

## **EPACRIS STUDY GROUP**

Group Leader: Gwen Elliot, P.O. Box 655 Heathmont Vic. 3135

### **NEWSLETTER**

**No. 27**

(ISSN 1038-6017)

**MARCH 2009**

Greetings to all Epacris Study Group members,

It has certainly been an interesting and challenging summer for home gardeners and lovers of Australia's natural bushland areas, with extremes of heat, floods and fires in several regions.

This edition of our Newsletter features an item on the study of Epacris in a fire-affected area of New South Wales. Also included are details of two new funds established by Australia's Open Garden Scheme. The first is an Australia-wide scheme designed to assist in the restoration and renewal of gardens affected by natural disasters, and the second fund will contribute to the restoration of public gardens and spaces devastated by the bushfires in Victoria.

Fortunately many plants have an amazing ability to respond to the extremes of nature, and already we are seeing plants producing new green growth and even bursting into bloom, as the season changes from summer to autumn. The recording of flowering times of *Epacris* could be particularly significant this year as many plants, native and non-native are blooming out of season.

As we keep turning over the pages of our 2009 calendars we realise that the 25th Biennial Conference and Seminar of the Association of Societies for Growing Australian Plants to be held in Geelong at the end of September is now approaching quite quickly. Registrations are now being received and for those who book by June 30th there is an encouraging 'Early Bird Registration Discount'.

If you don't have a copy of the full-colour Conference Program you can phone Sue Guymer on 03) 9872 3583 and she will be pleased to send you a copy.

Our Epacris Study Group will be participating in the Study Group meetings on Wednesday September 30th, and we will also have a display feature on that day.

These ASGAP Conferences are always extremely enjoyable and informative, and we look forward to seeing as many as possible taking part at Geelong.

Warm greetings, and happy gardening,

*Gwen E.*

## News & Notes

### The Australian Plant Society Victoria Inc. has a new logo.

A.P.S. Victoria now has a new official logo.

The fine illustration of *Epacris impressa* is the work of botanical artist Fay Hobby.

This now replaces the previous "official" *Epacris impressa* logos, of which there were many hybrids, and extensive searches failed to find any original artwork of the logos earlier used.

This new logo will now be available for use wherever necessary on all Australian Plant Society Vic. sanctioned material.

A CD of the logo in colour, grayscale and line versions, and in several formats, will be held by members of the Executive Committee and by the Historian, with the original artwork being lodged with the Historian.

You may like to check out the website, at [www.apsvic.org.au](http://www.apsvic.org.au)



### Heath Plants - the topic for study by members of the Country Womens Association in NSW for 2009

Each year the Country Womens Association selects a particular topic for study and in 2009 the selected topic in New South Wales is plants of the **Epacridaceae family**.

Our Study Group has been contacted in connection with the search for information on the topic, including referrals from the Royal Botanic Gardens Sydney.

We have been pleased to be able to assist, and undoubtedly there will be many women in New South Wales who will know much more about this group of plants than prior to the start of this year.

This issue of our Newsletter also includes *Epacris coriacea* from New South Wales as our Plant Profile species, and a report of the impact of fire on the endangered *Epacris hamiltonii* in the Blue Mountains of NSW.

### Australia's Open Gardens Scheme launches 2 new funds.

Australia's Open Garden Scheme has recently established two specific funds to assist gardens affected by fire and floods in the past summer.

The **National Garden Renewal Fund** has been given an initial contribution from AOGS of \$50 000, to assist with the task of restoration and renewal of gardens which have been opened for Australia's Open Garden Scheme. This fund will be available for gardens across Australia.

A **Victorian Bushfire Community Grant** has also been launched with a contribution of \$50 000 and this fund will be dedicated to public gardens and spaces in the communities devastated by the recent fires.

Additional contributions to both funds are most welcome and can be sent to Australia's Open Garden Scheme, P.O. Box 5001, Glenferrie South 3122, or you can donate online at [www.opengarden.org.au](http://www.opengarden.org.au).

## News & Notes

### Special EPACRIS STUDY GROUP Garden Visit Day

A special Garden Visit Day for members and friends of the EPACRIS STUDY GROUP is planned for **Tuesday September 8th**.

