

AUSTRALIAN NATIVE PLANTS SOCIETY (AUSTRALIA) INC

# GREVILLEA STUDY GROUP

NEWSLETTER NO. 108 – OCTOBER 2017

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### GSG NSW Programme 2017

*Leader: Peter Olde, p 0432 110 463 | e [peter.olde@exemail.com.au](mailto:peter.olde@exemail.com.au)*

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

### GSG Vic Programme 2017

*Leader: Neil Marriott, 693 Panrock Reservoir Rd, Stawell, Vic. 3380  
p 03 5356 2404 or 0458 177 989 | e [neil@whitegumsaustralia.com](mailto: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.*

### GSG Living Collection

There has been further extensive planting of the collection, with the development of a South Australian Grevillea bed, a *Grevillea alpina* hill, many areas of Western Australian Grevilleas and a lovely NSW Grevillea bed. Any volunteer help would be greatly appreciated as the garden is now getting just too much to care for alone. Special thanks must go to those members who have donated plants recently to the collection: Brian Weir, Graeme Woods, Phil Vaughan, Neville Collier, Dave Binch, Barry Teague, Mike Williams, Humphris Nursery and Kuranga Nursery. Any members wishing to get seed or cutting material are most welcome – come and have a look around and collect your own.

### GSG SE Qld Programme 2017

*Meetings are usually held on the last Sunday of the even months. We meet for a communal morning tea at 9.30am after which the meetings commence at 10.00am. Visitors are always welcome. For more information 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, 29 October

**VENUE:** At home of Gail and Adrian Wockner, 5 Horizon Court, Highfields Qld 4352  
**SUBJECT:** Pests and Diseases associated with Grevilleas by Adrian Wockner  
**PHONE:** (07) 4615 4800

#### Sunday, 03 December (in lieu of 26.11.2017)

**VENUE:** Garden of Denis Cox & Jan Glazebrook, 87 Daintree Drive, Logan Village, Cnr Diamantina Drive (the 2nd corner of Daintree Drive on Diamantina Drive)  
**SPEAKER:** Mr Peter Olde  
**PHONE:** (07) 5546 8590

## A FEW WORDS FROM PETER

Peter Olde, NSW

Well it seems I was jumping to conclusions about *G. arenaria* subsp. *canescens* occurring naturally in Victoria (See Newsletter 107). I am glad that two study group members picked up on it, although a field trip to the Victorian locality would probably have shown it. However, I did collect this subspecies near Albury and did not suspect that it was anything other than natural. Certain features of this plant placed it with the Blue Mountains form and I was certainly puzzled by that. I am not sure now if I will make this into a field trip as indicated last newsletter.

I have just returned from a stint in Western Australia where I spent nearly 4 weeks in the herbarium studying unresolved taxonomic problems. On weekends I took off into the bush to confirm my findings. While there I was informed of a new *Grevillea* species at Koolyanobbing which will be written up by the herbarium staff for an anniversary issue of *Nuytsia* proposed for 2019. It is a most peculiar species.

The effect that continued funding cuts is making to the effectiveness of Western Australian plant taxonomy and conservation was notable to me while there. There are now only 1.5 permanent botanists studying angiosperms employed by the Western Australian herbarium, an institution that has recently been merged with Kings Park and Botanic Garden, and which is responsible for

the taxonomy of half of Australia. The importance of conservation is also being whittled away with councils clearing large swathes of bushland beside roads and getting away with it scot free. There is a puzzling attitude abroad. Every person, including botanists attempting to describe the flora, must jump through major hoops simply to be allowed to collect a specimen. There are severe penalties and you are prohibited from collecting just about everywhere sensible. It makes me wonder if Australia is becoming more and more authoritarian and common sense is going out the window.

I am pleased to see Richard Tomkin getting stuck into grafting again. Not only is he probably the finest *Grevillea* breeder in the country but his grafted plants grace many a garden, especially here in Sydney. Richard is willing to deal with individuals and ordered plants will be mailed. You can order from his catalogue too.

I commend to you the article on *Grevillea arenaria* which Mark Noake has written. Hopefully he will produce another soon. Also a great article from Christine Guthrie showing the benefits of pruning and buying grafted plants. Thanks to all our contributors. I want to encourage more people to write articles. It is not so difficult and the editorial team will assist if required.

## REMINDER: NEW FINANCIAL ARRANGEMENTS

Christine Guthrie, NSW

You will recall from the last edition that the **Grevillea Study Group newsletter is now only available online, for FREE**. Please send any email changes to Christine Guthrie at [bruce.moffatt@tpg.com.au](mailto:bruce.moffatt@tpg.com.au) to ensure you don't miss out on the newsletter. If we are unable to email you the newsletter we will call or text you to confirm email details. Please send your phone details to Christine at the above email address.

While there is no subscription, donations are welcome. We are encouraging all groups and regions to make an annual donation to the study group. This can be done by direct deposit into the *Grevillea Study Group* account:

**BSB: 112-879**  
**Account number: 016526630**  
**(St George Bank)**

Please include your name in the transaction details.  
 Alternatively post your cheque to:

**Grevillea Study Group**  
**32 Blanche Street OATLEY**  
**NSW 2223**

**Illawarra Grevillea Park**

NEXT OPEN DAYS 2018

**May 5, 6, 12, 13****July 7, 8, 14, 15****September 1, 2, 8, 9***Opening hrs are 10am – 4pm***Location**

The Park is located at the rear of Bulli Showground,  
 Princess Highway, Bulli.

**Admission**

\$5 adults, children with adults are free

email [info@grevilleapark.org](mailto:info@grevilleapark.org)  
 or visit [grevilleapark.org](http://grevilleapark.org)

### At home of Fran & Jim Standing at Mt Clunie – 27 August 2017

Denis opened the meeting at 10:05 and thanked members for attending & welcomed all visitors. Thanks to the hosts for having us at your home/garden. Fran advised the group of housekeeping arrangements. Denis explained why & apologised the fact that Phil Vaughan wasn't able to be with us, as originally planned.

**Attendance:** 16 members & 4 visitors signed the attendance book.

**Apologies:** Apologies tendered from: Len & Joan Hubbard, Lorna Murray, Beth McRobert, Peter Bevan, Adrian & Gail Wockner, Ken & Jan Mathiesen.

**Raffle:** Tickets were 50c. The host was given first choice on the raffle table, followed by the general raffle.

**Record of Last Meeting:** The record of June Meeting sent out by Ross on 26 June. Notice of this meeting was sent out by Ross on 7 August, and subsequent notifications.

#### Business Arising

1. Ross issued a handout explaining the itinerary for the 21st October excursion to Mole River Nursery. We will meet at the nursery at 10:00 for shared morning tea & a nursery tour; then head to Grevillea Downs, to see *G. beadleana* in the wild. After a BYO picnic lunch there & exploring the 4WD country, we'll return to Mole Station for a BBQ, hosted by Sarah & David Caldwell. After overnighing at Tenterfield, I suggest a visit to Basket Swamp NP on the way home, to explore some more.

2. November meeting (actually on 3 December), Peter Olde will discuss the 'Grevillea/Hakea issue'. Denis to contact Peter about our offer to assist with travel expenses.

3. ABC Gardening Australia is continuing to promote Australian Native Plants on the program. So put on-hold penning a letter requesting more promotion of natives, following Angus Stewart's retirement. Noted that Costa did a beaut segment on the native gardens at National Botanic gardens in Canberra on 5th August and last week's show was 'mostly' about natives.

Financial Report: Treasurer - Bev Weir;  
Opening Balance June 2017 = \$1,867.51  
Raffle income = \$22

Expenditure-Reimburse host = \$10

New Balance = \$1,879.51 (TBC)

Bev moved acceptance; Sec Jan G. Carried.

#### Correspondence

##### Outward:

26.06.17- R Reddick, minutes sent to mailing list;

17.07.17- R Reddick, email to Tenterfield council re Bot Gardens

07.08.17- R Reddick, email meeting reminder sent to mailing list;

##### Inwards:

19.07.17- Tenterfield council Ops Supervisor, advising

'Landcare' planting opposite TAFE College is mostly native.  
04.08.17- Newsletter 107 arrived, beaut new format & new conditions.

