried a side-veneer graft with Grevilleas on to Silky Oak stocks. I think of this as an extension of the budding technique described above. I grow the Silky Oak stocks vigorously by adding a little native plant Osmocote in spring and giving them plenty of water and sun.

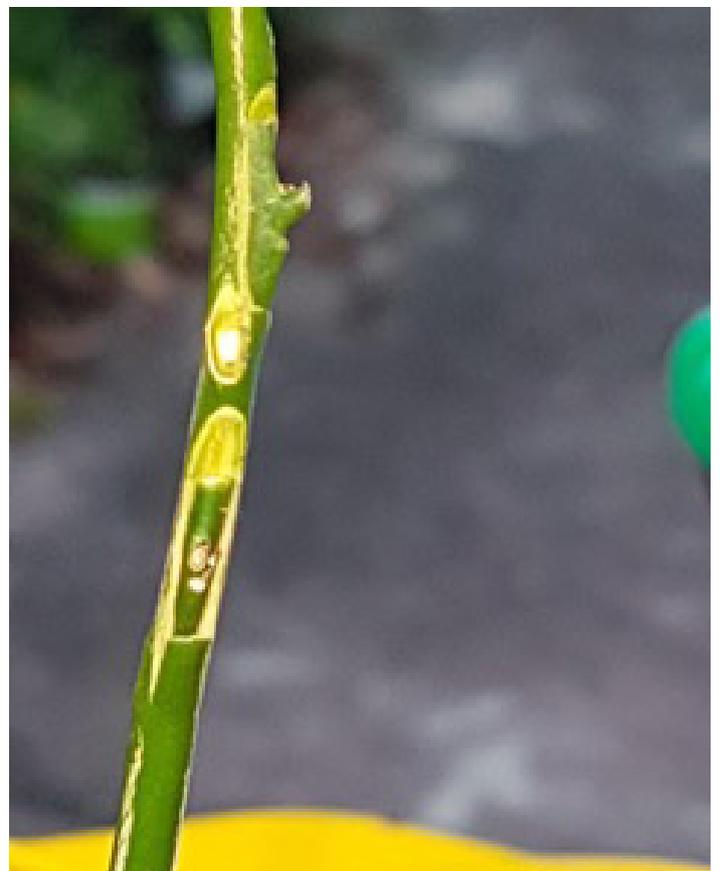
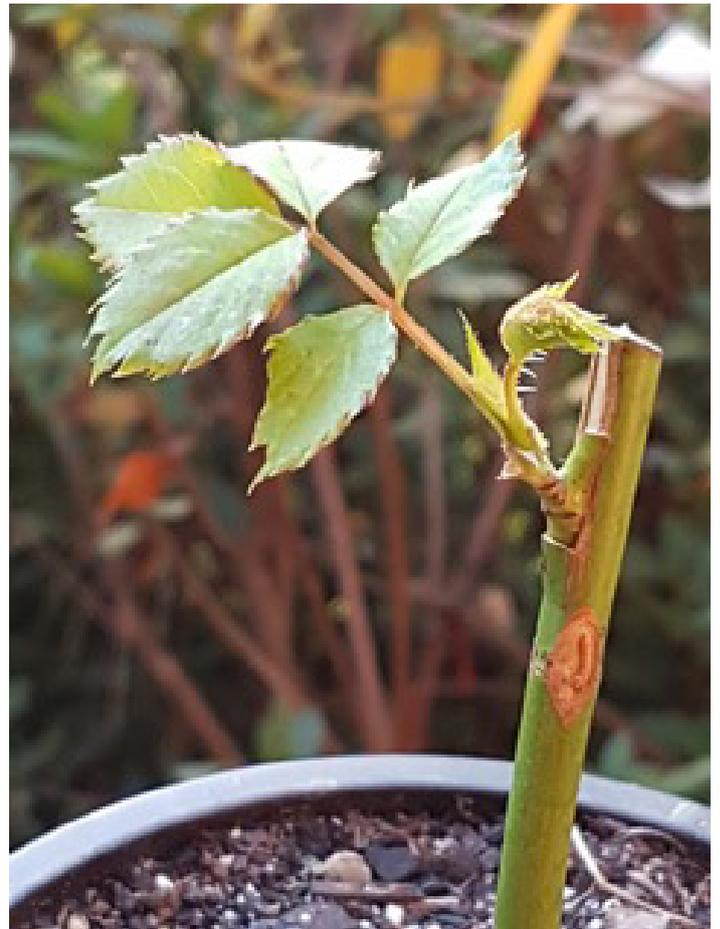
When they reach about 30cm tall, I do the graft. Instead of a shield bud I usually take about a 5-8cm firm stem piece and make a 3-4cm cut along the stem and cut the end to make a little wedge for easy insertion into a side cut, much like I do for budding (but longer). This is taped for about 30 days. By then the stock should have grown 10cm or more. After removing the tape, hopefully the scion is happy looking with obvious vigorous callousing around it. I then cut the stock back. Success rate is usually 90%+.

