Hakea fraseri

Australian Plants Society

Armidale & District Group

PO Box 735 ARMIDALE NSW 2350

Volume 24 No 5

December 2004 / January 2005

President:	Secretary:	Treasurer:
Col Mulquinney – 6772 6012 (H)	Kristine Gow	Phillip Rose – 6775 3769 (H)

President's Message

Having spent a very enjoyable time at John and Barbara's garden in the St Peter's Open Gardens, it became very clear that a great deal of effort is needed to make any garden look its best when one is working to a set date. John and Barbara judged their work to perfection. Congratulations to them both on an excellent effort and thanks to those who helped over the two days the garden was opened. The plant sale was a great success and the guest speaker sessions were very well received.

With my enforced break from 'heavy work' I have recently been watching Glenda toil solidly in our garden. Weed removal and pruning seem to be the main activities. We are watching with interest the sand/loam mix that we used to add to the poor soil under the pine trees. The mix is similar to, but not identical with that used by John in many beds of his garden. We have also copied his use of sugar cane mulch which seems to be working well.

We have just returned form a short visit to the north coast and it was interesting to note that the natives that are still flowering in Armidale have 'finished' in the nurseries we visited in Tweed Heads, Wollongbar and Ballina. It will be interesting to see how long the grevilleas we purchased this time in flower continue to do so in our climate. We purchased flowering G.'Lady O' and the callistemon 'Matthew Flinders' a couple of months ago from these nurseries and they have continued to flower profusely since they have been planted.

Our group's Christmas party will be held at our place on Sunday 5 December at 11am (see details later in the newsletter). We hope many of you will be able to come and see the progress of our new plantings. As this is Glenda's garden too, you will be able to play the game of 'hunt the natives', many of which are hiding amongst the roses and other exotics.

During our two months recess I hope you have the opportunity to enjoy your own gardens and no doubt put in lots of hard work over the warmer months. Wishing you all a very happy Christmas.

Cheers

Col

CONTRIBUTIONS TO THIS NEWSLETTER ARE GRATEFULLY ACCEPTED at ANY TIME

Postal address as above or email – jrnevin @ northnet.com.au

GROUP INFORMATION

(group commenced August 1977)

We are a very friendly and helpful group who enjoy monthly meetings, garden visits and field trips to help members to enjoy the search for knowledge about our native flora. Most of all we range from raw beginners to others who have been at the game for many years - all willing to share their knowledge.

General Meetings are held at 7.30pm on the third Tuesday of each month (except December, January, June and July) at The Tree Group Woodland Centre where a display of flowers is presented by members. Old and new members and visitors are very welcome to these meetings and any outings that we organise.

Committee Meetings are held on the first Monday of the month at 7.30pm – see diary for where - members are welcome to these meetings too.

Annual General Meeting is held in February.

Solstice Function is held in June.

Wattle Day Function is held on a day closest to 1 September.

December Meeting is taken up by an end of year function, usually a BBQ or picnic.

Cover: Background is adapted from a drawing of Hakea fraseri in Forest Flora, NSW

A Place To Visit in South East South Australia

Linda Gowing from Macclesfield tells us in the South Australian, Australian Plants Society, journal for August 2004 about the Ken Stuckey Arboretum at Furner.

The Arboretum can be accessed at any time – there is a sign at the entrance. The trick is finding the road on which the entrance is located. Linda and Bruce Gowing have found one map that shows the detail of side roads in this area. It is quite old but it got them to the Arboretum and back to Adelaide via Max Ewer's property (another good reason to visit the southeast). They are happy to provide copies of the relevant section of the map to anyone who wants to visit the Arboretum.

Barbara and Martin Cameron on 8735 2035 have offered the use of their shearer's quarters as a base for any Australian Plants Society members wanting to explore the southeast. These are very comfortable and come with the added attraction of Barbara's native garden. Their property is on the main road, just north of Millicent.

Myoporum floribundum by the Sheathers

Myoporum floribundum is another shrub with white flowers. We have many specimens scattered throughout our gardens. The species is known as the Slender Myoporum and is a tall, spreading shrub with narrow leaves that hang down from horizontal branches. When not flowering the plants appear to be wilting. This is misleading because the Slender Myoporum has proved to be extremely drought tolerant.

In spring and early summer *Myoporum floribundum* bursts into flower. Each branch becomes covered with small white flowers. This is one of the most attractive white flowering native plants.

Cuttings strike rapidly.

Even I can propagate this one – Ed!

My New Garden by Graeme Fairweather in Walcha

This tale goes back several years and had it's beginnings after I decided to extend the flat area around our barbecue shelter.