09.08.17- Sarah Caldwell, Emailed map showing best way/s to Mole Station.

Ross moved the inward correspondence be accepted & outward endorsed. Sec; Jim S. Carried.

#### General Business

1. Mole Station Nursery excursion-21st October. Denis called for expressions of interest; 15 people indicated their intention to attend.

2. 16 & 17 Sept. Flower show exhibit. Ross passed around a photo of the display board that he & Chris have prepared for the show. The board is 1200x800 showing the location of 22 species of Grevillea, on the combined RACQ maps for SE Qld & Nth NSW. Jan called for helpers for the exhibit & requested anyone with examples of the species (or hybrids) to bring them along.

3. 2018 venues; Joy & Gahan Gilfedder at Gondwana Nursery (near Kyogle) have offered to host our April meeting.

February meeting to be at Peacehaven Botanic Park, 56 Kuhls Road, Highfields, via Toowoomba, followed by a visit to Chris Hotton's nearby garden. More venues still to be discussed. And more details to be issued at a later date.

4. Newsletter 107. Noted that Newsletter is now available on-line, to SGAP members- for free. I also note that groups, branches & regions are encouraged to make an annual donation to the Grevillea Study Group.

#### Show and Tell

Denis displayed a 'magnificent' *G. juncifolia* flower, grafted on *G. robusta* stock.

On Saturday at a 'sustainable gardeners' meeting, Denis was presented with Grevillea flowers & foliage to identify. They resembled *G. pteridifolia*, very Golden styles & very maroon at the base of the style (Perianth!?). The jury is still out on the ID!

Laylee had sent home material from far west WA of *G. rogersonia*?! for propagation.

**Discussion:** Garden tour, followed by another garden tour, and material gathering! About 5 acres of exquisite native gardens to explore.

**Close Meeting:** Thank you all for coming. Small Plants Group meeting follows after the Lunch break.

**Discussion topic:** Dampieras, by Fran.

**Meeting attendees:** Ray & Noreen Baxter, Jan Glazebrook & Denis Cox, Ross & Chris Reddick, Janette Thurley & John Walton, Laylee & Stephen Purchase, Jim & Fran Standing, Chris Hotton, Bill & Bev Weir, and Claire Shackel.

**Visitors:** Sandra Neill? (nee Gordon), Mark & Christine Stevens, and Lauren ? (Toowoomba).

## VALE GRAHAM NOSWORTHY (1927–1917)

Graham Nosworthy, a founding member of the Queensland chapter of the *Grevillea* Study Group, passed to eternity on Thursday September 14. He was in his 90th year of life. Graham was known to all for his mischievous sense of humour, followed by a huge loud laugh. This personal characteristic belied his deep plant knowledge, not only about *Grevillea*, *Eremophila* but also Orchids and Ferns, of which he had a substantial collection, and some exotic species. Graham was an only child. He never married. He died after a short illness without any family, leaving his entire estate to charity. Until he retired, he had a hard life. His parents were unable to afford to keep and educate him from the age of 14. He left home to become a jackaroo and worked around the Winton area, later working on road gangs and as a supervisor in civil constructions. He returned to Brisbane in the 1960s and lived with his mother during which time he purchased a large block at Pullenvale where he grew rainforest and Proteaceae, among other things. It was a difficult block and he spent hours of his time building rock walls and gardens. It was here that he discovered *Grevillea* 'Majestic' growing as a seedling on an adjacent property. The probable parent, *Grevillea* 'Pink Surprise', was growing on his property. Graham also produced a large red-flowered tropical *Grevillea* hybrid which he gave to Fairhill Nursery but they could not propagate it and so *Grevillea* 'Grandview' came to nought.

Graham retired in 1983 at age 56 with very little money but he lived frugally off his savings until he got the pension, after which he continued to live frugally! By then he had built a two-bedroom house on the block where he had lived from 1974. In August–September 1993 I travelled with him and Merv Hodge through southern and central Queensland, following up *Grevillea* locations. It was an eventful trip and we discovered many new locations. On this trip I was able to confirm *G. hodgei* as distinct from *G. whiteana* and I was also able to describe *G. floribunda* subsp. *tenella*. We visited Eidsvold, the most westerly location for *G. banksii* ( a white-flowered form). Graham was extremely well-read, politically aware and learned about many subjects. He was also a genealogical world authority on the Nosworthy name, tracing family back to the 12th Century.

His closest friend for many years was Bryson Easton who has informed this obituary greatly. Bryson inherited his orchid collection of native and exotic species before Graham died. He and Graham made many trips together around Australia and to plant meetings. A trip to my farm at Oakdale some ten years ago by them is particularly well-remembered by me. They were able to visit the ferns Graham gave my wife when he sold up at Pullenvale.

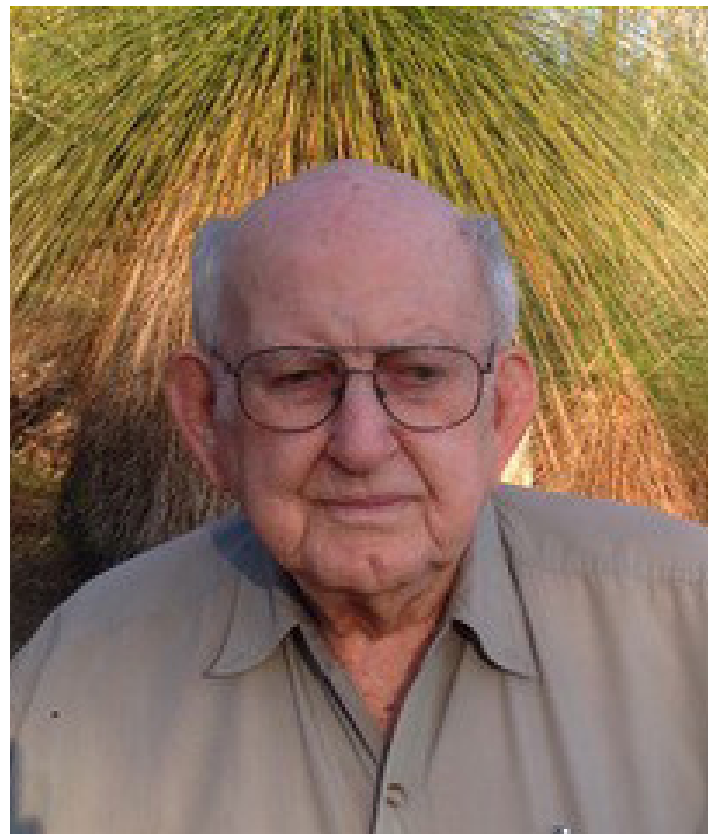
## PETER OLDE, NSW

Graham left the Public Trustee in charge of executing his affairs. His wish to be cremated will be granted but when and where has not presently been decided.

## From Beth McRobert

I don't know much about Graham's working life, except that he worked in the north-west for some time, and used to return to Brisbane on his motor bike. In one showing of slides of a Pine Rivers safari, he recognised a view from the Cawnpore Lookout, knowing it from his trips home. Graham cared for his mother in her later years, and moved to his amazing garden at Pullenvale after she died.

There, he was a generous host to many visitors with whom he shared his vast collection, and who were appreciative of his propagation skills and skills in growing 'difficult' plants e.g. *Platyzoma microphyllum* (Braid fern), and from where he prepared the many plants he generously donated for exchanges at SGAP meetings. We who saw him often will miss his infectious laughter and are grateful for the opportunities we had to share with him. Vale, Graham.





