

GREVILLEA STUDY GROUP

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JULY 1986

NEWSLETTER NO. 14

I suppose that you are a little surprised to receive your newsletter in July but thanks to news editor Ken Arnold I am hoping we can supply you with three per annum from now on.

I have been particularly impressed by the enthusiasm of some members in taking up the challenge of their species study along the lines suggested. If you would like to take up a study, please contact me. Dr. Bill Marsh has unfortunately been forced to give up his study of G. baueri. We owe Bill a great deal of thanks because he is getting on in years and only has one leg!! Is there anyone willing to take over this species?

A word of thanks to all those members especially Neil Marriott who contributed articles to the Grevillea Study Group issue of Australian Plants which will appear later this year. I do think that there are a lot of articles out there waiting to be written not only for Australian Plants but also for our newsletter. Our new editor has called for articles on cultivation. How about it members? What plants do you grow well and how do you do it? Articles on the Grevilleas which occur in your area would be of interest. Information about size, flower colour and foliage especially any unusual variation, habitat and soil type, aspect, climate, associated vegetation and any other information would be great. Have you done any Grevillea Crawls? Members visiting from other areas might like to follow in your footsteps. Put pen to paper and tell us where to go and what we will see.

What kind of articles would you like to see in the newsletter? Please let us know. We have one request for a series of articles briefly describing each species so members can get some idea of what they are like. I will attempt to do this next year.

Ray Brown has been working overtime. I've even got him interested in G. linearifolia. We all owe Ray a special vote of thanks because of his tremendous enthusiasm for the job. He collects wherever he happens to go and the Study Group Collection is growing so fast I can scarcely keep up with it. As well, our herbarium has grown like topsy and we need a curator. Is anyone interested?

A special welcome to new member Mark Hickman who has taken on the study of G. molyneuxii. Mark is a new member to S.G.A.P. but spends two nights a week at the Collection grafting and propagating. Thanks Mark. I hope you benefit from all the effort you are contributing.

Rodger Elliot reports from Montrose, Victoria:

On Sunday 23.2.86 at Montrose 13 people potted up 160 Grevilleas into 20cm pots as part of the Grevillea Collection for Victoria. About 95% of these plants are thriving, a few struggling and the rest have departed this world.

At present two forms of G. depauperata are producing their typical glorious display of orange-red flowers. Others with bloom include G. acrobotrya and G. paniculata (which when obtained was labelled

G. teretifolia). They are very close and can be distinguished by the former having straight styles with a cone-shaped pollen presenter, whilst G. teretifolia has reflexed perianth segments and a curved style with a disc-shaped pollen presenter (Don McGillivray who is ever helpful with problem solving provided these distinguishing characteristics).

G. uncinata is massed with its cream flowers and now the pollen presenters are gaining their orange to red coloration. G. deflexa is loaded with buds on the long pendant stems which emanate from the older wood - what a sight it will be in a couple of months.

In early June, David and Pam Shields from Shepparton donated about 90 plants to the Collection. They were species and forms which we did not have growing. David, being an avid G. alpina freak, included 30 different forms of that outstanding species.

So, in a couple of months when things warm up, there will be a working bee for Victoria members (I am sure they will all be notified by a ring around to let them know with plenty of advance notice).

The collection will need label updating due to Don McGillivray's revision, and there are a few weeds which tend to be persistent too. So, Victoria members you can look forward to a convivial morning of work and fellowship amongst some beautiful plants and get some dirty hands in the process. Hope to see you there!

A special word of thanks to John Knight who has organised another another Grevillea Study Group Activity for anyone interested to attend. This is a joint activity with Maroondah Group.

DATE: Melbourne Cup Weekend . . . Friday Oct 31 to Tues Nov 4.

VENUE: Halls Gap, Churches of Christ camp.

FACILITIES: Dormitory accomodation, separate toilet and shower blocks.

COST: \$15 per day includes three cooked meals plus supper and afternoon tea.

CHILDREN WELCOME, DUTY ROSTER OPERATES FOR WASHING UP AND CLEANING.

ACTIVITIES: Trips to areas of floral interest in the Grampians led by experienced members.

GREVILLEA CRAWL: Led by Neil Marriott which will take in all the Western Victorian Grevilleas. He intends to show you G. microstegia, G. floripendula, G. montis-cole (including ssp. brevistyla from Langhi Ghiran), G. aquifolium, G. ilicifolia, G. lavandulacea, G. linearifolia in their wild habitat.

CONTACT: John Knight 24 Kardinia Crescent Warranwood NOW!!!
Phone 03.876.2636

LIMITED VACANCIES BOOK EARLY

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SPECIAL APPEAL

Do we have any member willing to set up a slide show with commentary titled GREVILLEA?

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The Queenslanders are also up and away. Merv Hodge has asked me to advertise a Grevillea Study Group meeting at his place on Sunday September 21 at 1 p.m.