I firstly pegged out the size of the rockery garden and then proceeded to collect suitable rocks from around the area to cement in the border. After completing this things went very slowly for eighteen months or so as I collected a variety of soils ranging from basalt sand to heavy dark loam in my trusty trailer. The last few loads were collected from the local Council. Having rescued some large flat shale rocks from a friend I then hired a large masonry cutting machine to cut the rocks into suitable sizes to form three steps which divide the rockery in two. In the process I damaged the cutting wheel and had to pay for its replacement. I then cemented a border strip around the top edge of the garden topped with suitable size rocks collected from a paddock nearby. After collecting more suitable flat rocks I then commenced the main terraced walls of the rockery with three levels on one side of the steps and two on the other side. After admiring my handy work I installed a dripper watering system from a tap down the backyard

The next stage was the leveling of the rockery beds with the soil ready for the planting of the variety of native plants purchased from Nurseries on our Grampians trip and Mole Station. Then I covered the soil with 7.5cm of coarse river sand to act as a mulch and control weeds. So far this has worked very well. This was completed in October 2003 and the only remaining task was laying out Fescue turf on the flat area above the new rockery bed.

This year has seen the results of my hard work with the plants really thriving and putting on a great flower display through late winter and spring. Among the plants in the rockery are *Eucalyptus caesia* (gungurru), *Phlebalium nottii*, *P. phylicifolium*, *Hakea purpurea*, H. rostrata, *Prostanthera cuneata*, *P. phylicifola*, *Calothamnus quadrifidus* (yellow form), *Isopogen formosus*, *Grevillea arenaria*,*G.* 'John Evans', *G. aquifolium* (desert form), *G.* 'Austraflora Gold',*G. confertifolia x sericea*, *G. baueri*, *Crowea exalata*, *Callistemon* 'Father Xmas', *C.* "Phil May', *C.* subulatus, *Micromyrtus ciliata*, *Eremophila youngii*, *E. maculata*, *E. glabra* 'Burgundy', and two unnamed varieties, *Eriostemon myoporoides.* Several groundcovers including *Kunzea ambigua*, *Grevillea* 'Bedspread', *G.* 'Aussie Crawl', *G.* 'Pink Lady', *Acacia pravissima*, and *Pultenaea pedunculata* 'Pyalong Pink'. Three plants that put on a great floral display this spring were *Grevillea baueri, G.* 'Pink Lady' and *Phlebalium nottii.* Of coarse there have been some casualties; *Phebalium whitei* which Sarah Caldwell describes as one of those 'drop dead' plants, *Leptospermum scoparium*, *L..scorparium nana* 'Dwarf Pink', and *Prostanthera striatiflora* which was the only one to succumb to the winter frosts.

I can now sit up on my verandah and feel satisfied with my perseverance and hard work.

A PLACE TO VISIT IN BRITAIN

From the Tasmanian Branch of Australian plants society Newsletter for October 2004.
Jeff Irons tells us that there is a B & B owner on SKYE who grows Australian plants and is always pleased to welcome Aussies. He is Murray McDonald, Hillview, Hill Place, Staffin Road, PORTREE, Isle of Skye, IV51 9GS. As at this date his standard rate is £20.00 per person per night. Phone 01478 61 2722

Improving Efficiency & life of Solar Garden lights by Mark Abell from November north shore Group newsletter

A wide range of solar garden lights are available on the market these days, mostly consisting of the following basic components:

* a solar panel for turning solar radiation into electricity.
* rechargeable battery/s to store the energy.
* LED(s) (Light Emitting Diode) to turn the stored electricity into light (usually white but can be coloured), reflectors & light diffusers to spread the light around.
* a photoresistor to control turning the light on when it is dark, and
* electronics to connect the components and to control the functioning of the unit.

The performance of these lights tends to be somewhat less than desirable, primarily the result of poor quality components. I am yet to see any useful or meaningful information provided on the packaging of these lights which would enable you to make a suitably informed choice. The only way to ascertain the quality of the components (not necessarily related to the price of the unit) is to open the box and examine the light.

The solar panels tend to fall into one of two main groups; amorphous or polycrystalline. The polycrystalline panels tend to be the most efficient and can be recognised by a crystalline appearance on the surface of the panel. A larger area on the solar panel will also capture more energy. So the best light at capturing solar energy should be one with a large polycrystalline solar panel.

Some units have 2 LEDs and these should emit more light, but at the cost of a shorter operating time. High efficiency and capacity LEDs exist but it is not easy to determine if they have been used, (safest to assume the cheapest components are used – so don't expect high capacity LEDs). In order to best distribute the light produced the lights should use reflectors to direct the light away from the body of the unit and clear (not milky) diffusers to spread the light around.