## REGULARITY IN FLOWERS OF GREVILLEA

Peter Olde, NSW

Species and species groups are often distinguished in *Grevillea* by the perceived regularity of their flowers. In the post-Darwin world of evolutionary species concepts, regular flowers were thought to be primitive and therefore rank highly on the taxonomic scale of importance which seeks to order nature in terms of its evolutionary development. Truly regular flowers are radially symmetrical, i.e. when bisected vertically in any plane the two halves are exactly the same. The botanical term for this is actinomorphy. The converse is zygomorphy. Some botanists have used the term actinomorphic rather loosely in *Grevillea* for species that have features of the perianth only characterised by radial symmetry, forgetting that the enclosed pistil never bisects equally. In fact, there are no truly actinomorphic or regular flowers in *Grevillea*, or *Hakea* for that matter. An appropriate term to describe these flowers is 'pseudo-actinomorphic'.

Pseudo-actinomorphic flowers have been classified by Olde & Marriott (1994: 189 *et seq.*) into four groups (1, 2, 7, 41). R.O. Makinson (2000) gave them names, respectively the *Triloba* Group, *Integrifolia* Group, *Petrophiloides* Group and *Rudis* Group. In a recent comparative study of these groups Mast *et al.* (2015) found that only one, the *Integrifolia* Group, was part of an early-divergent lineage. The remaining three were resolved in a heterogeneous clade that evolved much later and contained species with some of the most strongly zygomorphic flowers in the genus. Furthermore, the clade in which the *Integrifolia* Group was resolved also contains other species with zygomorphic flowers, including (Group 4) *G. glauca*, *G. myosodes* and *G. donaldiana* (not tested) and some members of Group 3 (in part) including *G. polybotrya*, *G. cheilocarpa*, *G. didymobotrya* (not tested) and *G. makinsonii*.

One of the many interesting features of the phylogeny published by Mast *et al.* (2015) is the way in which tested pseudo-actinomorphic species in the *Petrophiloides* Group and the *Rudis* Group cluster together in their own subclade. This suggests the possibility that they might together represent a taxonomically distinct grouping. *Grevillea pulchella* from the *Rudis* Group is the lectotype species of Robert Brown's genus '*Anadenia*' and the possibility of its re-recognition at some level using different characters is currently being examined.

In the same paper two tested species of Group 1 (Bentham's Section *Manglesia*/ the *Triloba* Group) (*G. anethifolia*, *G. acrobotrya*) resolve closely together as you might expect but far away from the *Anadenia* cluster. According to the chronogram supplied, the two tested species (and by inference all the species) in this group evolved less than 5 million years ago, a relatively recent novelty. Pseudo-actinomorphy thus has evolved at least three times in the evolution of *Grevillea*. Studies in floral evolution currently in train have already revealed at least 16 changes from radial to bilateral floral symmetry in the Proteaceae, according to Dr. P.H. Weston (pers. comm.).

Molecular dating published by Mast *et al.* (*loc. cit.*) indicates that the Proteaceae evolved around 85–90 million years ago. When it comes to the Hakeinae, the earliest-diverged lineage with only one extant species (*Opisthiolepis heterophylla*) dates to around 55 million years. The *Buckinghamia* clade with two extant subspecies, dates back almost 50 million years. The earliest *Grevillea* lineage (with one tested species, *G. endlicheriana*) did not evolve until around 38 million years ago. All have zygomorphic flowers.

## References

- Makinson RO (2000a) Proteaceae 2, *Grevillea*. *Flora of Australia*. Volume 17A (Australian Biological Resources Study: Canberra)
- Mast AR, Olde PM, Makinson RO, Jones E, Kubes A, Miller E, Weston PH (2015) Paraphyly changes understanding of timing and tempo of diversification in subtribe Hakeinae (Proteaceae), a giant Australian plant radiation. *American Journal of Botany* 102: 1634–1636.
- Olde PM & Marriott NR (1994e) The *Grevillea* Book. Vol. 1. (Kangaroo Press: Kenthurst, New South Wales)

## NEW MEMBERS

Christine Guthrie, NSW

We have a number of new members. We love to find out about our members, so feel free to send a few sentences about yourself or your activities by way of introduction.

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**Chantelle McConchie***Yackandandah, Vic*

I'm writing this email to you as I wish to become a member of your Grevillea group. To give you a little background my husband and I have become owners of the native garden in Yackandandah named Eremaea Native Garden. By now you've found out a little about us as Martin Rigg has been visiting you recently.

Martin and Diana have both mentioned your group in passing and that Martin is an active member of the group. He also mentioned the interaction that the members have, including treks hunting unusual or interesting newly found species. There was also an expectation of the exchanging of plants which I'm willing to participate in as I intend to propagate plants for the garden here and other like minded enthusiasts. Considering the diversity of species represented here that aren't found in your average nursery or Kuranga etc. and the cuttings Martin brought here from Canberra, I realise there are many other plants still to be shared.

I am also really pleased to have found and bought your Grevillea books (all 3 volumes) and they are in quite good condition being second hand. Martin explained that there are very few available which prompted me to look so quickly. They will be of great value to me with all the grevilleas here that I'm not yet familiar with as well as those I do know.

I am a collector of plants of all sorts but finding this lovely treasure trove at Eremaea is certainly a windfall for me.

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**Brendon Stahl***Elliminyt Vic*

I live at Elliminyt which is a suburb of Colac in South West Victoria and we have a house on one acre of land. I am growing various grevilleas but I am restricted by a heavy soil so I have some raised garden beds. Neil Marriott gave me some grevilleas when we hosted him and Wendy for an APS Victoria Quarterly weekend. The grevilleas are still thriving.

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**Ray Weeks***Park Orchards, Vic*

I am a member of the Correa Study Group & recently joined ANP Yarra Yarra Group. We live on a large block on which I am developing a garden of mostly Australian native plants. My plant interests are varied and include the following: Correas, Grevilleas, Banksias, Eremophilas, Australian epiphytic orchids, Vireya Rhododendrons & Tillandsias. We are growing a number of the Australian genera in our garden & I have a collection of species of Australian epiphytic orchids, Vireya Rhododendrons & Tillandsias.

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**Carole Barron***Ungarie, NSW*

I would like to join the Grevillea Study Group. I live on a farm in the Riverina/Central West of NSW, with a large garden mostly planted with natives. I grow drought and frost tolerant grevilleas, hakeas, wattles, eucalypts and attempt to propagate local natives with limited success. My biggest success is a series of self-sown hybrid grevilleas, all the same parentage (G. olivacea & G. fililoba I think), one of which has apricot flowers while the others have red. They are not artificially watered or protected in any way but reliably flower and increase a little in size each year. I would very much like to propagate the apricot one but have been unsuccessful so far. Does anyone have any tips to help?

.....

OBSERVATIONS ON GREVILLEA ARENARIA IN THE EUROBODALLA SHIRE

Mark Noake, NSW

Given the task of propagating each local form of *G. arenaria*, I found my interest piqued in these quite beautiful and varied plants. By "local" I mean endemic to the catchment area for the Eurobodalla Regional Botanic Gardens (NSW) where a dedicated team of volunteers and a few equally dedicated staff were working to preserve local species from the ravages of development.

Young apprentice, Ryan Harris, was at the time curating a massed planting of a form from Donalds Creek (more follows below). The bronze new growth sitting against grey green foliage was quite stunning and Ryan's regular pruning had produced a thick, aesthetically pleasing screen at the side of a small dam. Next came the news that a certain *Grevillea* guru showed an interest in a form from Pollwombra with bright red flowers with an apiculated limb, and so a project was born.



The following observations of five forms are based upon plants in cultivation grown over decomposed granite in our Glendeuart garden and visited during a trip into the wild with Peter Olde and John Knight. The five forms are called Donalds Creek, Larrys Mountain, Mogo, Pollwombra, and Shallow Crossing. The plants in this article all belong to the so-called 'villous' form of *G. arenaria*, *sensu* Olde and Marriott (1995: 35) which is notable for the spreading, messy indumentum on the undersurface of its leaves. They share the typical green style of *G. arenaria* which complements the warmer hues of the perianth.