VENUE: Lot 36 Loganview Road LOCAN RESERVE
Phone 075.463322

TIME: From 1 p.m. Sunday September 21

ACTIVITY: Garden visit to Mer's marvellous collection.

CUTTING EXCHANGE: We will be sending a huge box of cuttings from the Sydney Collection. Many rare and unusual species will be available for trial in your area.

If time permits we hope to see G. helmsiae in its wild habitat at Bahrs Scrub.

Members are asked to bring plants for sale and exchange as well. 50¢ per plant to go to the Study Group.

Any members coming from far away with a caravan will find room to put it on Merv's land and are welcome to do so.

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An appeal to South Australian members: I would like someone to mount an excursion to collect and photograph two Grevilleas which I do not believe to be in cultivation. G. treueriana and G. sarissa ssp. umbellifera. G. treueriana grows on the southern slopes of Mt. Finke, look it up on your maps. It has red toothbrush flowers and shortly divided leaves with pungent lobes. G. sarissa ssp. umbellifera was known formerly as G. umbellifera, and you should find it at two known locations:

1. Northern Eyre peninsular $32^{\circ}35'$, $134^{\circ}58'$, about 20 km north of Karcultaby on a track running from a road junction about 1.5 km north west of Karcultaby. There is an extensive roadside area of cleared mallee in agricultural land, with a few remnants. It is a rounded shrub with erect branches, fairly rigid, about 1.2m high.

2. 40 km north west of Ceduna, 2.5 km north west of Koonibba Hill $31^{\circ}53'$, $133^{\circ}24'$ about 150 m altitude. Shrubs of about 1 m on undulating crest of low dunes of deep white sand, rare in mallee growth of E. incrassata.

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I very much regret that I will be unable to attend either of these activities because I will be in Western Australia. I hope to meet some of my Sandgroper members and stir up a bit of interest in the West for our Grevilleas. There are a number of new species which we will be looking for. Maybe someone would be interested to join me in a Grevillea Crawl or two.

Don't forget the Grevillea Book! We really need more slides especially of Queensland Grevilleas but all areas have their inadequacies. Are you able to assist? Maybe this Spring you could get out with your cameras.

We hope to have a report on the Shepparton meeting ready for the next newsletter.

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GREVILLEA CRAWL APRIL 19 1986

The convoy left Bulli at 10 a.m. and headed out towards Appin. Shortly after leaving the Sydney expressway, we stopped off to look at the robust form of G. diffusa ssp diffusa. This form has brown hairy new growth and the decumbent to prostrate habit of its close ally from the Heathcote area. One of its most visible characteristics are the large elliptical l-aves which can reach to 10 cms x 1 cm wide, but I was more than impressed by its habit. Beautiful down-arching branches and a compact mounding habit make this a superb contender for the rockery or border. Plants grew to about 1 m. round and no more than 30 cms in height. We also saw plants of G. speciosa ssp. oleoides and G. buxifolia ssp. sphacelata at this location.

Some members took cuttings and pressings. The plants of G. speciosa ssp. oleoides had reasonably narrow leaves but appeared to be the root-suckering form usually found in heath habitats.

Up the road about five kilometres at the second stop we saw plants of G. mucronulata and G. diffusa ssp. diffusa, Heathcote form, with its mounded growth habit and tight dark maroon flower heads. The habit of this form is similar to the robust form we visited earlier but it can grow slightly taller. The leaves are much smaller and have silky white hairs on them and their branchlets imparting a grey effect.

Down on a nearby creek bank which was part of the upper reaches of the George's River, we saw a few specimens of G. longifolia, an attractive shrub 2m x 2m, with long, elliptical, neatly-lobed leaves. The underside of the leaves on this species has short curled hairs.

The convoy then headed over the Cataract River and up the other side. On the steep roadside banks we could see plants of G. arenaria growing to about 3m with fairly inconspicuous green and pink flowers. Noticeable was the pointed and tapered limb on the flower. Many plants had persistent fruit with its characteristic ribbed sides.

We then snaked our way up to the Goulburn expressway and followed a path past apparent hybrids between G. arenaria and G. baueri growing in cleared areas along the roadside. A short diversion from here to the Avon Dam took us into a fascinating area. Among rocks in the river we found low plants of G. speciosa ssp oleoides, plants we knew to have an intense rose pink flower. This is a particularly attractive area especially for anyone wanting a break from expressway driving. The narrow, curving road down to the dam passes through some beautiful natural vegetation. Amongst this grew G. mucronulata including one which cascaded down over a rock and G. buxifolia ssp. sphacelata and G. arenaria.

From here we trundled off to a Waterboard Reserve near Welby where we saw plants of G. triternata. This is a most unusual occurrence of this species which I usually associate with more inland areas. Growing here too were G. baueri and a low root-suckering form of G. linearifolia. Some plants of G. baueri had hybridised with plants of G. arenaria which also occurred in the Reserve. Hybrids tended to aggregate around the disturbed track area. One of the most impressive plants seen on the whole day was a huge prostrate plant of Persoonia mollis.