The batteries included are usually NiCad (Nickel Cadmium), with normally 1 or 2 provided. The batteries have a capacity to store energy, measured in mAh (milli-Ampere hours). Those provided in garden lights tend to be low capacity, 600mAh AA batteries. Obviously the amount of energy that can be stored is limited by the total capacity of the batteries. So, two batteries are usually better than one, with higher capacity batteries better still. NiCad batteries have a number of known problems: they tend to develop a "memory" of previous charge / discharge levels that after a number of uses often to fully charge / discharge; and Cadmium is poisonous and care is required when handling and disposing of old batteries. *(Make sure you dispose of batteries in accordance with the relevant legislation – Ed.)*

A better solution to NiCad batteries is NiMH (Nickel Metal Hydride) batteries. These do not exhibit the same degree of "memory" problem, and are a much safer alternative. They are however, a little more expensive than the equivalent NiCad (about $4 each for 1600mAh AA batteries). All rechargeable batteries have only a limited number of charge / discharge cycles that they can undertake before they are no longer useful. This will limit the useful life of the batteries in a solar light to about 2 years.

Whilst the batteries provided in the solar garden lights tend to be one of their worst features, it is fortunately the easiest one to rectify. The batteries can be easily replaced with higher capacity NiMH batteries (1200MwH would be a good size – an even larger capacity can be used if the light has only 1 battery). If you have a good battery charger that has a discharge function, then the NiCad batteries in the lights can be put through a couple of full charge discharge cycles in the battery charger in order to regenerate the battery capacity and to clear the memory effect. This can often be all that is needed to give the lights a new lease of life.

Further improvements can be made by ensuring that the solar panels get good direct sunlight (they don't get nearly as much charge when they

little towards north will ensure that they get even more sun.
I have undertaken a number of tests with a variety of lights and, even in winter, I am getting light till midnight from some of my garden lights. Those in the shade are only giving an hour or so of light and the lights still with NiCad batteries are showing performance degradation a.

ALL HANDS ON DECK FOR ARBORETUM

Holiday time is quickly arriving and there will be oodles of visitors wandering through the Arboretum. We will be having a working bee on Saturday 4 December a, meeting at 1pm, to do a gigantic tidy up so that we have a good presentation of our native plant gardens.
Bring all your clearing up utensils such as rakes, secateurs, pruning saws, gloves, wheelbarrows, spades, buckets and whatever else I have forgotten.
Now for yourselves, bring plenty of drinks and afternoon eating goodies, sunblock, hats, and a folding chair if you have old bones like mine.

ANOTHER NURSERY!

Warren and Gloria Sheather tell us that on a recent trip to Yamba they visited the Country Road Nursery near South Grafton. The nursery is situated on the Gwydir Highway, from Glen Innes, at the first roundabout before entering South Grafton. Just as you come out of the roundabout the nursery is on the left hand side.

The nursery has a huge range of native tube stock with an average cost of $2. They purchased a number of tubes including: Banksia lehmanniana, *Banksia occidentalis*, *Melaleuca wilsonii* and the pink flowering form of *Prostanthera rhombea.*

They assure us that if we visit this ;nursery we will spend a few horticultural dollars.

Thanks to you both – Ed!

Christmas Function on 5 December

This will be our last function for 2004 (unless you come to the committee meeting on the following Monday). We are having a picnic lunch at the Mulquinney garden and then having a short talk by Wal Whalley on Local Grasses and then he will take us for a short excursion down the hill to look at the grasses at the Apex lookout area.
DATE & TIME: 11am on Sunday 5 December
VENUE: The Mulquiney's at 4 Eulahbar Crescent. [This home is on the southern corner of Erskine Street and Crest road – has a lovely high ornamental brick wall on these two street sides].Phone if you get lost: 6772 6012.
Please note it is close to impossible to park legally in Erskine Street and there are few parking places in Eulahbar Crescent but the side gate (in Crest Road) will be open
WHAT TO BRING: A picnic lunch and all drinks. There will be a B-B-Q if you would like to use that. We traditionally have everyone bring a piece of fruit (cut up if suitable), to make a communal fruit salad to have as dessert. Include a fold up chair, hat and sunblock and whatever you need such as eating and drinking utensils..

know your caterpillars

from Gardening Aust magazine Oct 2004

To some, the sight of a caterpillar chomping away on a leaf is enough to make them reach for a pest spray. But it's important to know how to identify caterpillars you find in the garden – the last thing you'd want to do is to unnecessarily harm larvae that will one day emerge into a butterfly that, in turn, will pollinate your flowers. A handy website, The identification of Caterpillars of Australia, offers photos and descriptions of caterpillars that are commonly seen in Australian gardens.
See
http://linus.socs.uts.edu.au/~don/larvae/faqs/ident.html.