My wife, Carolyn, and I have developed a bed with each form growing side by side which allows us to easily observe similarities and differences. Our soil type is relevant because our local forms grow naturally on granitic sandy soils, usually collected between rocks. The NSW Geological Survey shows the collecting zones as granitic, where the broader leafed, greener appearance forms have developed, or finer grained and usually drier rhyolitic soils where the plants appear greyer and finer leafed. It should be noted, however, that a thick indumentum of fine hairs contributes to leaf greyiness and when these rub off, the leaf colour is usually dull green. Leaves with revolute

margins often appear thinner, and may be a possible evolutionary response to drier conditions. The leaf upper surface is quite granulate with obvious venation, features which are more obvious in those forms with a sparse cover of hairs.

***Grevillea ferruginea*** The form from Bent's Basin and on inland sandstone outcrops or shaly soils between Werombi to Mittagong is not considered here to be part of this form. These plants have actually been formerly described (as *G. ferruginea*) and will be reinstated from synonymy in a future paper in preparation by Peter. They differ notably in the pale brown hairs on their foliage, their larger oblong, olive-green leaves and in the attenuated perianth limb. They also have terminal sessile inflorescences whereas the plants under discussion below all have decurved peduncles extending from lower leaf axils.

Table 1 contains a list of species growing in association with collections from Shallow Crossing (on the Clyde River) and in the hill country above. John Knight, in preparing the list, was once again very generous with his time and experience.

		Carisbrook Road	Mares Hill Road	Shallow Crossing
<i>Acacia</i>	<i>implexa</i>		x	x
<i>Acacia</i>	<i>irrorata</i>			x
<i>Acacia</i>	<i>terminalis</i>		x	
<i>Allocasuarina</i>	<i>littoralis</i>	x	x	x
<i>Angophora</i>	<i>floribunda</i>	x	x	
<i>Boronia</i>	<i>microphylla</i>	x		
<i>Bossiaea</i>	<i>obcordata</i>	x		x
<i>Bursaria</i>	<i>spinosa</i>		x	x
<i>Choretrum</i>	<i>candolleana</i>		x	
<i>Corymbia</i>	<i>maculata</i>			x
<i>Dampiera</i>	<i>purpurea</i>	x		
<i>Daviesia</i>	<i>ulicifolia</i>			x
<i>Eucalyptus</i>	<i>elata</i>		x	
<i>Eucalyptus</i>	<i>globoidea</i>	x	x	x
<i>Eucalyptus</i>	<i>piperita</i>	x		
<i>Eucalyptus</i>	<i>saligna</i>		x	
<i>Exocarpus</i>	<i>cupressiformis</i>			x
<i>Geitnoplesium</i>				x
<i>Gompholobium</i>	<i>grandiflorum</i>	x		
<i>Kunzea</i>	<i>ambigua</i>	x		x
<i>Lasiopetalum</i>	<i>ferrugineum</i>	x		
<i>Lepidosperma</i>	<i>laterale</i>	x		
<i>Leptospermum</i>	<i>polygalifolium</i>	x		
<i>Leptospermum</i>	<i>trinervium</i>	x		
<i>Lepidosperma</i>	<i>urophorum</i>		x	
<i>Leucopogon</i>	<i>lanceolata</i>		x	

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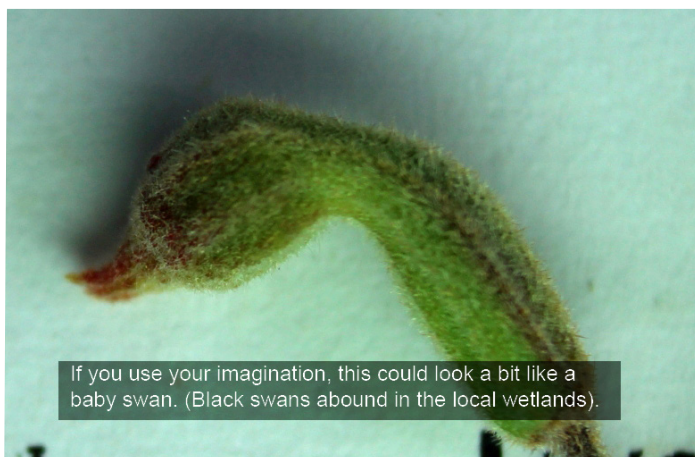
<i>Lomandra</i>	<i>longifolia</i>		x	
<i>Macrozamia</i>	<i>communis</i>		x	x
<i>Mirbelia</i>	<i>rubrifolia</i>	x		
<i>Ozothamnus</i>	<i>diosmifolius</i>		x	
<i>Persoonia</i>	<i>linearis</i>		x	x
<i>Phebalium</i>	<i>squamulosum</i>	x		
<i>Podolobium</i>	<i>ilicifolium</i>	x	x	
<i>Pultenaea</i>	<i>cunninghamii</i>		x	
<i>Sannantha</i>	<i>pluriflora</i>	x		

The Donalds Creek form is noted for its dense grey appearance and has a spreading habit that will easily reach 3m in height by 4m wide. Leaves are narrower than the other local forms at around 6mm and, being recurved, appear particularly slender. Although the underlying lamina is green and quite granular, the heavy indumentum of light coloured hairs makes the leaves appear quite grey or glaucous. New growth is bronze and pendent.



Donalds Creek form in cultivation - bronze new growth contrasts with grey/green foliage.

The flowers are quite delicate and not obvious although the form is floriferous. Flower colour is pink through to light green at the base of the perianth. A dorsal stripe of deep pink follows the shape of the tepals for the full extent of the flowers. Overall flower colour, and that of the green stems is greyed off by a heavy indumentum of light hairs. The limb is quite blunt, not as acute as other local forms.



If you use your imagination, this could look a bit like a baby swan. (Black swans abound in the local wetlands).

In cultivation this form provides an attractive, grey screen of dense vegetation. The delicate flowers reward close appraisal. It is very strongly bird and bee attractant and birds will readily nest in its branches.

During propagation this plant seems to prefer a slightly drier environment, possibly because of the dense indumentum. It does, however root quite easily from cuttings of firm young growth.

This is a robust plant which reacts well to a heavy prune, rewarding the gardener's efforts with attractive bronze new growth and a dense habit for use as a feature or as a hedge. It handles an exposed site with aplomb and can be used to provide protection for more delicate plants.

The Donalds Creek form was collected in dry, rocky scree from a hilltop with a thin forest cover. The pockets of soil derive from rhyolite and the presence of *G. rhyolitica* in the area was also noted. Rhyolite is an extrusive volcanic rock similar to granite which it often resembles. You really need to be a bit of an expert to tell the difference. More on the subject at <https://en.wikipedia.org/wiki/Rhyolite>. The Donalds Creek leg of the trip was not without a certain level of adventure and a salutary lesson in bush navigation. Suffice it to say that a GPS app on a genuine Android phone saved us from an extended stay in the bush.

The Pollwombra form grows across an east/west ridge at about 200m on Pollwombra Mountain on the northern side of Moruya. It inhabits sandy soil amidst granite outcrops.

This form is green in appearance, with a quite open, spreading habit. It reaches 2m in height by about 2m in width. In keeping with the other forms growing in coarser soils, the leaves are relatively wide, growing to about 8mm in width. Venation is clearly visible through the sparse hairs on the upper surface of the leaves which is also quite granulate. The leaf margins are recurved but flatter than those found on the forms growing on rhyolitic soils. New growth is green/bronze.



Pollwombra form in cultivation (not in flower at time of photograph)

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Flower colour is monochromatic deep red with no yellowing at the base of the perianth. Very dark, almost black lines follow the shape of the tepals on the dorsal side, deepening the appearance of the perianth. The perianth limb has apiculations up to 2 mm long, somewhat reminiscent of the shape of a cygnet's head. Thus the limb has earned it the local nickname of "cygneta".

Easy to propagate from cuttings of firm new growth, this is an attractive form in cultivation. It is floriferous, showing its deep red flowers well across the plant. A good prune is rewarded with denser habit. This plant is happy in filtered shade but will grow well in an open situation. The medium size of this plant makes it valuable in most gardens.



Collection point for Larrys Mt form on a bit of a slope!

**The Larrys Mountain form** was collected from sparse sandy pockets in a cliff face leading down to the Deua River near the intersection of Larrys Mt Road and Araluen Road.