After eating our lunch here, the convoy trekked to Wingello to see G. molyneuxii. Due credit must be given to Bill Molyneux who relocated this species in a very isolated area and who provided the mud maps for us to relocate it. It is not growing beside the track, at least visibly in great numbers but rather off the track in a deep swampy heath area on skeletal soils over rock. Several

plants were in flower (red) and many plants were very old and woody. There were not many plants in this area, certainly less than 100, and the species while probably not endangered by land use requirements at this stage is most certainly maintaining a tenuous hold on existence. The walk-in took about an hour and along the way we located an usual *Prostanthera* which neither Robert Miller nor Les Taylor had seen before.

After relocating the cars, most people bade farewell to their companions and the day as darkness fell. They drove off thinking they had had a full and complete day. Ray Brown had other ideas. He wanted to show us a form of *G. linearifolia* which was growing beside the road to Bundanoon near Taudts Lookout. Although it was pitch black and the plants were growing in tall grass, the cuttings we managed to take were of two different forms, just as Ray said. It still wasn't over. The remainder of the convoy wanted to see *G. rivularis* in its natural habitat. So, off to Carrington Falls.

The moon was rising well when we arrived. Our headlights picked up the mist from the river as we forded the stream in our search. There, at the edge of the water was a large plant in flower of *G. rivularis*. This rare and endangered species grows to about 2 metres and the plant we saw was similar to the one in cultivation. We resolved to return soon and determine for ourselves if there were any variation in flower colour among other plants and to do a count. After a quick drive round the area in which we located another form of *G. linearifolia* we finished off the day at the Robertson Pie Shop. The owner probably wasn't too impressed as we arrived at closing time, but the pies sure were nice.

p.s. A later trip to the area with Neil Marriott revealed that we had been very lucky that night because the plant we saw in flower was the only one in the area. A search of the river banks revealed many hundred plants albeit in a very restricted area. One area which had been recently burnt had literally thousands of seedlings regenerating. Not all of these would survive unfortunately.

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CONSERVATION

We are still looking for someone to act as liaison for us in this very important area. Many *Grevilleas* are endangered, made doubly so by ignorance. If we could provide a person to identify the problems and bring them to the attention of Government authorities, we could have a good to better chance of conserving them. Who will volunteer their services? Make the job whatever you want. How about someone from interstate?

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EDITOR: I have received a letter from Mr. John Benson, Resource Officer (Botanist) N.P. & W.S., giving some detailed information on a couple of threatened species, and here publish it in full for the information of group members:

I noticed that the March 1986 Newsletter of the S.G.A.P. *Grevillea* Study Group made mention of two rare of threatened *Grevilleas* occurring in New South Wales: *G. renwickiana* and *G. caleyi*.

The N.S.W. National Parks and Wildlife Service has undertaken a survey and other work for both these species as part of its rare and endangered plant conservation programme. *G. renwickiana* is known to occur in Morton National Park where some 12,000 plants have been located. However, its range has certainly been reduced by land clearing west of the Park.

The future of *G. caleyi* remains precarious. It only occurs in a few scattered stands along Mona Vale Road on laterite. The Department

of Main Roads is proposing an upgrading of the road to four lanes. Their original plans would have eliminated one of the best remaining stands of G. caleyi. They have since revised their plans due to requests from various sources including the Service. The DMR's new road proposal avoids the important stand of G. caleyi but still effects some plants. The Service is still negotiating with the DMR over the road upgrading.

I hope this information aids your understanding of the conservation status of these two Grevilleas.

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GREVILLEA CRAWL - BRAIDWOOD TO NOWRA

After a recent trip to Canberra, Ray Brown and I decided to have a search for the allegedly rare G. renwickiana near Nerriga. After leaving Braidwood we headed north towards Nerriga along an unsurfaced but well-graded road. Although we were travelling at about 50 k.p.h. (I was driving) Ray was able to spot Grevilleas as we went. About 30 kms from Nerriga we spied a prostrate form of G. juniperina which regrettably was not in flower. Although we could do little about it, a search of the area revealed many more plants and we resolved to research the area in Spring. Further along about 7 kms from Nerriga, we spotted the first plants of G. renwickiana, suckering down an embankment on the left hand side of the road. On the right a farmer had just ploughed a huge acreage and we were somewhat fearful of what we might find as we began to search. On the left in a cleared area beneath telegraph wires we found hundreds of plants, suckering in large clumps over an area of about 200 metres x 60 metres. The cleared area then receded into a pine plantation. We wondered how we should go about getting this area declared as a Reserve. On the right hand side, there was nothing where once there had been the main population of plants. Surely this is only ignorance. One can only hope that the plants will regenerate by root sucker.

As we drove on towards Sassafras crossing tributaries of the Shoalhaven, we found on the river banks very tall plants (2 m) of G. juniperina. The banks of the Molongarlowe River in particular had many plants.