From the same magazine about **SNAILS** –
The University of California has snail control methods on one of their websites, including a trap made from a small square piece of timber with two 2cm high feet. Place it near plants snails like. They hide under the wood and when the sun rises you collect them.
For more ideas see
www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7427.html

NEXT MEETING IN FEBRUARY

This meeting will be our **Annual General Meeting** so you people need to start thinking about how you can contribute towards the smooth running of the group. Someone who has lots of experience and a depth of knowledge or perhaps a new member who has fresh ideas and seeking knowledge (and all in between), can help to steer the group in the right direction to meet the needs of members and perhaps attract new ones. Have a think about it and put your name forward to a member of the committee or come to the meeting and volunteer on the night.

PLEASE NOTE NO GENERAL MEETINGS IN DEC AND JAN.

La differance

I have always had trouble telling the difference between Prostantheras and Westringias; and Beckeas and Leptospermums.
Prostantheras have a couple of rounded bits as their calyx and Westringias have many pointed bits as their calx. (told to J Nevin by Warren Sheather many years ago).

The way to separate Isopogon from Petrophile early on is by looking at the seed and cotyledons. The seed of Isopogon looks like a tear drop shape covered in hair, whereas the Petrophile looks like a little heart shape. The Isopogon all have linear-type simple cotyledons, whereas the Petrophile have cotyledons that look like heart shapes with the points of the 'hearts' touching at the stem. (from Wildflower society of Western Australia newsletter for May).

BITS & PIECES

* A plant tonic recipe from Marcia, heard on the ABC gardening segment on Saturday mornings. 1 teaspoon Seasol, 1 teaspoon Potash, 1 teaspoon Epsom Salts, 1 teaspoon Sulphate of Iron. Mix all together in 5 litres of water. Spray all over plant and base of plant a couple of times a year.
* If you do not have the space to plant a climber then plant it in a hanging basket and let it all hang down – from Col Mulquinney
* From the NPA newsletter – The Armidale Bushwalking Club now has a Mailing List. BushwalkingClub@waterfalltrack.com mailing list! This list is used to notify people of bushwalking events undertaken by the club. To be adequately covered by insurance, people must be members of a bushwalking club when attending club activities. A membership form can be downloaded by following this link http://www.waterfalltrack.com/armidalebushwalkers/downloads/bmembership2.pdf

Gibraltar Range National Park by the Sheathers

On the way back from Yamba we stopped at the Granites Picnic Area. This pleasant spot is just off the road that leads to Washpool National Park. There is a short circular walk from the picnic area and also a track that takes you to Waratah Trig.

A large area of the park was burnt out a few years ago. Many species are now regenerating. On the circular track there used to be a large *Hakea macrorrhyncha*. This specimen was killed in the fire and it was interesting to see the dozens of seedlings regenerating from this individual plant.

Further towards Glen Innes (still within the Park) the highway was lined with shrubs covered in white flowers. These were *Conospermum burgessiorum*, a member of the Proteacea family. This rare plant has limited distribution and occurs in Gibraltar Range National Park and the Stanthorpe area.

Conospermum burgessiorum is a medium shrub with hairy new growth and masses of cream to white flowers in spring. There are 40 species in the genus. Most occur in Western Australia with six native to New South Wales. Their common name is Smoke Bush and some western species are harvested for the cut flower market.

Propagating with Warren Sheather by Bob McCaig

Warren spoke to a large and very interested group and responded to several question both during and at the end of the session. The presentation fell into the following broad headings.

CONTAINERS: He extolled the virtues of plastic and hoped that the environmentalists would never succeed in getting rid of plastic altogether. Of particular value for seed preparation were the 500g margarine containers. With holes for adequate drainage they were admirable for sowing all kinds of seed, without holes and with a centimetre or two of water in them they were a simple way of ensuring that a seed container resting in one would maintain adequate moisture until germination. Labels, dry seed containers, small tubes for small quantities of dipping material for cuttings, as well as bags over pots for miniature glasshouses were useful plastics in the garden shed.

GERMINATION MATERIALS: Warren favoured the same commercial seed raising mix for both seeds and cuttings. The one criterion when buying potting mixes was not price but the presence of the Australian Standards Association seal on the package.