We will be visiting three very different venues, all with special collections of **Epacris**.

Our day will commence at **Kuranga Native Nursery, 118 York Rd. Mt. Evelyn Vic**, where the owners **Evan Clucas and Leanne Weston** have developed possibly the most extensive collection of *Epacris* in any nursery in Australia.

We will be given a special talk on Kuranga's **Epacris collection** at **10 am** and have reserved a table at the **Paperbark Cafe** for **morning tea** at **10.30**.

A special price for the delicious (but optional) morning tea will be \$10 per person. We plan to depart from Kuranga by noon, but you can arrive any time after the nursery opens at 8.30am if you would like even more time to look around.

*Epacris* we are likely to see in flower at Kuranga include the following:

*Epacris barbata*, *E. coriacea*, *E. impressa* - 'Cranbourne Bells', *E. impressa* - 'Spring Pink', *E. impressa* - 'Bega', *E. impressa* - late white, *E. impressa* - red, *E. lanuginosa*, *E. microphylla*, *E. mucronulata*, *E. 'Nectar Pink'*, *E. paludosa*, *E. reclinata*, *E. reclinata compact*, *E. calvertiana*, *E. calvertiana var. versicolor*, *E. exserta*, *E. gunnii* double-flowered form, *E. longiflora*, *E. longiflora squat*, *E. microphylla*, *E. microphylla* late white, *E. microphylla* pink buds, *E. petrophila* and possibly several more.

From Kuranga we will drive to **Katandra Gardens**, which is only 5 - 10 mins away at **49 Hunter Road, Wandin North**.

Here we will be welcomed by owners **Bob and Dot O'Neill**. Bob will give us a guided tour of their superb large garden and Bob and Dot have kindly offered to supply tea/coffee for us to have with our BYO picnic lunches. Bob was the ABC Victorian Gardener of the Year in 2005, and he is currently Study Group Liaison Officer for APS Victoria.

Our final stop for the day will be at the garden of Epacris Study Group member **Shirley Carn** at **75 David Hill Road, Monbulk**. Melways reference is map 124: K1. Shirley's garden was opened last September for Australia's Open Garden Scheme, and she selected the date specifically to 'show off' her collection of *Epacris* to visitors on that weekend. From all reports they were certainly not disappointed.

We are looking forward to having an extremely enjoyable day for all who are able to come along.

To assist in our planning we are asking you to note the date in your diary now, and to let Gwen know if you are able to come.

You can phone 9879 1427 or reply by email to [rgelliot@optusnet.com.au](mailto:rgelliot@optusnet.com.au)

## **News & Notes**

### **Encouraging good development of *Epacris* seedlings.**

Our UK member, Jeff Irons, has sent the following item from England.

*Some years ago Gwen gave me some *Epacris impressa* seed.*

*The seedlings were planted into a box containing a mix made up from 3/4 years old leaf mould, sphagnum peat and Perlite.*

*The seedlings were very slow in growing, so the compost was inoculated with soil taken from around a *Rhododendron*.*

*One seedling responded and grew. It was transplanted into a pot.*

*The next year two more seedlings responded.*

*Since then I have tried inoculating the box with soil taken from around *Epacris gunnii* - to no avail.*

*This year the seedlings were transplanted to a sandy mix, which was inoculated with soil from around *E. gunnii*, *E. serpyllifolia* and *E. impressa*. Still the seedlings will not progress.*

*Can any Study Group members suggest a suitable treatment for encouraging the seedlings to make a mycorrhizal association ?*

*Jeff Irons*

Well - can any members provide any comments which might assist Jeff and others in the growing of *Epacris* seedlings... or seedlings of any other Epacridaceae family members, which may also be relevant to *Epacris* cultivation ?

If so we would love to hear from you.

Jeff also comments on Fay Candy's efforts in removing moss manually from a pot of seedlings and suggests that moss can usually be prevented from growing on pots by spraying with a dilute solution containing cresols. It is also possible to use very dilute Jeyes Fluid, at around 1: 1000 or even 1: 10 000.

Jeff adds that the development of moss in seedling pots can also be prevented by sowing on dried sphagnum that has been rubbed through a sieve, as sold by Garden Centres for use in lining hanging baskets.

