

# EAST HILLS GROUP NEWSLETTER



## MAY 2016

### NEXT EHG MEETING:

**From 7pm for 7.30 pm start, Wednesday 4 May 2016**

**WEEDS:** *Do you have a favourite weed?* Bring it along, and tell us about it!  
*Do you have a mystery weed?* Bring it along and perhaps we can identify it!

**PUZZLE TIME:** Test your observational skills and plant knowledge with mix and match.

### LUGARNO-PEAKHURST UNITING CHURCH

909 Forest Road Lugarno (opposite the Chivers Hill Lugarno shops)

Visitors are welcome.

If you can, please bring something to share for supper, and labelled specimens for the plant table.

**WELCOME** to the May edition of the East Hills Group Newsletter. This one includes notes and photos from our April meeting, including some of the members' presentations. We'll have more of these in the next issue.

Enjoy your garden, and see you soon!

Jan Douglas, Editor

In this newsletter:

- A note from the President
- Plant list and photos from the April plant table
- Coming events – Reminders and dates to note
- Notes and photos from our April meeting and presentations
- EHG contact details.

[www.easthills.austplants.com.au](http://www.easthills.austplants.com.au)



## FROM THE PRESIDENT

April meeting was disappointing in that only nine people attended and two of these were from Sutherland Group. But the meeting was also encouraging, in that the absence of a guest speaker provided our members with the opportunity to show us just what knowledge they have stored away. We were kept very interested the whole evening and went away with more knowledge of our flora than we arrived with, I am sure. Thank you to all our presenters.

I encourage everyone who can to attend the AGM at Sutherland; remember we hosted it last year and very successfully.

Also, keep in mind the remaining quarterly meetings, particularly the Tamworth meeting.

The FJC Rogers seminar\* in Hamilton, Victoria on 8<sup>th</sup> and 9<sup>th</sup> October about native orchids will be well worthwhile making the effort to attend.

Graham Walters  
President.

[\*See page 8 for details – Editor]

### APS NSW Annual General Meeting & May Quarterly Gathering

Saturday, 21 May 2016

hosted by Sutherland Group

Sutherland Multi-Purpose Centre, 123 Flora Street, Sutherland

#### 10 am to 12 noon:

- **Guided tours of Joseph Banks Native Plants Reserve.** Park in Bates Drive in front of Sylvanvale School and access the Reserve from the pedestrian entrance on Bates Drive.
- **Garden visit: Joan Zande, 8 Bates Drive, Kareela.** This is a formal garden using Australian native plants.

**12 noon: Lunch – bring your own.** Tea and coffee will be provided at the Multi-Purpose Centre.

**12 noon: Registration and plant sales.** Entry is \$5 for the gathering, not for the AGM.

**1 pm: APS NSW Annual General Meeting.**

**1.30 pm: APS NSW May Quarterly Gathering.** Guest speaker Anthony O'Halloran will talk about threats to the Pilliga Forest near Coonabarabran. Anthony and his wife, Annabelle, run an Australian native plant nursery and cut-flower farm, *Bilby Blooms*, outside Binnaway in the Central West of NSW.

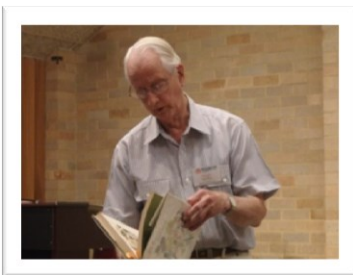
## APRIL 2016 MEETING MEMBERS' PRESENTATIONS

Members' presentations covered a variety of topics:

- Graham Walters: Re-wilding Australia
- Hugh Stacy: Bonbonniere bags used to collect seed; *Corymbia* and *Eucalyptus*
- Graham Fry: *Banksia integrifolia* and The Atlas of Living Australia
- Kyrill Taylor: *Stenochlaena palustris* (Climbing Swamp Fern) (Photos at right and on page 5)
- David Crawford & Jan Douglas: *Hakea laurina*



Graham Walters shared extracts from a recent issue of the journal of the Foundation for National Parks & Wildlife. Liz Cameron pointed out that re-wilding is the speaker's topic for the July meeting of Oatley Flora and Fauna Conservation Society.