This is quite a spreading form which to date (after about 3 years in cultivation) has been lower growing than the other local forms. The 10mm-wide leaves appear green with only a few sparse white hairs on the current year's growth, although the tips of new growth are pink to purple, soon turning bronze. Venation is clearly visible.



Larrys Mt form in cultivation - a green, spreading shrub.

Flower colour is a bright pink through to apricot at the base of the perianth. Pink/red dorsal stripes carry the pink colour through the entire length of the flower. The peduncle is reddish brown and the limb is markedly attenuated.

In cultivation this form provides a spreading shrub which grows to about 1.5m to 2m high by 2m wide. Taken from its harsh natural environment it forms quite a dense umbrella of green. Flowers are carried discreetly but reward a closer inspection.

**The Mogo form** occurs near the hamlet of Mogo just south of Batemans Bay. It grows in the lower reaches of Maulbrooks Rd and adjacent forest trails, generally around creeks on sandy granite derived soils, often amidst granite outcrops. An interesting variation occurs along Buckenbours Rd which crosses Maulbrooks Rd just south of Mogo.



Mogo form in the wild just south of Mogo in open forest.

This is one of the greener forms with leaves about 8mm wide and carrying sparse hairs on the lamina. It forms an open spreading shrub to about 2.5m in open forest, growing denser in open territory.

Flower colour is deep red, grading to a greenish base on the perianth. Plants on Buckenbours Rd also have red flowers, but the perianth is covered with quite prominent yellow hairs which can change the apparent colour of the flowers to an apricot hue.

This form performs well in cultivation, carrying an even display of bright red flowers sprinkled across the bush. It is robust in wet and dry conditions, and it responds well to a regular prune.

**The Shallow Crossing form** occurs in open forest all along the road to Shallow Crossing from Nelligen in specific habitats in decomposed granitic sand among rock. Plants occur usually in open forest on very steep slopes overlooking the river and have a particular association with other species.

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The habit of this form is distinctly vertical compared to other local forms and a mature specimen may reach 3m in height by about 3m in width.

This form is deep green in appearance, the lamina is quite granular with sparse hairs and the veins are clearly visible. The relatively wide leaves (to 8mm) are also longer and recurved but not to the extent of those found in the Donalds Creek form. New growth is dark green. The leaves also have a rather odd angular growth pattern which is particularly notable in cultivation as 'different'.

Flower colour is luminescent pink, grading to bright yellow at the base of the perianth. Tepals are strongly recurved at anthesis, forming an attractive "rams horn" effect. The perianth limb is acute but not attenuated.

In cultivation this readily propagated form is strong and vigorous providing a dense green screen sprinkled with attractive bright pink inflorescences. It flourishes in dry, impoverished soil and has survived heavy rain events and very dry conditions. It responds well to pruning and is attractive to birds and bees.

**Conclusion.** Plants of the 'Villous' Form of *G. arenaria* also occur outside the Eurobodalla Shire of New South Wales and the form is more widespread than may be indicated in this article. Plants occur subcoastally from around Mogo in the south to just west of Nowra in the north. No attempt has been made to fit other populations into the scenario presented above. However, the treatment serves a basis for the examination of this group and could be and hopefully is important to an understanding of *G. arenaria* as a whole.

**MORE ON GREVILLEA ARENARIA - AN EMAIL TRAIL**

**From Glenda Datson:**

I read with interest the piece in the study group newsletter 107 re *Grevillea arenaria* at both Everton and west of Albury. The population at Albury on the roadside slope has naturalised from approximately 35 year old plantings in the adjoining property. I wonder whether something similar has occurred at Everton where plantings have been undertaken along sections of the rail trail.

I live about 20km from the Albury population, at Baranduda. In the 1980s and 90s I worked for the Albury-Wodonga Development Corporation (AWDC) at their Carramar Nursery, about 0.5km from this population. You may recall that Albury-Wodonga was a Commonwealth Government growth centre from 1975 till about 2010. Carramar Nursery was set up to grow plants for re-greening the growth area ahead of development and some 3 million trees and shrubs were planted over around 20 years into what were to become urban areas of Albury-Wodonga. It was the largest reforestation project of its type in Australia. Provenance seed collection was unknown in the early years of the program and whilst the species planted out mostly occurred locally, some were from wider areas of the region. Also, householders purchasing land from the AWDC were given an allocation of non-local native shrubs for their gardens. A lot of that shrub stock was collected as cuttings from the Australian National Botanic Gardens and Yarralumla Nursery. I believe the *G. arenaria* population at Albury would have originated from that cutting material.

A good 20 years ago I noticed the naturalisation of this species in the location you mention. Today I went back to check it and still believe this is the case. The adjoining property contains mixed plantings including *G. arenaria*. It is beginning to flower, with what I call green and peach coloured flowers. I would like to join you on your excursion later in the year.



**From Neil Marriott:**

*G. arenaria* is a prolific coloniser. Down here in Western Victoria there are a number of wild feral populations that I know of. Several kms south of Great Western there is a "lovely" population on a back lane. The plants look almost identical to yours Glenda!! Then down south of the Grampians there are a number of populations along the Cavendish-Hamilton Road as well as many populations of *Grevillea rosmarinifolia*. Interestingly they are mostly well away from any farm gardens!!

**From Peter Olde:**

Thank you both for your comments. You are probably both correct, though the population at Albury does not look hybridised, unlike the plants on the adjoining property. Photos of the plants beside the rail trail at Everton do give the impression of being planted and I wanted to have a look in the adjoining bushland.

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*Grevillea arenaria* is under revision at present. Among the options being considered is the reinstatement of *Grevillea canescens* R.Br. as a full species. The implications for this are that all the variants should be similarly recognised because we do not know for certain what is closely related to what. There are three recognisable variants currently recognised informally in *G. arenaria* subsp. *canescens*. The typical form reproduces only from seed, and has an apiculated perianth limb. It grows in the upper Blue Mountains. The inland form is at least sometimes root-suckering and typically has a very blunt perianth limb. The third form from the subalpine region of New South Wales has the longest pistils and, as we have seen on field trips, a very stunning plant. It breeds only from seed but we have

only managed to find one of the recorded populations of this species at Yarrangobilly.

More to come on *Grevillea arenaria* and its complexities.



IN YOUR GARDEN

SOME FAVOURITE SPRING GREVILLEAS

Christine Guthrie, NSW

This year we had some old and newer favourite Grevilleas flowering the best I've seen them. I think perhaps the spring drought conditions in Sydney may have had the plants thinking they had to have a final flowering before they snuffed it!

The following six plants are WA species, at least 15 years old and I think they are grafted. It's a bit hard to tell as the trunks are now so gnarled. They are all growing in full sun in shallow sandy soil that tends to be dry most of the time.

*Grevillea tenuiloba* is now a domed shaped plant about a metre tall with pendulous branches and brilliant orange flowers hanging at the tips. the shape makes it look like a standard as most of the branches are coming from the top of the plant. This year it was absolutely covered in flowers for two months. The flowers are followed by very attractive seed pods. I haven't had to prune it over the years but it does tend to get quite a few dead branches which I just cut off. It is the prickliest Grevillea ever!!!



*Grevillea tenuiloba*



*Grevillea nana* subsp. *nana*

*G. nana* subsp. *nana* is similar to *G. tenuiloba* but is only 30 cm high and more of an arching prostrate plant. The flowers are not nearly as vivid, being more a dull orange. The flowers are held at the end of the branches and lay on the ground in a circle around the plant. It also has very attractive seed pods, to both me and a critter who has just had a big feed and left the eaten pods in a pile!