### **From 'The Alpine Gardener' in England**

Jeff has also sent to us some pages from the December 2008 issue of THE ALPINE GARDENER magazine from UK. Included is a full-page colour photograph of a lovely pink form of *Epacris impressa*, accompanying an article by Barry McWilliam on 'Alpines in Australia'.

Barry speaks of the Mt. Kosciusko region, and says "The overall appearance of the vegetation is very like the Pennine moorland but the species are very Australasian and much more varied. Two or three species of heather and spreads of cotton grass on our moors are replaced by *Pentachondra*, *Olearia*, *Prostanthera*, *Leucopogon*, *Epacris*, *Richea*, *Pimelea*, *Podolobium* etc., interspersed with no less than eight species of *Ranunculus*, four of them endemic, three *celmisias*, seven *brachyscomes*, at least eight *craspedias*, four of those beautiful southern hemisphere eyebrights, *Euphrasia* and one white gentian."

*We sometimes take for granted the rich diversity of our native flora, and reading reports such as this reminds us how lucky we are. Many thanks for the article Jeff.*

ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS Inc.  
EPACRIS STUDY GROUP  
Plant profile

***Epacris coriacea*** A. Cunn. ex DC.  
**Leathery-leaved Heath**

Distribution - New South Wales

Species name - *coriacea* = leathery.

Common name - The common name of 'Leathery-leaved Heath' has been sometimes used for this species, but no widely-accepted common name is known.

If any members of the Epacris Study Group or other readers of this Newsletter are aware of other common names for *Epacris coriacea* we would be very pleased to hear of them.

*Epacris coriacea* is a spreading to erect to bushy shrub which can vary in height from 50 cm to about 3 m by 1 - 2 m across.

The thick, smooth leaves are to 3 - 12 mm long by 3 - 8 cm wide and are stem-clasping with a very short stalk.

Flowering period of plants in their natural habitat is during spring when small white flowers are produced in the axils along the branches. They are to about 6 mm across and have a short floral tube with flared petals revealing the beauty of the stamens and stigma. The anthers can be partly or fully exerted beyond the floral tube.

Seed is produced in minute capsules to about 1.5 mm long.

Natural Habitat

*Epacris coriacea* occurs in skeletal sandy soils on sandstone cliffs and in rock crevices on the Woronora Plateau in New South Wales.



Photograph  
© Rodger Elliot

***Epacris coriacea*** A. Cunn. ex DC.Propagation

*Epacris coriacea* can be propagated from barely firm new growth using conventional propagation methods as outlined Study Group Newsletter No. 8 and subsequent issues.

No information is available on plants having been grown from seed.

Cultivation

*Epacris coriacea* is not well-known in cultivation. The publication AUSSIE PLANT FINDER published by Florilegium, 145 St. Johns Road Glebe NSW lists the only nursery growing this species as Kuranga Native Nursery, 118 York Rd., Mt. Evelyn Vic, but it is also likely that plants are being cultivated by municipal nurseries and indigenous plant groups in the Woronora Plateau region.

Plants require very well-drained soils and are likely to be best suited to a situation with dappled shade or sun for only part of the day.

While flowering in the natural habitat is recorded as being mainly September to November it is interesting to note that plants grown in containers in Melbourne have been recorded by Study Group members as flowering from July onwards.

*Epacris coriacea* A.Cunn. ex DC.

The author citation for *Epacris coriacea* refers to the English botanist, Alan Cunningham, with DC. referring to the Swiss botanist, Augustin Pyramus de Candolle.

The inclusion of 'ex.' in the author citation means 'from' or 'out of' referring to the early work of Cunningham and the subsequent work of de Candolle.

Allan Cunningham was among the very significant early botanists in Australia. He was born in Surrey England and after initially studying Law he became assistant to the Manager of Kew Gardens, London. In 1814 he obtained an appointment from Banks to collect in New South Wales and arrived in Sydney later that year.

He was offered the position of Colonial Botanist in 1831 and again in 1837 but declined on both occasions.