Hugh Stacy (L) spoke briefly about the use of small mesh bags to collect seed from plants with seedcases that split at maturity. The photo at right shows an example containing *Grevillea* seeds. Hugh then spoke at length about his exploration of the question *What is the difference between Eucalyptus and*



*Corymbia and why and how do we come to have these groups?* Hugh has provided an article related to this – see page 6.



Graham Fry (L) spoke about *Banksia integrifolia*, including its distribution, characteristics, history and naming. Graham also spoke about the Atlas of Living Australia - see [www.ala.org.au](http://www.ala.org.au) Graham will be providing an article for our next newsletter. In the meantime, below are some photos of flowers and a cone of *Banksia integrifolia*.

Banksia photos:  
L: Karlo Taliana  
Centre & R: Jan Douglas



David Crawford gave a presentation he and Jan Douglas had prepared on the Pincushion Hakea, *Hakea laurina*. The usual form of this Hakea is a shrub or small tree to 6m which can be pruned to a bushy shape or hedge. There is also a dwarf form to 0.5m. Its natural distribution is in the far south of Western Australia, but it is commonly cultivated in many states. It may suffer root rot in damp situations. The main feature is the amazing flowers (see photos below) which attract insects, but the woody fruits are also attractive. The leaves are simple, with longitudinal veins. The species was named by Robert Brown in 1830. *Laurina* means 'like a laurel' (i.e. bay tree).



## THE PLANT TABLE

Hugh Stacy

Specimens on the plant identification table for our April meeting are listed below.

Many thanks to everyone who brought specimens.



*Banksia* cv. 'Giant Candles' (thought to be a hybrid:  
*B. ericifolia* x *B. spinulosa*) (in photo above)

*Calothamnus quadrifidus* (Common Net Bush)  
(photo at right)

*Correa* cv. 'Marion's Marvel'

*Correa* sp.

*Eryngium prostratum* (Blue Devil) (photo below left)

*Grevillea* hybrid (photo below right)

*Hoya australis* (Common Hoya)

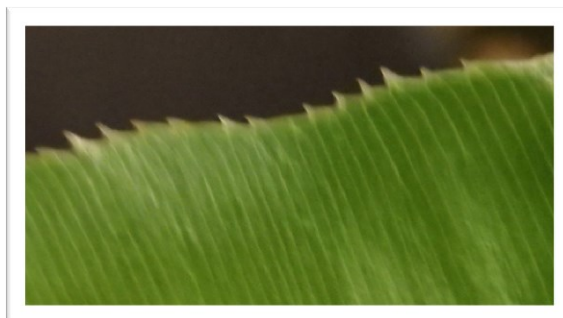
*Pseuderanthemum variabile* (Pastel Flower)

*Stenochlaena palustris* (Climbing Swamp Fern)

(Photo of sawtooth frond edge below centre)



Photos: Jan Douglas



## Corymbia and other Eucalypts

Hugh Stacy

When Ken Hill and Dr Lawrie Johnson published the name of a new genus, *Corymbia*, in 1995, they transferred to it eighty species of *Eucalyptus* and described some new species as well, about 113 in all. Should this work have been universally rejected, the name *Corymbia* would survive at least as a synonym for those species first so described. But Hill and Johnson had realised that certain types within *Eucalyptus* (the bloodwoods, spotted gums and ghost gums) really have some characters more in common with the small genus *Angophora* than with other *Eucalyptus* species. For example, bristly or simple hairs somewhere on the bud, pedicel or peduncle are typical of *Angophora* and are also found on some northern bloodwoods such as *C. setosa*, while the buds of *Eucalyptus* are always glabrous. Another reliable indicator of related species is the shape of seeds: those of ghost gums and *Angophora* are both flattened and saucer-shaped, while most bloodwoods have flattened ellipsoidal bodies with a transparent wing (aerially ineffective).

Flowers of *Corymbia* form in umbels, sometimes compound, often branching alternately from a single stem, the lower ones on longer pedicels and peduncles, such that all flowers of the conflorescence\*\* seem to lie on a common surface, convex tending to flat, or corymbose, from which the name *Corymbia* arises. The fruits are typically large and urn-shaped (e. g. *C. ficifolia*, *C. gummifera*). Many species of bloodwood retain their juvenile opposite leaves for long periods, some develop adult alternate leaves together with terminal flower heads, while others never grow alternate leaves. Again, this provides interesting comparisons with *Angophora*, which also has opposite sessile juvenile leaves and develops adult opposite leaves with petioles.