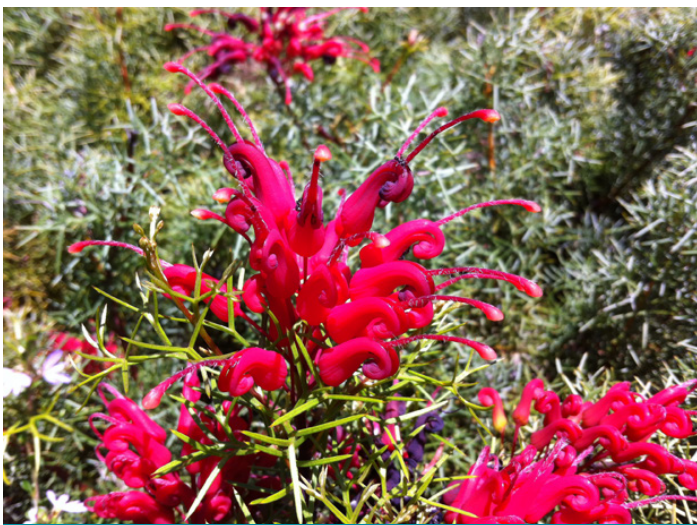
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*Grevillea leptobotrys* compact form

*G. leptobotrys* really is one of my favourites as it seems to have a flower all year, with a peak in spring, and it requires little maintenance. We have two forms. The older plant has larger silver grey foliage and is a bit more open. It is 30 cm tall x 1m wide. I never prune it much (only to keep it off the path) but a third of it died back recently. It is growing well after a cut back. The smaller leaved form is grey green and more compact. I have only had to prune this form lightly. Both have the most delicate sprays of pink flowers.



*Grevillea wilsonii*

*G. wilsonii* has the most stunning brilliant red flowers I know. The flowers are held above the foliage and are a great contrast to the bright green of the leaves. Most years I cut this plant back really hard, by at least half, sometimes more if it is getting too big. It responds amazingly well. Despite being over 15 years old it is currently a lovely rounded bush less than a metre tall and about 1.5 m wide.



*Grevillea intricata*

*G. intricata* is an old favourite, so old that the rootstock is about 15 cm diameter! It got really tall and straggly and in the end we chopped it back hard to 0.5 m. It responded well and is now a manageable 2 m high. It has a profusion of lovely creamy white flowers but it is probably the leaves that are most interesting. They tangle around each other and if its heading where you don't want, you can just pick up an arm full and move it over. The attractive red stems are a bonus!



*Grevillea insignis*

*G. insignis* subsp. *insignis* is probably the most unattractive plant in our garden. It is straggly and has been threatened with removal many times. Despite being old it hadn't grown much but this season it has grown and flowered the best ever. You still have to be an enthusiast to appreciate the shape of the plant! It is however, one of my favourite Grevillea flowers, which is why it's had so many stays of execution! The pink flowers are stunningly gorgeous and the stiff grey holly shaped leaves are a good contrast.

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*Grevillea buxifolia*



*Grevillea buxifolia*

Of the newer plants, *G. buxifolia* is a local Sydney plant that fills me with joy! I had tried to grow it a number of times without success until I got a plant from Sutherland Council Nursery where I volunteer. The plant is a few years old now and 1.5 m x 1.5 m. It doesn't respond to pruning very well but it is still a nice rounded shape. It has flowers most of the year but has been covered with flowers for a few months now. The large woolly flower heads are held at the ends of the branches. This is one of the best specimens of *G. buxifolia* I have seen and it has pride of place in the garden.



*Grevillea lanigera* 'Mt Tamboritha'

*G. lanigera* 'Mt Tamboritha' is a cultivar we have used as a border planting. It is prostrate and quite compact with pink flowers over a long period of time. It was a bit of an experiment for us to plant a border like this but it works quite well at the front of the garden and provides a bit of orderliness for our neighbours to enjoy in amongst the rest of the messiness! Not quite a Buxus hedge but a compromise.

## ON GREVILLEA OLDEI - AN EMAIL TRAIL

### From Jane Wilkinson

I wish to obtain approx. 40x–50x *Grevillea oldei*, preferably in 6 inch pots. I have tracked you down and am hoping that you sell this particular grevillea with which I have had great success at our holiday property in Far South Coast NSW (Wonboyn Lake). It is pretty well wallaby proof and the honeyeaters love it!

Hoping that you can help me with this one or point me in the right direction. I obtained my initial supply from St .Kilda Indigenous Plants Nursery but they do not have any at present and may not be able to supply in the future.

I look forward to your response.

Regards Jane Wilkinson

### Hi Jane

I have included Peter Olde in this email reply, who was honoured with the naming of this lovely Grevillea as I do not even have one in my garden any longer. It has proven to be intolerant of the extremely dry summers we get here in Western Victoria now. He may know a nursery who sells it in the Sydney region as I know of no nurseries that sell it in Victoria!! Good luck with your hunt!!

Cheers, Neil Marriott

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**Good evening Jane.**

This species is not commercially sold at present except in small numbers. You would have to place an order for large numbers. The only people presently selling it to my knowledge are Jonathon Steeds ([snative@bigpond.com](mailto:snative@bigpond.com)) at Somersby phone 04 1546 5162 [www.facebook.com/jonathan.steeds.9](http://www.facebook.com/jonathan.steeds.9) or Brian Roach [bcroach@optusnet.com.au](mailto:bcroach@optusnet.com.au) at Westleigh, Sydney. 02 94843672 or 0418 115630.

*Best wishes, Peter Olde*

**Hi Peter,**

I contacted Jonathan Steed and he will be able to supply the required plants in the not too distant future, so that is great news.

I sent him some images so that he could confirm that it was the right plant. He was most impressed and thought that you would also like to see them and perhaps include them in your content for the Grevillea Study Group. I will send them to both you and Neil via my iPhone.

The information that I supplied to Jonathan about growing conditions is as follows: The plants were purchased from St. Kilda Indigenous Plant Nursery in Port Melbourne. This is run by a delightful Frenchman, Charles, and he does most of the propagating of the more unusual plant stock. I have no idea how he got hold of the initial samples and I had no idea that the plant was so unusual.

Growing at Wonboyn Lake (Far South Coast NSW), we planted on a slight mound which is basically the naturally occurring rocky/clay soil with a small amount of topsoil. We added some topsoil and bush mulch and the drainage is good. The plants receive sun from the East and North but are partially protected from the West by the adjacent bush.

Wonboyn enjoys good average rainfall of about 800-900mm and this year we have received approx. 400mm within a month. However, my recollection is that the plants were put in about 4 years ago, towards the end of the last drought, and were growing very vigorously before the benefits of decent rainfall.

I have tried other plants in this area with less success, Wallaby attack being the main problem, so I would like to mass plant this proven winner which ticks all the other boxes as well – bird attracting, habitat for small mammals and, of course, beauty.

I am very grateful to both you and Neil for the prompt assistance that you gave me – it confirms my view that plants people are always nice people.

*Best regards, Jane Wilkinson*



**Hi Jane**

Great pics –thanks so much!! Reminds me of the days when it used to be available in nurseries in Victoria as *Grevillea trinervis*!! They had massed plantings of it in the gardens around Monash Uni!! Today it is very hard to find as you have discovered!! So pleased Peter was able to put you on to Jonathan –he is a champ!! Will drop in to St Kilda Indigenous Nursery when next down there and see if Charles has any more coming on!! He is a great bloke!

*Cheers, Neil*



## THE GLASS FLOWERS OF HARVARD

Peter Olde, NSW

Two of the most skilful lamp workers or glass artisans that ever lived joined the service of botanical education between 1887 and 1936 in a unique partnership of craftsmanship and artistry that has endured the test of time. You have probably never heard of them. Their names were Leopold and Rudolph Blaschka, father and son, and they lived in Hosterwitz, Germany, near Dresden. Leopold Blaschka (1822–1895) was the grandson of the most widely known glass-worker in Bohemia, where he was born and raised. He and his own son Rudolph (1857–1939) were part of a glass-working lineage that extended over centuries with each generation increasing the skill or ‘touch’ of the next. Tragedy stalked the young Leopold. His father Joseph, his own first wife and youngest son all died before he turned 30 and on a trip to the U.S. in 1853 during which his sailing ship was becalmed for two weeks, the grieving Leopold whiled away the time studying and drawing the jellyfish and other marine invertebrates that gathered or swam past. Up till then the family business which he had joined, revolved around the manufacture of glass eyes, ornaments and novelties, although he had also developed a new technique called glass-spinning that permitted the construction of complex glass ornaments. Leopold was struck by the parallel of near transparent biology and his working medium, glass. He began to illustrate the marine invertebrates, which as it turned out, was another skill this remarkable man possessed.