This reminds me of a question I have wanted to put for a long time. What is the origin of G. "molongolo"? Perhaps someone can answer for me.

Further along as the road began its climb up into Morton National Park we saw more plants of G. arenaria which had been very common through the entire area. As the road climbed higher, the road worsened into thick talcum powder. At the top we pulled over to look at the view. Guess what? Ray spied another Grevillea. This time it was G. linearifolia growing to about 1 metre and with thin narrow leaves with rolled margins. No flowers on these plants. As we began a short excursion into the nearby bushland we spied on leggy open bushes some pink/red and cream flowers which proved to be those of G. baueri ssp. asperula. This plant grew to about 1 m. A stop-off at Tianjara Falls, a spectacular scenic spot where the river cascades hundreds of feet below, we found plants of another form of G. linearifolia which grew to about 1 m. and had some white flowers, typical of the species, sparsely scattered on a few shrubs. These plants were found in the shallow sandy rocky soils around the top of the cliff and adjacent areas.

Further along the road towards Nowra at a place where a large bald hill rises beside the road in a more exposed area we found plants of a compact mounded form of the same ssp asperula. Not much further along we arrived in Nowra and completed the excursion.

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A later discussion with Beth Michie, well-known nursery person from Sydney, revealed that she knew of plants of G. renwickiana which occurred on a property she owned in the Nerriga area as well as a few plants which occurred in Morton National Park. She promised to send a mud map for further searches. Don McGillivray indicated that this species is infertile and never sets seed. It survives entirely by root-suckering (Some plants miss out on all the fun.).

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GREVILLEA CRAWL - GOSFORD AREA

There are some interesting areas to search around Gosford if you are interested in looking for Grevilleas. Our trip started with a drive to find G. shiressii, a rare and endangered species known only from one or two areas near Woy Woy. Our first stop was at Mt. White on the expressway, a spot which Brian Parry had shown me some months before. Here we found growing in gutters of washed sandy soil, G. diffusa ssp. filipendula. Brian had told me that when he was working for the DMR they had completely scraped this area of vegetation. It was interesting to see how well the Grevillea had come back - all the vegetation for that matter, but I am sort of one-eyed on these crawls. Plants of this species had thick linear leaves and grew to about 0.5 m. G. buxifolia ssp. buxifolia was also growing at this location with its huge umbel-like heads of grey flowers with their prominently-horned style-ends. These flowers are delicately perfumed.

Further along the old expressway around Calga we stopped off to look at G. linearifolia, which was growing beside the road. Pink and white flowering forms were growing together. Here in dense vegetation and fairly closed overhead canopy we found more plants of G. diffusa ssp. filipendula. At 2m, these plants were much taller than those at the Mt. White location, with finer, narrower leaves and longer, pedunculate flowers. Altogether, this species is a magnificent garden plant with most unusual and delicate flowers.

2.8 kilometres further along we arrived at Mooney Mooney Creek and turned left off the old highway down a dirt road beside the Creek. The road meandered for a few kilometres passing under the new expressway soaring above on the longest bridge span in Australia. Not much further the track stopped at the entrance of Brisbane Water National Park. We got out and began our search. Some of us became somewhat excited when we located Stenocarpus salignus which superficially resembles G. shiressii, but it was not in flower as we had known it should be, and our suspicions were aroused. We walked on perhaps from some 3-4 kilometres, (who's counting?), passing more plants of G. linearifolia in pink and white, until we found it. There beside the track and almost in the salty water, grew tall shrubs of G. shiressii. The large clusters of greenish almost transparent flowers were unmistakable. How similar the leaves are to Stenocarpus salignus. They tend to be somewhat more flexible and less opaque, so that you can see the venation clearly through the leaf especially when backlit by the sun as they were on this beautiful Spring day. Plants were about 3-4 metres in height and grew on the creek bank in sandy soil about 1 metre above high tide mark. Certainly they would be subject to inundation in flood. It seems so remarkable to me that this rare plant seems to prefer such an unlikely habitat. A special note of thanks is due to Philip Strong for his location information to enable us to find this species.

From here we drove to Somersby to Debenham Road. What a remarkable area! Plants of G. speciosa ssp. speciosa grew here in profusion. These plants have almost rounded leaves and a swollen marginal leaf vein. They used to be known as var. crassinervia. In some the leaves were quite small. Hybrids with G. sericea had appeared in disturbed areas and were flowering in all shades of pink and all shapes from large to small.

Futher up the hill beside an old quarry, we found plants of G. oldei, whose angular, flexible branchlets are covered in long brown hairs. Its small linear leaves with long fine points and open pedunculate flowers resembling G. diffusa were most attractive. In cleared areas this plant was prostrate but tended to scramble amongst the vegetation in woodland areas.