Research into DNA at the University of Melbourne under Prof Pauline Ladiges, also published in 1995, provided evidence to support the new name *Corymbia*. This was not the first time that a new genus had been assigned to a new species of eucalypt: in 1844 the German botanist Johannes Schauer described *Symphyomyrtus lehmannii*, a WA tree. The generic name means 'fused myrtle', describing how the clustered fruits grow together into a globular mass; later Bentham considered the fused fruit too superficial a character and included this species as *E. lehmannii*. Schauer published his description even though the buds of Bushy Yate carry long and prominent opercula, the very flower caps which the French botanist Charles Louis L'Heritier had emphasised in naming the type species *Eucalyptus obliqua* in 1788; the name *Eucalyptus* derives from Greek words meaning 'effectively covered', referring to the operculum. Sometimes the word 'calyptra' is used, derived from another Greek word meaning 'hood' or 'veil'.

A similar instance occurred in 1861, when the German migrant botanist Ferdinand von Mueller used the name *Eudesmia erythrocorys* in a newsletter about a year after he had published a description of this species as *Eucalyptus erythrocorys*. The Illyarrie is well known for its large operculum. Although printing the name *Eudesmia* seems to have been a mistake, it surely indicates that von Mueller had that name in mind and may well have considered creating a new genus before deciding to follow a conservative course.

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\*\***conflorescence**: a branch system bearing flowers in which the main axis bears uniflorescences, but is itself qualitatively different in structure from the uniflorescences.

**uniflorescence**: a unit inflorescence forming part of a conflorescence.

**inflorescence**: a general term for the flower-bearing system of a plant, and more particularly for portions of such systems separated from one another by vegetative portions of the plant.

From <http://plantnet.rbgsvd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&glossary=yes&alpha=C>

Based on the DNA sequencing, Ladiges et al. in 2003 proposed a Eucalypt Group consisting of seven genera, with *Eucalyptus* divided into three subgenera: *Eucalyptus*, *Symphyomyrtus* and *Eudesmia*. These three subgeneric names head groups of species which show different evolutionary paths in the development of the eucalypts and revive two names applied previously but discarded. For, as Prof. Ladiges writes: '*The protective opercula (caps) that characteristically cover the flower buds of Eucalyptus and Corymbia have evolved more than once: independently in Corymbia, and in the three main subgenera of Eucalyptus.*'

The three groups may be summarised:

- *Eucalyptus* subgenus *Eucalyptus* has one operculum only;
- *Eucalyptus* subgenus *Symphyomyrtus* has flowers with two caps, representing sepals and petals;
- *Eucalyptus* subgenus *Eudesmia* has one operculum but free teeth-like sepals.

One way to distinguish *Angophora* from other eucalypts is by the flowers which lack an operculum in bud and open to show small petals, each with green keel becoming white above, outside the stamens but inside woody green sepals which remain attached to the fruit, with points topping ridges that extend down the outer walls. In the eucalypt the petals become joined early as the bud develops, forming a cap, the inner operculum, which breaks away at its periphery as the stamens expand. (Only then does pollen ripen before dispersal to lessen the likelihood of self-fertilization.) The sepals lie in a ring outside the petals and also unite to form an operculum in most eucalypt species; but in most cases this outer operculum is aborted at an early stage. Consequent detachment as the bud grows causes a scar around the bud which sometimes may be visible to the naked eye. About 130 species of *Eucalyptus*, in subgenus *Eucalyptus*, have lost all trace of an outer operculum during their evolution and so show no scar, while the side of the bud is quite smooth (e. g. *E. pilularis*). An example of subgenus *Symphyomyrtus* is *E. pulverulenta*. Subgenus *Eudesmia* is represented by *E. erythrocorys*, which clearly has sepals angled outwards above the rim of the fruit after the flower opens.