Leopold Blaschka

On his return Leopold began, as a hobby, to manufacture detailed life-like glass representations of plants and marine creatures, using his drawings as a model. His efforts attracted the attention of Prince Camille de Rohan who commissioned 100 orchids and other plants in glass. These in turn attracted the attention of Professor Ludwig Reichenbach, director of the Natural History Museum in Dresden, who commissioned 12 sea anemones, which were hailed as masterpieces, so truly did they replicate the living organism. Reichenbach persuaded him to abandon his current business model and to turn to the manufacture of marine creatures for sale to museums and galleries across Europe. Thus Leopold soon established an extremely lucrative mail-order business. Not only were his pieces regarded as scientifically flawless and artistically exquisite but it was soon realised that his skills were possessed by no other glass artisan in the world.

I first came upon the Blaschka glass models in the Harvard Museum of Natural History in September 2014. Here the Blaschka Glass Flowers are on permanent exhibition in one of the best-kept secrets I have ever stumbled upon. ‘The collection’s fame rests not on its uniqueness or even its breadth - it includes ferns, fungi, bryophytes and algae as well as flowering plants - but on its accuracy and beauty’ said Donald Pfister, Professor of Systematic Botany and curator of the Farlow Library and Herbarium of Cryptogamic Botany. There are 847 life-size models representing 780 species and varieties of plants in 164 families as well as over 3,000 models of details such as enlargements of plant parts and anatomical sections. Approximately 4,300 individual glass models comprise this dazzling collection of glass flowers, all of which are held at Harvard and nowhere else. Therein lies another interesting story.

Rudolph Blaschka was the son of Leopold’s second marriage. He possessed the same skills taught to him by his father but was an even better artist and painter using life-like colours. Rudolph was responsible for most of the work done with flowers as his father passed away early on in the project. Later Rudolph even turned his hand to making the glass and paint pigments. He joined the business in 1880 and in the same year he and his father produced more than 100 models of sea creatures destined for the United States. These were seen by Professor George Lincoln Goodale, the first director of Harvard’s Botanical Museum, who was in the process of establishing a botanical museum at Harvard, the centre of botanical excellence at the time. He saw potential in the models as an excellent way to train botany students, among other things. Goodale travelled to Dresden and met the Blaschkas who agreed reluctantly to send botanical models to him.

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Goodale then induced the wealthy philanthropists Mary Lee Ware and her mother Elizabeth who had a deep love for botany, to underwrite an exclusive ten-year contract to make glass flowers for Harvard for 8,800 marks per annum.

The work was commissioned in 1886 and the first models arrived in 1887. Ultimately after 40 years, there would be 847 life-size models representing 780 species and varieties of plants in 164 families as well as over 3,000 models of details such as enlargements of plant parts and anatomical sections. Approximately 4,300 individual glass models comprise the collection.

On November 7, 1894, in a lecture delivered to the Boston Society of Natural History, Dr. Goodale expressed his belief that the packing of the flowers was “almost as wonderful as anything about them.” The Blaschkas had had years of practice in the packing of delicate marine invertebrate objects, and they applied the same highly successful methods to the packing of the glass flowers for shipment.

The finished model would be mounted on firm cardboard, with strong wire securing it. The mounted specimen was then placed in a sturdy cardboard box. Tissue paper was used to cushion it and keep the parts that could not readily be wired from moving. Two samples of this preparation-for-shipment technique are still on exhibit in the museum at Harvard.

Next, the cardboard box would be covered; and, when a number of such boxes were ready, they were all placed in a very large, sturdy wooden box with a sufficient amount of straw padding to keep the individual boxes from touching one another or the walls of the wooden box. The wooden cover was then screwed on, and the box was embedded in more straw padding before being wrapped in burlap. The finished bale, which was nearly the height of a person, was then sent to a seaport, loaded onto a ship, and transported to America. Here, the packing procedure was reversed, much care being taken in the final process of removing the models from their cardboard boxes.

Rudolf continued making models for Harvard until 1938. Neither he nor his father had taken on an apprentice, and Rudolf left no successor - he and his wife, Frieda, being childless. They are all buried together in the Hosterwitz cemetery in Dresden.

Although there are Blaschka models in other museums such as the Natural History Museum in London, all the floral works are at Harvard, for whom they were especially commissioned. ‘The collection’s fame rests not on its uniqueness or even its breadth - it includes ferns, fungi, bryophytes and algae as well as flowering plants - but on its accuracy and beauty’ said Donald Pfister, Professor of Systematic Botany and curator of the Farlow Library and Herbarium of Cryptogamic Botany. The models represent

both habit and magnified plant organs, pollination, and diseased plants and comprise a dazzling exhibition of life-like glass work featuring true colours and full three-dimensional life-like intricacy.

All the work was done in the Blaschka’s studio in Hosterwitz, Germany, near Dresden, using techniques that were well-known at the time. However, only very few people were allowed to see them at work. They undoubtedly had some trade secrets. They used both clear and coloured glass, wire and organic media and enamel paints to produce their models. In an article for the Journal of American Conservation, authors McNally and Buschini note that “the Glass Flowers are not made simply of glass. Many are painted (particularly models made in the years 1886–95) and varnished; some parts are glued together, and some of the models contain wire armatures within the glass stems. Coloring of the models ranges from paint to colored glass to enameling.” To this day, no one has been able to duplicate the Blaschkas’ fine artistry.

Plants for modelling were collected around Dresden and in the royal gardens at Pillnitz Palace. The Blaschkas also had a garden of North American plants around their own house. Some were grown from seed sent from the U.S.A. or collected by Rudolph in the Caribbean and U.S. where he made extensive drawings and colour notes during a trip that he went on in 1892. Rudolph also collected and preserved specimens to take back to the workshop in Germany for future reference. Rudolph’s second field trip to America in 1895 was curtailed by the death of his father. He returned to Germany to continue this monumental project alone.



Rudolf Blaschka

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There are very few southern hemisphere plants and those represented came exclusively from cultivation. There is a beautifully rendered piece of *Eucalyptus globulus* that originated in Tasmania.

The Blaschka Glass Flowers are on permanent exhibition at Harvard

University in one of the best-kept secrets I have ever stumbled upon. There are very few southern hemisphere plants and those represented came exclusively from cultivation. There is a beautifully rendered piece of *Eucalyptus globulus* that originated in Tasmania. What attracted my attention was a specimen of *Grevillea preissii* (labelled *Grevillea Thelemanniana* Hueg.) rendered from a specimen in cultivation at the

time probably in the royal gardens. The magnificently wrought and coloured leaves in all their lace-like intricacy along with the magnified sections of the flowers are truly life-like. Unfortunately this was the only *Grevillea* specimen the Blaschkas ever crafted. On an historical note it is interesting that this species was still being cultivated in Europe as late as 1913. The origin of the *G. preissii* in the glass model is uncertain, but it too may have once been grown in Hügel's garden.