This proved to be a rich Grevillea area. Down the hill slightly we found large populations of G. speciosa ssp. speciosa, G. sericea, and G. buxifolia ssp. buxifolia mixed with G. oldei.

From here hwe drove to Kulnura, where an unusual population of plants grow with G. buxifolia ssp. sphacelata. Over an area of some 30 kms low-growing plants are found having characteristics of two species, neither of which are present except at the far end of its range. The plants of this population have the angular flexible hairy branchlets and similar flower clusters to G. oldei, but the larger flowers and bright red colour of G. speciosa. Further research of this population is needed to determine its real relationships, We found this plant root-suckering in another place nearby on a recent trip with Angus Stewart who incidentally is doing a plant study of G. oldei for the Study Group. Good on you, Angus, and thanks. Angus is a new member and shows what interested people can achieve. He is also doing research for us on Tissue Culture of Grevilleas.

On this trip with Angus he took us along Dogtran Road near Narara, Gosford where plants of another form of G. oldei were growing. Plants in this population were erect shrubs attaining a height in some of over 1 metre. They were more robust than the population at Debenham Road and had more triangular shaped leaves. This population was not apparently root-suckering as we found many seedlings growing beside the road.

If anyone is thinking of doing this trip, I would highly recommend it in Spring. You could return to Sydney down through Wisemans Ferry. Have a look at the small leaf form of G. mucronulata as you go through Dharug National Park. At Birralea on the south side of the Hawkesbury, you will find a distinctive and most attractive form of G. linearifolia. Have a nice trip!

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PROPAGATION

Who else has tried aerial layering (marcottage) with Grevilleas? Ann Moran of Mackay has had good success during the summer months. She strips off nearly all the bark for about 2.5 cm on a suitable branch, leaving a thin connecting strip, and using a new, clean razor blade for the job. She then packs moist peat moss around the stripped area and for about 5.0 cm on either side. The whole lot is then wrapped in thick plastic which is held in place with twist ties at each end. In her climate, roots ausually appear in three months.

There is a problem with limb breakage using this technique - a piece of dowel tied on before wrapping in plastic will help alleviate this.

When the roots appear inside the peat most ball, just cut off the piece of branch, unwrap and pot on.

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NEW NAMES IN GREVILLEA

PETER OLDE

On 24th February 1986 Don McGillivray, from the National Herbarium of NSW published over 100 new names and name changes in the genus GREVILLEA. Although the publication is not a full revision as such of the genus, it foreshadows one in the near future and legitimises the use of the new names it will contain. For the long suffering amateur botanist, *Grevillea* sp. nova is a thing of the past. The publication of this list of names and the abbreviated description therewith raises many questions about the final revision and the final composition and groupings of many species. For the moment, though, it serves the valuable purpose of making plants more meaningful by giving us something to work with. The new descriptions highlight many more rare and endangered species and others worthy of horticultural attention.

Grevillea acacioides C. Gardner ex McGillivray, W.A.

The proper publication of this name legitimises the name given it by Charles Gardner but not published. *G. acacioides* is a medium shrub to 2m with narrow almost terete leaves and small clusters of white flowers which occur in terminal and axillary heads. It occurs over a wide area of inland W.A.

G. acerata McGillivray, N.S.W.

The specific epithet of this newly described species refers to the style-end. It has small heads of flowers resembling *G. sphacelata* (now *G. buxifolia* ssp. *sphacelata*) but differs from it in having longer subulate (tapered) floral bracts as well as an acerate (without horns) style-end. It is found in the Gibraltar Range National Park near Grafton, on acid granite soils and grows to 0.5 metres.

G. acrobotrya ssp. *uniforma* McGillivray, W.A.

This subspecies of *G. acrobotrya* occurs in a restricted area near Mt. Lesueur and differs from ssp. *acrobotrya* in having leaves of similar shape on all its branches. In ssp. *acrobotrya* the leaves are narrowly lobed on the upper part of the plant.

G. adenotricha McGillivray, W.A.

A new species from the Kimberley which has to date only been collected a few times. It occurs in sandstone country near Manning Gorge and Prince Regent River. It grows to about 0.8 metres and has small red flowers. Glandular hairs give the oblong-lanceolate leaves a dense pubescence. In addition, the leaves have numerous pungent serrations along their margins.

G. aneura McGillivray, W.A.

This is a fairly widespread species in the Norseman area of inland W.A. It grows to about 2 metres but is generally lower than this. It has red flowers and narrow rigid divided leaves, with lobes to 4 cms and pungent tips. Sometimes known as *Grevillea* from Red Lake, it is closely related to *G. treueriana* which is only known from Mt. Finke in South Australia.

G. arenaria ssp. *montana* (R.Br.) McGillivray, N.S.W.

This is a new name for a well known and previously described *Grevillea* which occurs in the Hunter River area of N.S.W. Formerly known simply as *G. montana*, it has now been placed as a subspecies of *G. arenaria* which it closely resembles.