SEEDS: These should be as fresh as possible. The seed mix in the pot needs to be moist. If the seed is very fine it can be mixed with sand to ensure even distribution. All seeds should be covered lightly with the seed mix or some mixed with sand. Once the seed germinates the pot should be placed in a well-lit area, protected from direct hot sun, eg. an easterly aspect. Seedlings can be transplanted into potting mix when there are two leaves. Again an easterly or similarly lit position is desirable. Seed with hard coatings need special treatment. Thus the seed heads of banksias and hakeas may need some heat before the seeds are released. Placing the cones in bags in hot sun is one way, and some people put them in the oven. Banksias respond well to Warren's blow torch! Hard-shelled seeds such as those of the acacia and pea families respond more quickly if soaked in hot water and left overnight before sewing the plump ones.

FERTLIZERS: Both seedlings and cuttings respond very well to spraying with seaweed-based fertilizers. As plants become established they respond to a few grains of slow release fertilizer such as Osmacote (for native plants).

CUTTINGS: Tools required are a sharp-edged knife or blade, a root promoting dip such as Clonex (purple) and the seaweed fertilizer mentioned earlier.

Warren made the important point that cuttings have an advantage over seed-produced plants in that cuttings are the age of the parent plant. Those taken from a flowering plant will flower during the cutting's first season whereas seed plants might take several years to reach flowering stage.

Cutting wood needs to be semi-mature, flexible and 10 to 15cm or so long. He illustrated with a branch from a bottlebrush which had flowered and had 7-8cm of new growth above the flower. He took one cutting from immediately above the dead brush and another from immediately below it. Leaves were removed (carefully so that the bark is not stripped) for the bottom 2/3rds of the cutting. On a hard surface and with a sharp blade the base of the cutting is cut diagonally to ensure a good exposure of the cambium layer. It is then dipped in the cutting solution to a depth of about 1cm (a small bore plastic tube is useful here) and allowed to dry. Holes are made in the potting mix with a dibbler to ensure that the base of the cutting is not broken or damaged as the cutting is planted. When the container is filled firmly heel in the mix around the cuttings with the fingers. A spray of seaweed fertilizer and some Osmacote may be applied, then cuttings are placed in a light but sheltered position.

Various types of 'greenhouses' can be used to provide adequate and uniform levels of heat and moisture. The simplest one is a plastic bag held in place by a domed frame fashioned from wire and placed over the pot. Rates of rooting vary but cuttings can be transplanted when roots appear through the drainage holes. When transplanting ensure that the cutting pot is thoroughly soaked in water so that the cuttings can be taken out with minimum root damage. The young plants should then be gradually hardened before planting in the garden.

On the subject of adequate light I remember Warren saying that if your arm casts any sort of a shadow then there is too much light. Ed!

Our President and Committee wish all members of Australian Plant Society and the Armidale Branch members in particular a most wonderful Christmas and all the very best for a terrific 2005.

Coming Diary Events

Saturday 4 December at 1.00pm:	**Arboretum Working Bee (see page 5 for details)**
Sunday 5 December at 11.00 am:	**Christmas function at Mulquiney's** **Wal Whalley – Local Grasses then excursion to apex Lookout to look at the grasses with Wal Whalley. (see page 5 for requirements)**
Monday 6 December at 7.30 pm:	**Committee Meeting at the Nevin's**
Sunday 19 December:	**Markets in the Mall**
Sunday 5 February at 1.00pm:	**Arboretum working Bee**
Monday 7 February at 7.30pm:	**Committee Meeting at the Nevin's**
Tuesday 15 February at 7.30pm:	**Annual General Meeting and Social get together**
Sunday 27 February:	**Markets in the Mall**

NB: ***Pat (6771 1703) would like some help with the Plant Display at the monthly Markets in the Mall –he would very happy to hear from you.***

MEMBERSHIP APPLICATION / RENEWAL FORM for Australian Plant Society

MEMBERSHIP TYPE: please tick appropriate box	Annual Fee	Concession
Single:	$44	$36
Joint: (2 adults at the same address)	$52	$44
Concession applied for: Limited Fixed Income	Full Time Student	

PERSONAL: Joint members please complete a) and b)

a) Mr Mrs Miss Ms Dr Other..... b) Mr Mrs Miss Ms Dr Other.....

Given Name (s):..... Given Name(s) .....

Surname:..... Surname:.....

Postal Address:.....

.....Postcode:.....

Tel: Home ( ).....Work: ( ).....

Fax: ( ).....email:.....

PAYMENT: Payment of $.....is enclosed by:

Cheque Money Order payable to APS Armidale Branch

Please return this completed form with your payment to :

Membership Officer APS Armidale Branch PO Box 735 ARMIDALE NSW 2350