I have done the above grafting method for *Grevillea flexuosa* too, but have found the internode a bit long and awkward, so I thought: why not try budding this exactly the same way as I do roses and citrus? It works really well (see pics). This is now my standard approach for this species. I have not had success with this method with other *Grevillea* species yet, so it seems of limited general use, but maybe it is suitable for types with long internodes.

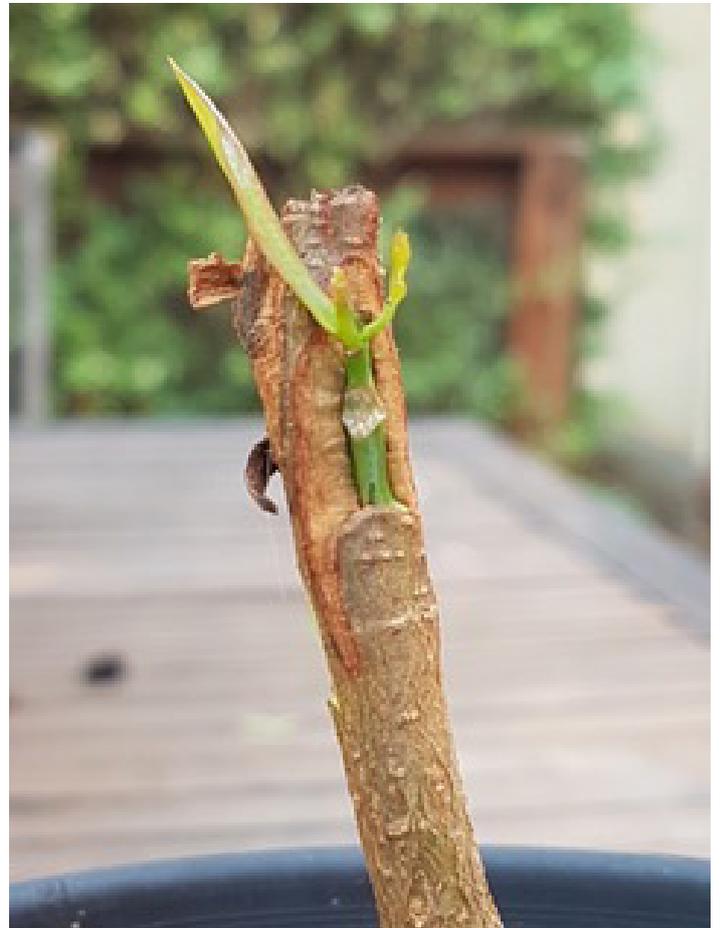
Not all grafts thrive as might be expected. I have grafted *G. 'Billy Bonkers'* on Silky Oak and found them slow growing. I am sure I have read there may be a compatibility issue. I recently tried an intergraft approach by side-veneer grafting a piece of *G. banksii* to Silky Oak, which appears highly compatible. After several weeks I can take off the tape and then side-veneer graft a variety like *G. 'Billy Bonkers'* onto the *G. banksii* graft. The final result is a thin sliver of *G. banksii* between the *G. 'Billy Bonkers'* and Silky Oak. So far, I have found the grafting method easy and the growth is looking good. This may be the easiest method to do intergrafting. Silky Oak is a great plant for roots and general vigour, but it's compatibility with other grevilleas is far from universal. An easy intergrafting method could open up opportunities for all sorts of Grevilleas not currently widely grown.

All I need now is more places where I can grow Grevilleas. A home garden is always too small!

P.S. I have never tried the grafted methods in *The Grevillea Book*, but will!



[CONTINUED >](#)



GREVILLEA 'FLAMINGO', A SPECTACULAR GARDEN PLANT

Peter Olde, NSW

Although I am detecting a move back to growing true species of *Grevillea*, there are many who appreciate the in-your-face- beauty of large-flowered tropical hybrids. For sheer horticultural beauty they are hard to beat and there are many historic examples dating back to the 1980s: *Grevillea* 'Honey Gem', *G.* 'Misty Pink', *G.* 'Moonlight', *G.* 'Superb', and *G.* 'Sylvia' are prominent among them. In more recent times I have come to appreciate the charms of *Grevillea* 'Flamingo' which we grow here at Oakdale, in the garden and in plantation. In plantation, they are planted in rows and when in flower are spectacular. It struck me that you could go a long way to find a better plant for lining driveways or paths or other landscaping projects. By bulk planting this cultivar, you can avoid the problems that afflict mass plantings of *G.* 'Robyn Gordon' or *G.* 'Superb' which often develop an unsightly leaf yellowing with a rusty coating, going 'off' for no apparent reason. I have seen these plants around a school building, magnificent one minute, terrible the next. The cause is probably in the roots reaching limey building rubble buried below ground but I would value the experiences of other people regarding this.