G. baileyana McGillivray, Old., New Guinea

This is a new name for *G. pinnatifida* Bailey, a name which is an illegitimate name under the rules of botanical nomenclature and has to be replaced.

G. barklyana ssp *macleayana* McGillivray W.A.

This newly described subspecies of *G. barklyana* is well known from the Jervis Bay area of N.S.W. It has mainly entire oblong-lanceolate leaves and differs from the type in having persistent floral bracts and an almost villous ovary. A recent collection of this subspecies with lobed leaves from Deua National Park extends its previously known range.

G. batrachioides F. Muell. ex McGillivray, W.A.

The only collection of this species now presumed extinct was made by James Drummond somewhere in Western Australia, early in the 19th Century. It is related to *G. asparagoides* Meisn. but the flowers have longer pedicels (12 mm) and the leaves are shorter. All plants presumed to be *G. asparagoides* Meisn. need to be looked at closely. (see also *G. maxwellii*)

G. baueri ssp. *asperula* McGillivray N.S.W.

This subspecies of *G. baueri* R.Br. with rough sand papery leaves occurs widely in the Morton National Park and elsewhere in the area. It differs from ssp *baueri* in its coarser leaves and more open habit. It is well known in cultivation.

G. beadleana McGillivray, N.S.W.

Rediscovered in 1982 by officers of the National Parks and Wildlife Service, this beautiful *Grevillea* with red toothbrush flowers like *G. aspleniifolia* Knight occurs in Guy Fawkes National Park. The only previous collection of this species was made near Walcha in 1887. It is a spreading shrub to 2 metres with extremely attractive divided hairy leaves and elongated floral bracts. This species is doing well in cultivation in Sydney.

G. beardiana McGillivray, W.A.

A low growing shrub with a wide distribution from Newdegate to Coolgardie and further, this new species is related to *G. concinna* R.Br. It differs from this species in its ovary having longer styles (2.5 - 5.1 mm) and its smooth leaves having revolute margins. It has attractive red inflorescences.

G. bedggoodiana J.E. Willis ex McGillivray, Vic.

The name of this new species was given by Jim Willis and taken up and published by Don McGillivray. It honours Mrs. Bedggood of Ballarat whose efforts were instrumental in setting aside as a reserve the area where this *Grevillea* grows. It occurs in Enfield State Forest south of Ballarat and grows into a low to prostrate shrub. Related to *G. aquifolium* Lindl. and *G. repens* F. Muell. ex Meisn., it differs from *G. repens* in its flowers having shorter pedicels and in its differently shaped (ovate-obovate) floral bracts and in its densely hairy branchlets. It has been known in the nursery trade as *G. sp. nova* Enfield.

G. benthamiana McGillivray, N.T.

Known from the Fergusson River area, this erect single stemmed shrub grows to 3 metres and has very dark black-red flowers. The leaves are finely divided pubescent with short pungent lobes.

G. buxifolia (Sm.) R. Br. has been enlarged and now includes three previously described species, *G. buxifolia*, *G. phyllicoides*, and *G. sphacelata* as sub-species Henceforth, these species are to be known as *G. buxifolia* (Sm.) R.Br ssp *buxifolia*, *G. buxifolia* ssp. *phyllicoides* (F.Br.) McGillivray, *G. buxifolia* ssp *sphacelata* (R. Br.) McGillivray.

G. bynesii McGillivray, N.T. and W.A.

One of the new species related to *G. wickhamii* Meisn., this is a widespread species ranging from the Kimberley to the N.T. growing among spinifex and in open Eucalypt woodland, usually on ridges. It is a small subconical tree or tall shrub to 6 metres with felted leaves on long petioles. The flowers have longer pedicels than *G. wickhamii* and the fruit is fuller with a thicker pericarp (wall of the follicle).

G. cagiana McGillivray W.A.

The name for this variable and widespread species commemorates Charles Austin Gardner, known affectionately by his closest colleagues as "Cag". Often confused with G. hookeriana Meisn., this species has similar one-sided inflorescences. However it is more closely related to G. baxteri R.Br. from which it differs in having a longer ovarian stipe and a glabrous style. It ranges from Southern Cross to Corrigin.

G. christinae McGillivray, W.A.

A new species from near the Mortlock River, S.W. of Goomalling, this low growing shrub to 50 cms is related to G. costata C. Gardner. It has very lightly ribbed fruit, glabrous leaves and small flowers with cream or reddish styles.

G. concinna ssp. lemanniana (Meisn.) McGillivray, W.A.

A previously unrecognised subspecies of G. concinna R.Br., it occurs from Bremer Bay to Cape Arid National Park. It is a low shrub to 80 cm with bright reddish flowers on a typically bent rhachis. Inflorescences are a short one-sided "toothbrush". This plant has been sold incorrectly for many years as G. baxteri.

G. curviloba McGillivray, W.A.

A new name for a well-known plant in cultivation, this species has a limited distribution around Muchea, Bullsbrook and Badgingarra. It has previously been known as B. liternata or G. tridentifera.