He died in a cottage at the Sydney Botanic Garden in 1839



Allan Cunningham  
from the book  
*Allan Cunningham* by W. McMinn  
Melbourne University Press, 1970  
with permission of the Mitchell Library

Augustin Pyramus de Candolle (who used the abbreviation "DC." in citing plant names he published) was born in Geneva, Switzerland in 1778.

He moved to Paris in 1796 and was appointed publisher of the 3rd Edition of the *Flore française* (1803-1815). He became professor of Botany at the University of Montpellier, then in 1816 moved back to Geneva. The remainder of his life was spent in an attempt to elaborate and complete his natural system of botanical classification, as opposed to the Linnaean method. He had been in poor health for several years and died in Geneva in 1841.

The plant genera of *Candollea* and *Callandolleodendron* are named after him, while *Banksia candolleana* refers to the de Candolle family which also includes Alphonse de Candolle (1806-1893) son of Augustin.



Augustin de Candolle

Additional notes on *Epacris coriacea* -

ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS Inc.  
EPACRIS STUDY GROUP

**SPECIAL PROFILE PAGE**

**The impacts of fire on *Epacris* plants**

All Australians have been affected by the bushfires of summer 2009. They have had a major impact on many communities, and have been brought to all of our homes through the various aspects of the media, both within Australia and overseas.

The loss of lives, homes and entire communities has been considerable. The impact on native animals and birds has also been significant and those of us with a love of our native flora are also concerned on the impact on our bushland.

Many of our Australian plants have evolved with the ability to cope with sporadic fire, but even these can be severely challenged by regular burning or frequent wild fires.

There will be opportunities for many of us in the coming months and years to observe the impact of fire on our native *Epacris*.

We are therefore asking members to be keen observers whenever you are in fire-affected areas over coming months.

Please send in your observations - at any time - and they will be recorded and kept in the files of the EPACRIS STUDY GROUP for future reference

**The impacts of fire on the endangered *Epacris hamiltonii* in the Blue Mountains, NSW.**

Studies on the impact of fire on *Epacris hamiltonii* have recently been undertaken by Jan Allen of Mt. Tomah Botanic Garden and Margaret Turton, Environmental Consultant from Katoomba NSW.

The results of their studies are reported in 'AUSTRALASIAN PLANT CONSERVATION', the Bulletin of the Australian Network for Plant Conservation Inc., Volume 17 Number 3, December 2008-February 2009, produced with assistance from the Australian National Botanic Gardens, Canberra.

Extracts from this very interesting report are included here for 'Epacris Study Group' members.

*On 20 March 2007 we visited the Neates Glen (Blue Mountains NSW) population of Epacris hamiltonii. The 1994-96 survey of this site by Margaret Turton established that this population consisted of more than 50 mature plants. These straggly, brittle-branched woody shrubs rising to on metre in height can spread for two metres or more. . . .*

*All the large, established above-ground E. hamiltonii plant material that had existed at Neates Glen prior to the 2002 fire appears to have perished in that fire. The status of the root systems of the previously well-established shrubs was not examined. Unlike other sites (upper Greaves Creek) where a large percentage of burnt plants have been recorded as re-sprouting, no growth was observed that could be easily attributed to re-sprouting from rootstock.*

*This challenges the previous suggestion that plants routinely respond to fire by re-sprouting from a subsoil rootstock. It is likely that fire intensity determines the extent of rootstock survival and potential for re-sprouting.*

Numerous seedlings were observed below the locations of some of the pre-20023 shrubs. No flowering or fruiting was observed on these seedlings in 2007.

The width of the population appears to have shrunk away from its former eastern limit, possibly by some 10 metres, and the vertical extent of the population is currently 5 metres lower than previously observed....

Canopy cover was significantly reduced by the 2002 fire compared with that previously provided by dense-foliaged rainforest taxa rising from the creek bed and by more sparsely foliaged eucalypts on the sloping ridges and cliff lines above the site, on both sides of the creek.

The resulting increased exposure to sun is expected to have significantly increased light levels and temperatures and decreased humidity at the site....

There is evidence of site disturbance by tree-fall and rock-fall. A portion of the slope below the site has slumped due to the removal of vegetation by the fire.

In addition the hydrology of the site appears to have been significantly affected by the current drought....