Grevillea 'Flamingo' is not so fussy. Its lovely pink-toned flowers appear all year with various bursts of colour

that really stun the beholder. Richard Tomkin tells me it is his most popular hybrid if label sales can be believed. In addition, it is a moderate-size shrub, rarely exceeding 1.5–2 m and pruning is rarely needed, although it does appreciate an invigorating hair cut from time to time. Until recently I had thought it to be a poor cut flower but my son David has relieved me of this misconception. Plants in vases on the table at home lasted almost two weeks. I can recommend this cultivar to new and old gardeners alike.



GREVILLEA 'VELVET CARPET'

Peter Olde and Helen Howard, NSW

Grevillea 'Velvet Carpet' is a dense ground cover with elongate furry brown branches and purple-pink new growth that soon turns light green. The soft leaves are very long and pinnately divided with short ascending lobes paired along the rachis in "sawtooth" pattern. An elongate simple lobe terminates the arrangement like a long foot. The leaves have a pubescent dark green upper surface and a white-velvety underside of matted, curled hairs. Numerous reddish pink toothbrush racemes form during spring and are prominently displayed. They are also bird-attracting. It adapts well to a variety of climates from subtropical to Mediterranean and is both hardy and long-lived in cultivation. This plant is suited to private and public landscapes and makes a decorative cascade on large banks or garden areas. It should be more popular than it is but is not listed in current nursery catalogues.

G. 'Velvet Carpet' arose apparently around 1998 in northern New South Wales but was sold only by Fairhill Nursery, Yandina, Queensland. It disappeared from commercial production a few years later for reasons that are unclear but has recently been rediscovered in the garden of Fran and Jim Standing in Woodenbong, New South Wales, from where attempts are being made to reintroduce it to cultivation.



PS. I have grafted 23 a few on mini standards. Thank you for the encouragement. I love the plant and it is trialed enough for us to know it grows very well. They are thriving at the moment.

GREVILLEA BEADLEANA

Christine Guthrie, NSW

My partner and I first discovered *Grevillea beadleana* in the 1980s, growing on an exposed, rocky ridge top in Guy Fawkes National Park. We were stranded in the park for a few days after car trouble sent our friend back to Coffs Harbour for spare parts for the car. We had a really good chance to have a look around.

G. beadleana has since been a favourite of mine. Our original garden plant died but a seedling emerged nearby and is now 1m x 1m. It would be bigger but I keep it well pruned so it doesn't obscure our window. It is growing in full sun, in front of a north facing window. That part of the garden doesn't get much water so it is obviously tolerant of very dry, sandy conditions. In the wild it is a spreading shrub, up to 2.5 m tall and wide. It has dissected and rather soft leaves about 12 - 16 cm long. There are short hairs on the upper surface and the lower surface is thickly felted with curled hairs. The scarlet flowers are the 'tooth-brush' type and are held prominently at the ends of the branchlets. The fruit is an attractive hairy capsule, resembling a small bird. The plant is very attractive even when not in flower.

G. beadleana has been listed as Endangered on both the New South Wales (NSW) *Threatened Species Conservation Act, 1995* (TSC Act) and the Commonwealth *Environmental Protection and Biodiversity Conservation Act, 1999* (EPBC Act) because it is likely to become extinct in nature in NSW unless the circumstances and factors threatening its survival and evolutionary development cease to operate.

At two locations population sizes have been reduced to such a critical level, and the habitat has been so drastically altered, that the species is in immediate danger of extinction. The species is only known to occur in northern NSW.

There is a Recovery Plan for *Grevillea Beadleana* and it can be viewed here:

<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Recovery-plans/grevillea-beadleana-recovery-plan.pdf>



CARPENTER BEES POLLINATE GREVILLEA SERICEA

Peter Olde, Ralph Cartwright, Michael Batley

I recently came upon some revealing photos posted by Ralph Cartwright in the Sutherland Group APS Newsletter, involving the pollination of *Grevillea sericea*, a common Sydney species. While it is commonly believed by the members of the general public that all grevilleas are pollinated by birds, this is not the case. Many species are entomophilous, techno-speak for pollination by insects. Even many species that look like they ought to be pollinated by birds are not. Bees and other insects have a vital role in the transfer of pollen. Actually, even in ornithophilous species, techno-speak for bird pollination. In the case of *Grevillea sericea*, I have never seen a bird on a plant. I have been quietly watching this for thirty years. Ralph Cartwright's photos reveal the reason. Michael Batley provides the expert diagnosis.