G. decipiens McGillivray, W.A.

A spreading shrub to 1 metre, G. decipiens is closely related to G. oligantha F. Muell. It has thicker linear leaves with the margin rolled and enclosing the undersurface of the leaves. Flowers are red on a very short peduncle.

G. didymobotrya ssp. involuta McGillivray W.A.

A new subspecies of G. didymobotrya Meisn. with broader dorsiventral leaves (different upper and lower surfaces) and involute margins (the upper surface of the leaves has the margins rolled inwards) has been described from between the Moore and Murchison Rivers. north of Perth.

G. diffusa ssp. evansiana (McKee) McGillivray, N.S.W.

G. diffusa ssp. filipendula McGillivray, N.S.W.

These two subspecies are part of an expanded species now known as G. diffusa Sieber ex Spreng., but formerly known as G. capitellata. The new name for the well known G. evansiana from the Rylestone area shows its close relationship to other similar species. G. diffusa ssp. filipendula McGillivray is the name for a previously undescribed species occurring between Calga and Mt. White on the Central Coast of N.S.W. This subspecies has flowers on long thin peduncles (often longer than 7 cms) and the leaves also tend to be longer than those of G. diffusa ssp. diffusa (syn. G. capitellata).

G. disjuncta ssp. dolichopoda McGillivray, W.A.

A new subspecies from near Ongerup, this plant differs from G. disjuncta F.Muell. ssp. disjuncta in having a longer torus and longer rough granula leaves.

G. diversifolia ssp. subtersericata McGillivray, W.A.

This subspecies from near Albany is a shrub to 3m growing in moist sites. It has more rigid leaves with appressed silky hairs on the underside than G. diversifolia Meisn. ssp. diversifolia, which has glabrous leaves.

G. drummondii ssp. centristigma McGillivray, W.A.

G. drummondii ssp. pimeleoides (W.V. Fitzgerald) McGillivray, W.A.

G. drummondii Meisn. has been divided into three subspecies. G. drummondii ssp. centristigma occurs in the Darling Range south of Perth, the Whicher Range and Shannon River area and has smaller flowers than ssp. pimeleoides. It is a low shrub to 60 cms with yellow hairy flowers which have a thickened style-end and a stigma which is set in the middle of the pollen presenter. G. drummondii

ssp. pimeleoides is found in the Helena Valley area and generally attains a height of 1.5 metres or more. It too has a hairy perianth but flowers are bigger and the concave leaves are sparsely hairy and much larger. This attractive plant has been in cultivation for many years. The subspecies drummondii, which occurs north of Perth has the perianth glabrous outside.

G. dryandri ssp. dasycarpa McGillivray, N.T.

The holotype of this new subspecies was collected about 10 km from the mouth of Deaf Adder Gorge although it is more widely distributed. It may be distinguished from G. dryandri ssp. dryandri in having more lobes per leaf (29-71) and by having hairs on the follicle (seed pod).

G. eriostachya ssp. excelsior (Diels) McGillivray, W.A.

Although different in habit and distribution, the two species G. excelsior and G. eriostachya exhibit close floral similarities. It is no surprise then to see G. excelsior made a subspecies of G. eriostachya.

G. formosa McGillivray, N.T.

Related to G. pteridifolia Knight, G. formosa has very large inflorescences and flowers. Flowers start out green in bud and age to pale orange. Found at Deaf Adder Gorge and other places in Kakadu and in the sandstone escarpment region this species rarely attains a height of more than 1 metre, being a sprawling, spreading shrub. It has finer foliage than G. pteridifolia.

G. georgeana McGillivray, W.A.

This beautiful new species was named after Alex George and is related to G. wilsonii A. Cunn. It is found in the Die Hardy Range north of Sothorn Cross. This shrub can attain a height of 2.5 metres. Its bright red subcylindrical inflorescences contrast attractively with its glaucous rigid foliage. It differs from G. wilsonii in having shorter, less hairy styles and smaller fruit.

G. glabrata (Lindl.) Meisn. has three subspecies as a result of the revision.

G. glabrata ssp. glabrata, G. glabrata ssp. dissectifolia McGillivray, and G. glabrata ssp. ornithopoda (Meisn.) McGillivray. This latter subspecies has been redefined from a previously described species, G. ornithopoda. G. glabrata ssp. dissectifolia McGillivray has been newly described. The holotype was collected near North Bannister on the Albany Highway. It has leaves deeply dissected into narrow lobes.

G. goodii R. Br. has been expanded to take in one newly described subspecies (ssp. pluricaulis McGillivray) and one previously known as G. decora Domin. from Queensland, now G. goodii ssp. decora (Domin) McGillivray. G. goodii ssp. pluricaulis McGillivray occurs in the Darwin region and on Melville Island. It is an erect lignotuberous shrub and has green and yellow flowers whose styles are completely covered in hairs.