Botanists, we are told, tend to be either splitters or lumpers; the approach above splits a huge genus and creates another. Others in the field argue that it would be more logical to absorb both *Angophora* (named in 1797) and *Corymbia* as subgenera within *Eucalyptus*, as well as several other single species genera which remain as relicts of the ancient rainforests. This was the method adopted in 2000 by Michael Brooker in his classification of the eucalypts. His paper published new specific names under *Eucalyptus* where necessary for all members of genera made redundant.

## THE BUSINESS

### East Hills Group Meeting – 6 April 2016

The April meeting was held at Lugarno-Peakhurst Uniting Church and was chaired by the President, Graham Walters. Nine members and two visitors attended. There were two apologies.

Business was brief. Graham gave reminders of coming APS activities, and there was discussion about speakers for East Hills Group meetings. No arrangements were made. Jan Douglas consulted members about forwarding their email addresses to the APS office and collected three to send on. The rest of the meeting consisted of members' presentations, the plant table, raffle and supper.

## COMING EVENTS – CHECK YOUR DIARY! MENAI GROUP PROPAGATION SESSION

From 1 pm on Saturday 7 May 2016

## APS NSW STRATEGIC PLANNING WORKSHOP

Saturday 28 May & Sunday 29 May 2016

The board is developing a strategic plan to guide the future direction of the Society. Members of the board will be visiting district groups to discuss the challenges facing the Society and to seek input on how these can be addressed. District groups are invited to send one committee member to a strategic planning workshop which will be held at a central location in Sydney. All board members, including delegates, will also be attending.

An email is to be sent to our Secretary at the beginning of April asking for details of the committee member who will represent East Hills Group at the workshop.

## FJC ROGERS SEMINAR 2016

**11th FJC Rogers Seminar**  
**'Native Terrestrial and Epiphytic Orchids'**  
*Hamilton, Victoria*  
**Saturday 8th & Sunday 9th October 2016**

**Program**

*Saturday:* Full day conference and formal dinner  
*Sunday:* Field trips to Hamilton, Casterton & Grampians Bushland





**To Register Your Interest . . .**

**Contact:** Mr Kevin Sparrow  
**Post:** 35 Sway St, Warrnambool VIC 3280  
**email:** [ksparrow93@gmail.com](mailto:ksparrow93@gmail.com)

This seminar will be popular – make sure you get in early.



## Even more COMING EVENTS – CHECK YOUR DIARY!

You can find more district group events at <http://www.austplants-nsw.org.au/calendar6.html>

<b>Saturday 30 April</b> <b>9.45 for 10 am</b>	<b>Walk and talk on banksias</b> – Join Rhonda Daniels (Sutherland Group) for a walk and talk on banksias and Sir Joseph Banks at Joseph Banks Native Plants Reserve at Manooka Place, Kareela. The walk is approx. 1 hour. Stay for refreshments and plant sales. Time: 9.45 am for 10 am start. <b>RSVP</b> to <a href="mailto:bushcare@ssc.nsw.gov.au">bushcare@ssc.nsw.gov.au</a> or 9524 5672 would be appreciated.
<b>Wednesday 4 May</b> <b>From 7 for 7.30 pm start</b>	<b>East Hills Group meeting – Weeds and puzzles</b>
<b>Saturday 7 May</b> <b>1 pm</b>	<b>Menai Wildflower Group</b> propagation meeting. Illawong Rural Fire Brigade Headquarters
<b>Wednesday 11 May</b> <b>From 6.30 for 7 pm start</b>	<b>Menai Wildflower Group meeting.</b> Illawong Rural Fire Brigade Headquarters
<b>Saturday 21 May</b>	<b>APS NSW Annual General Meeting and May Quarterly Gathering</b> – Sutherland. See page 2 for details.
<b>Monday 23 May</b> <b>7.30 pm NEW TIME</b>	<b>Oatley Flora &amp; Fauna Conservation Society</b> – Deb Andrew will speak on Regent Honeyeaters and other threatened woodland birds, and Tony Porritt will speak on Cameron and the other Corners <b>NEW VENUE</b> Oatley RSL & Community Club, 23 Letitia Street, Oatley
<b>Saturday 8 &amp; Sunday 9 October 2016</b>	<b>FJC Rogers Seminar – Terrestrial and epiphytic orchids.</b> Hamilton, Victoria. See page 8 for more information.

### East Hills Group contacts

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