The current canopy cover at the site does not exceed two metres in height. Post-fire regrowth of King Ferns (*Todea Barbara*) and Black Wattle (*Callicoma serratifolia*) saplings form the current upper canopy across an estimated 30% of the site.

Seedlings of *E. hamiltonii*, ranging in height from 2 - 40cm cover an estimated 5-10% of the site, which is significantly decreased from previous years when *E. hamiltonii* was the dominant species....

#### Conclusions

The severe alteration in site conditions resulting directly and indirectly from the 2002 fire, combined with the prolonged drought, appear to have severely impacted the regeneration potential of *E. hamiltonii* at the Neates Glen site. Fronds of the King Fern now constitute a greater canopy cover than previously observed and may diminish the potential for long-term success of *E. hamiltonii* seedlings.

There are now no known unburnt sites containing mature plants of *E. hamiltonii*.

Plants have been previously observed to take a minimum of 8 years to set their first fruit.

With the Blue Mountains regional fire frequency standing at 7-10 years or less, the likelihood of any of the known of *E. hamiltonii* populations attaining the maturity observed at Lower Greaves Creek prior to 2002 seems low.

#### Recommendations

Our preliminary observations from a single site visit to the Neates Glen populations of *E. hamiltonii* suggest the need for reassessment of the species' current recovery plan (NSW National Parks and Wildlife Service 2001).

We recommend that:

- \* an ex-situ population be established to mitigate further fire-related or other loss of habitat.
- \* the planned management of *E. hamiltonii* be reviewed in the light of the loss of all known mature plants
- \* the Lower Greaves Creek site be further studied to record the current ecological state of the population; and
- \* as a matter of urgency, that fire management practices recognise this species as a high priority. This includes considering it during any fire event within its habitat and taking all necessary precautions to exclude fire from the location of any known populations for a minimum of 15 years.

#### References

- Epacris hamiltonii - Species Recovery Plan, NSW National Parks and Wildlife Service. Report to Australian Nature Conservation Agency, Canberra (J. Cohn, 1993).
- Epacris hamiltonii Recovery Plan, NSW National Parks and Wildlife Service. Hurstville (2001).

For further information on the AUSTRALIAN NETWORK FOR PLANT CONSERVATION you can visit the website [http:// www.anpc.asn.au](http://www.anpc.asn.au). GPO Box 1777, Canberra ACT 2601. The phone number for the National Office is (02) 6250 9509

\*\*\*\*\*

A profile page on *Epacris hamiltonii* was included in our Epacris Study Group Newsletter No. 16 - October 2003.



## **Recording the flowering times of *Epacris* species**

This page is for recording the flowering times of *Epacris* in own garden, or in community gardens, botanic gardens, bushland areas or other sites in your region.

There is no deadline for sending the information to the EPACRIS STUDY GROUP. It is an ongoing project, with results being recorded on computer as received. The information received will also provide a reference for comparisons relating to any climate change in the future.

### **April 2009**

Date

IF INSUFFICIENT SPACE PLEASE USE EXTRA PAGE

_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>

### **May 2009**

Date

_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>

### **June 2009**

Date

_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>

### **July 2009**

Date

_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>

### **August 2009**

Date

_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>

### **September 2009**

Date

_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>

### **October 2009**

Date

_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>
_____ <i>Epacris</i> _____	In BUD <input type="checkbox"/>	In FLOWER <input type="checkbox"/>	Flowering finishing <input type="checkbox"/>

**Epacris Study Group - Membership information.**

Membership of The Epacris Study Group and other Study Groups of the Australian Plant Society / Society for Growing Australian Plants is available to all members of the A.P.S. / S.G.A.P.

Membership of any Australian state group, not necessarily that of the area in which you reside, entitles you to membership of one or more study groups.

You can join the EPACRIS STUDY GROUP for just \$5.00 for 1 year or \$10 for 2 years renewable in June. Overseas subscriptions - \$10 Aust. p.a.

Membership renewal date is shown on address label of current Study Group members.

Memberships should be sent to P.O. Box 655, Heathmont 3135.

Please make cheques payable to The Epacris Study Group.

Sender:

**EPACRIS STUDY GROUP**

P.O. Box 655, Heathmont Vic. 3135