You can see the Blaschka story on video here:

<http://www.youtube.com/watch?v=rHOx5H5vNx4>

or here

<https://youtube/F-eqQkd1zrw>

or here

<https://youtube/RZZffuyUIKQ>

<https://www.flickr.com/photos/cienne/sets/72057594070875957/>

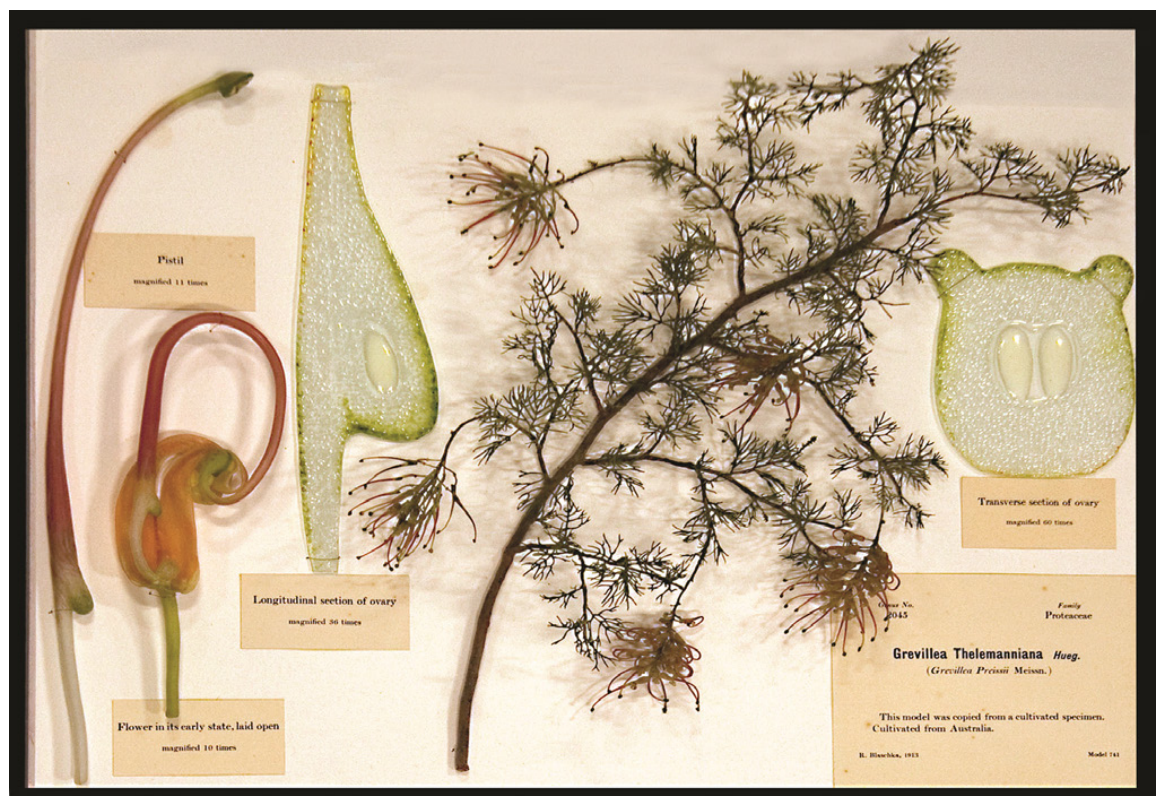
<http://www.youtube.com/watch?v=8PSmTMT03Gs>

Or you can read about them here:

<http://www.journalofantiques.com/Feb04/featurefeb04.htm>

[https://en.wikipedia.org/wiki/Leopold\\_and\\_Rudolf\\_Blaschka](https://en.wikipedia.org/wiki/Leopold_and_Rudolf_Blaschka)

Most of all do not forget to visit the The Ware Collection of Blaschka Glass Models of Plants at the Harvard Museum of Natural History, 22 Divinity Rd., Harvard University in Cambridge, Massachusetts, when next you visit the west coast of U.S.A. Say hello to the curator, Jennifer Brown, from everyone here in Australia.





MATT HURST: 37 HEYDON AVE, WAGGA WAGGA 2650 NSW

PHONE (02) 6925 1273

Please include a stamped self addressed envelope.

\$1.50 + s.a.e

<i>Grevillea aurea</i>	<i>Grevillea magnifica</i>	<i>Grevillea refracta</i>
<i>Grevillea baileyana</i>	<i>Grevillea magnifica</i>	<i>Grevillea ramosissima</i>
<i>Grevillea banksii alba prostrate</i>	<i>ssp magnifica</i>	<i>Grevillea ramosissima ssp</i>
<i>Grevillea biternata</i>	<i>Grevillea manglesii</i>	<i>ramosissima</i>
<i>Grevillea candelabroides</i>	<i>ssp manglesii (ltd)</i>	<i>Grevillea stenobotrya</i>
<i>Grevillea crithmifolia</i>	<i>Grevillea monticola</i>	<i>Grevillea striata (ltd)</i>
<i>Grevillea decora</i>	<i>Grevillea nana</i>	<i>Grevillea superba</i>
<i>Grevillea decurrens</i>	<i>ssp abbreviata</i>	<i>Grevillea synapheae</i>
<i>Grevillea eriobotrya</i>	<i>Grevillea newbeyi</i>	<i>Grevillea teretifolia</i>
<i>Grevillea eriostachya</i>	<i>Grevillea nudiflora</i>	<i>Grevillea tetragonoloba</i>
<i>Grevillea excelsior</i>	<i>Grevillea occidentalis</i>	<i>Grevillea triloba</i>
<i>Grevillea floribunda ex</i>	<i>Grevillea paniculata</i>	<i>Grevillea triternata</i>
<i>Coonabarabran</i>	<i>Grevillea paradoxa (ltd)</i>	<i>Grevillea vestita</i>
<i>Grevillea glauca</i>	<i>Grevillea pilulifera</i>	<i>Grevillea wickamii</i>
<i>Grevillea johnsonii (ltd)</i>	<i>Grevillea polybotrya</i>	<i>ssp aprica</i>
<i>Grevillea juncifolia</i>	<i>Grevillea preissii</i>	<i>Grevillea wilsonii</i>
<i>Grevillea leucopteris</i>	<i>Grevillea pteridifolia</i>	
<i>Grevillea longistyla</i>	<i>Grevillea pulchella</i>	

Free + s.a.e

<i>Grevillea banksii prostrate white</i>	<i>Grevillea leucopteris</i>
<i>Grevillea banksii prostrate red</i>	<i>Grevillea magnifica</i>
<i>Grevillea banksii prostrate red</i>	<i>Grevillea 'Moonlight'</i>
<i>ex 1770</i>	<i>Grevillea petrophiloides</i>
<i>Grevillea bracteosa</i>	<i>Grevillea plurijuga</i>
<i>Grevillea glauca</i>	<i>Grevillea ramosissima</i>
<i>Grevillea juncifolia</i>	<i>Grevillea robusta</i>
<i>Grevillea johnsonii red flowers</i>	<i>Grevillea stenobotrya</i>
<i>Grevillea longistyla</i>	

Please note: seed from hybrid  
-substitute -cultivated plants does  
not necessarily come true to type.

**Fresh stocks of garden seed are desperately needed as most species are almost out of seed.**

Can members asking for seed please give an alternative list in case some species are no longer in stock. It is preferred if requests are sent with a small padded post pack. It costs less to send at approx \$1.50 per letter than padding an envelope at \$2.00 each or more so the seed will survive the trip down the sorting rollers. It's a good idea to send extra stamps with requests as extra postage is usually needed to be paid with almost every request. Leftover stamps would be sent back with your seed.

**Income**

Interest	0.05
Donations	100.00
.....	
<b>Total income</b>	<b>\$100.05</b>

**Expenditure**

Newsletter publishing	\$210.00
Printing	18.74
Postage	17.00
.....	
<b>Total expenditure</b>	<b>\$245.74</b>

**Bank account details**



Amount in interest bearing deposit till 23/10/2017  
**\$19,489.82**



Balance in current account 20/10/2017  
**\$470.61**

**LEADER**

**Peter Olde**  
140 Russell Lane, Oakdale NSW 2570  
☎ (02) 4659 6598  
✉ [peter.olde@exemail.com.au](mailto: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](mailto: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](mailto:neil@whitegumsaustralia.com)

**CURATOR OF ILLAWARRA GREVILLEA PARK, BULLI**

**Ray Brown**  
29 Gwythir Avenue, Bulli NSW 2516  
☎ (02) 4284 9216

**CURATOR OF SEED BANK**

**Matt Hurst**  
37 Heydon Ave, Wagga Wagga 2650 NSW  
☎ (02) 6925 1273

**DONATIONS**

The newsletter is now free but if groups and individuals wish to make a donation, 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](mailto:bruce.moffatt@tpg.com.au)) or by post to:

**Grevillea Study Group**  
**32 Blanche St Oatley, NSW 2223**

**ONLINE CONTACT**



**1. President's email address**  
[peter.olde@exemail.com.au](mailto: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](mailto:bruce.moffatt@tpg.com.au)