G. granulosa McGillivray, W.A.

From the Mullewa area north of Perth, this new species related to G. extorris S. Moore is found. It is a small shrub to 1.5 metres with bright red flowers in axillary clusters. Its linear sand-papery leaves are rigid with thick revolute margins.

G. hakeoides Meisn. has been expanded to include two subspecies previously known as separate species, G. stenophylla and G. commutata. Although there is a wide difference in the leaf size at the two extremes of these three subspecies they form a continuum with no clear point of differentiation. The new names here are now G. hakeoides Meisn. ssp. hakeoides, G. hakeoides ssp. stenophylla (W.V. Fitzgerald) McGillivray, G. hakeoides ssp. commutata (F. Muell) McGillivray.

G. iaspicula McGillivray, N.S.W.

This species has a restricted habitat on limestone at Wee Jasper, N.S.W. A clever piece of linguistic humour was used in the derivation of this new name. The Latin diminutive -icul- effectively gets the Wee back into Iasper. This species is closely related to G. baueri and G. rosmarinifolia. It has much broader oblong-elliptic leaves than either and attains a height of 2 metres.

G. infecunda McGillivray, Vt.

This is an unusual new species from near Anglesea, Vic. which is closely related to G. aquifolium Lindl. The hairs on the leaves are completely flattened (appressed). In addition it is completely root suckering and never sets seed because the pollen is sterile, hence the specific epithet, which means unfruitful.

G. integrifolia (Endl.) Meisn. Many previously well-known species have been recombined into this species as subspecies. The new names are:

G. integrifolia ssp. integrifolia formerly G. integrifolia (Endl.) Meisn.
G. integrifolia ssp. biformis (Meisn.) McGillivray, formerly G. biformis
G. integrifolia ssp. ceratocarpa (Diels) McGillivray, formerly G. ceratocarpa
G. integrifolia ssp. incrassata (Diels) McGillivray, formerly G. incrassata
G. integrifolia ssp. shuttleworthiana (Meisn.) McGillivray, formerly
G. shuttleworthiana

G. kenneallyi McGillivray, W.A.

This new species from north of Wongan Hills is related to G. teretifolia Meisn. It differs from it in having densely silky branchlets and flowers with a smaller pistil and villous hairs only on the lower half of the perianth. It forms a shrub to 2m with white scented flowers.

G. leptopoda McGillivray, W.A.

Another new species related to G. teretifolia Meisn. from north of Perth around Three Springs and Carnamah. It is a fragrant white flowered shrub to 1 metre with divided, trifurcate leaves. It has longer inflorescences, a smaller pistil and sparse hairs on the lower half of the perianth.

G. leucoclada McGillivray, sp. nov. W.A.

A new white flowered species from the area near Kalbarri related to G. intricata Meisn. from which it differs in having glaucous young branches, tough, pliable leaves and an oblique stigmatic cone. The leaves on this sweet-scented species are thrice divided into linear lobes about 90 mm long.

G. linsmithii McGillivray, Qld. and N.S.W.

Closely related to G. victoriae F. Muell., this species has narrower oblong-ovate to elliptic leaves and inflorescences with much fewer flowers. Flowers have an interesting green and red colouring. It is found on Mt. Greville and Mt. Maroon, Qld. on rocky ridges and on the Forbes River near Wauchope N.S.W. in dry sclerophyll forest, where it forms a shrub to 2 metres. It was named after a highly regarded Queensland botanist.

G. lissopleura McGillivray, W.A.

This species is known only from the type collection made by Ken Newbey from about 86 km NE of Hyden. It forms an upright spreading shrub to about 1 metre x 70 cms. It has very small flowers and is related to G. scabrida Gardner from which it differs in having smooth leaves and almost sessile inflorescences.

G. longicuspis McGillivray, N.T.

This new species, related to G. cunninghamii R.Br., occurs in the Port Darwin area and Woolanng. It has small bright red flowers in axillary clusters and holly-shaped, petiolate, pubescent leaves. It forms a small multi-stemmed shrub to 50 cms and is lignotuberous.

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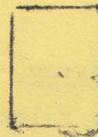
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FINANCIAL REPORT JUNE 1986

<u>INCOME:</u>	Membership Fees	317.59
	Seeds	48.00
		<u>\$365.59</u>
<u>EXPENDITURE:</u>	Postage	132.75
	Newsletter exp.	38.75
		<u>\$171.50</u>
BALANCE AS AT 9.7.86		\$751.27



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And, finally not a final word from our leader but an impassioned plea from your editor - I would like the next issue to be on cultivation - PLEASE, PLEASE write to me about your experiences with Growing Grevilleas in the Garden (what fine alliteration!). What do you do about things like pruning, mulching, fertilising, pests, etc. etc. - no contribution will be too small or too trivial. Put pen to paper post-haste (more alliteration!) - I NEED YOUR CONTRIBUTIONS!

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