That is a female *Exoneura* species. The current state of *Exoneura* taxonomy is such that I could not give you a species name even if I had a specimen. My guess is that although the *Exoneura* visit for nectar, they will perform little if any pollination. They might crawl up to the pollen presenter and transfer some pollen while collecting it, but I don't think it will be very much.

Even *Apis mellifera* manage to collect nectar from *G. sericea* and *G. buxifolia* without touching the style. The large carpenter bees, *Xylocopa aeratus* and *X. bombylans* do the job beautifully and one can often find the bees with the distinctive purple pollen covering their backs.



GREVILLEA MONTANA FROM THE WARKWORTH SANDS

Peter Olde & Ryan Sims

A recent collection of *Grevillea montana* from near Ravensworth, New South Wales echoes collections of the same species from Warkworth Sands Woodlands made by ecologist Tony Rodd in October 2011. Whereas the colour of the flowers of *G. montana* is usually green at base with red in the distal half, some of the flowers at Warkworth were yellow in the upper half. The style colour of this species and all species related to *G. arenaria* is green. These photos were posted on flickr and you can view them here <https://flic.kr/p/dQn4Qq>

Tony stated that the yellow perianth colour is uncommon, maybe localised to the vicinity of Warkworth. The population here had both colours but some sub-populations were all yellow.

The Warkworth Sand Woodland is now an endangered ecological community confined to a small area near Warkworth, about 15 km south-west of Singleton in the Hunter Valley. Only approximately 800 hectares of Warkworth Sands Woodland remains, none of which occurs within a conservation reserve. Due to the extent of vegetation clearing and modification, this is estimated to be as little as 13% of its pre-settlement extent. It is currently known to occur only in the Singleton LGA, but may occur elsewhere in the Sydney Basin Bioregion.

Warkworth Sands Woodland is a low woodland dominated by *Angophora floribunda* (Rough-barked Apple) and *Banksia integrifolia* subsp. *integrifolia* (Coast Banksia). Other tree species may be present such as *Eucalyptus tereticornis* (Forest Red Gum) and *E. glaucina* (Slaty Red Gum). Shrub and ground layer species commonly present include *Acacia filicifolia* (Fern-leaved Wattle), *Melaleuca thymifolia* and *Pimelea linifolia*. Aeolian sand deposits are a feature of the soil profile.

Recent studies by the authors show that there are two forms of *Grevillea montana*, a lignotuberous form which appears to be the most common and a seed-obligate form from the Milbrodale–Rothbury area, from which most cultivated plants are known. It is not known how the yellow-green flowered form reproduces, although seed follicles have been photographed.

References

Office of Environment and Heritage (2017) Warkworth Sands Woodland in the Sydney Basin Bioregion.

https://www.flickr.com/photos/tony_rodd/8423583276/



Grevillea 'Lime Slice', the yellow-flowered form of *G. montana*
Photo R. Sims



Grevillea montana yellow-flowered form with fruit- Photo T. Rodd



Typical flower of *G. montana* - Photo T. Rodd

Income

Donations	98.00
Raffle	184.00
Interest	0.45

.....

Total income **\$282.45**

Expenditure

Newsletter publishing	\$285.00
-----------------------	----------

.....

Total expenditure **\$285.00**

Bank account details

Balance in current account
28/09/2020 **\$3,667.28**

DONATIONS

The newsletter is now free but groups are encouraged to make an annual donation. Individual donations are always welcome. Direct deposits can be made into the Grevillea Study Group account.

BSB: 112-879

Account Number: 016526630
(St George Bank)

Please notify the Treasurer of transfer by email
(bruce.moffatt@tpg.com.au)

LEADER

Peter Olde

140 Russell Lane, Oakdale NSW 2570

(04) 3211 0463

peter.olde@exemail.com.au

TREASURER AND NEWSLETTER EDITOR

Christine Guthrie

32 Blanche Street, Oatley NSW 2223

(02) 9579 4093

bruce.moffatt@tpg.com.au

CURATOR OF LIVING COLLECTION

Neil Marriott

PO Box 107, Stawell Vic 3380

(03) 5356 2404 or 0458 177 989

neil@whitegumsaustralia.com

CURATOR OF ILLAWARRA GREVILLEA PARK, BULLI

Ray Brown

29 Gwythir Avenue, Bulli NSW 2516

(02) 4284 9216

CURATOR OF SEED BANK

Jeremy Tscharke

PO Box 521, Bairnsdale Vic 3875

jtscharke1@gmail.com

ONLINE CONTACT

1. President's email address

peter.olde@exemail.com.au



2. URL for Grevillea Study Group website

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

To be notified of the latest newsletter, email recipients must be registered. Please ensure your email address is registered and up to date and any changes are advised to Christine Guthrie at bruce.moffatt@tpg.com.au