EAST HILLS GROUP NEWSLETTER

Isopogon anemonifolius

JULY 2016

NEXT EHG MEETING:

From 7 pm for 7.30 pm start, Wednesday 6 July 2016

Holding back the concrete - Urban bush projects

Speaker: Dorothy Luther

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 July edition of the East Hills Group Newsletter.

Our own EHG member, Dorothy Luther, will be speaking at our July meeting:

> Inner Sydney is fast becoming a concrete jungle, with high rise apartments and shopping centres driving out the houses and corner shops that formed local communities. Even the remaining houses are being gentrified, with high walls hiding Buxus hedges and garden furniture. Trees and gardens are disappearing. But some intrepid souls are fighting back - a small but determined army of bush carers, community groups and feral gardeners are trying to stem the tide. They're creating bush pockets, rain gardens, walking and cycle tracks that enable us to still keep in touch with nature. This talk is the story of some of those groups.

I hope you'll come along to share Dorothy's enthusiasm. Also - enjoy your garden!

Jan Douglas, Editor

In this newsletter:

www.easthills.austplants.com.au

AUSTRALIAN PLANTS SOCIETY

FROM THE PRESIDENT

Well, June was an interesting meeting . There were a few more visitors than East Hills members and the total was 25, including our speaker, Robbie Renu.

Robbie provided us with something a little different from the usual way we look at plants with his interest in green walls and green roofs . The way things are going, with buildings taking up most of the available space, we may see much more of green walls and green roofs, so maybe his talk is very timely. Dorothy Luther may provide us with a more optimistic outlook in her talk next month.

The June propagation day (because of the weather) was changed to Saturday 11 June which unfortunately clashed with Menai Group's meeting at which our East Hills member, Graham Fry, gave a talk on birds. Dorothy and Kyrill did some propagation while Hugh Stacy and I attended the Menai meeting which provided us with very interesting information on the way some bird species' numbers have decreased and others increased over about 50 years of recording.

With regard to birds and plants: I came across a paper entitled 'Indigenous Landscape Design Australia'. It provided this comment: 'Hybrid native plants with oversize flowers and extended flowering seasons, grevilleas in particular, attract territorial, sedentary nectar feeders such as Wattle Birds and Noisy Miners that are not endangered and that drive out smaller, more vulnerable birds such as the Fairy Wren, Thornbill, Robin and many others that now face extinction or serious decline.' There are other threats to the environment posed by pollen-bearing hybrids, but I will leave that to another day.

Graham Walters
President

Don't forget the

Annual Get-together in Tamworth

20-21 August 2016

with extra activities: talks, field trips, garden visits, tag along tour

YOU NEED TO REGISTER ASAP

For a copy of the program and the registration form see the April issue of your journal *Native Plants for New South Wales*
Details: http://austplants.com.au/9-news/latest-news/374-2016-aps-nsw-get-together.html, but no registration form – you will need to send an email to Lee Esdaile at pjltesdaile@gmail.com if you can't find your journal!

JUNE 2016 MEETING

ROBBIE RENU ON GREEN WALLS AND ROOFS USING SYDNEY NATIVE PLANTS

Notes by Liz Cameron

Robbie Renu is a registered horticulturist specialising in green roofs, green walls and native plants of the Sydney region. His interest in native plants began when he was a teenager and he has over 25 years' experience working with Sydney native plants and garden design. Currently he manages the Cornucopia Nursery in Gladesville for the Health Department; it provides employment and support to people living in the community with an ongoing mental illness.

Robbie completed an intensive course to obtain the Specialised Certificate in Green Roofs and Green Walls at Melbourne University, and has applied his knowledge to developing green walls in Sydney. He has a special interest in vegetating green roofs and green walls in a way that is sympathetic with the native environment. One of his photos illustrated a natural green wall at Woolwich Dock; it was covered in lush ferns including *Todea barbara* (king fern) and *Adiantum* species (maidenhair fern).

Functions of green walls include:

- Promotion of native plants
- Enhancing biodiversity
- Contributing to health and wellbeing
- Increasing property value
- Storm water retention (for example in some Melbourne buildings)
- Noise reduction (especially in roofs)
- Food production
- Energy savings – improves insulation in summer to keep interior cooler, but in winter may block warmth from the sun so homes may be cooler.

A conspicuous green wall in Sydney is the vertical planting on towers in the Central Park development in Broadway. The towers were designed by French botanist Patrick Blanc, who uses two pieces of thin (3 mm) polyamide felt stapled to a PVC plate to provide the attachment for his plants. https://en.wikipedia.org/wiki/Patrick_Blanc

This system requires lots of water and Robbie is experimenting with thicker felt, which would retain more water. He passed round examples of several different felts and showed slides illustrating different kinds of vertical gardens he has created using felt

walls, pots on walls, vegetative bags (he passed round examples) and green facades of climbers.

Robbie projected a diagram of the profile of a green roof illustrating the layers from the top:

- Vegetation
- Growing medium
- Filter membrane of geotextile
- Drainage layer
- Waterproof membrane
- Roof structure – important to check weight loading of the roof, and leave gap between the plantings and the gutters

Plant selection should take into consideration:

- Flowers to attract pollinators
- Succulents (many natives have fleshy roots and tubers that hold water)
- Epiphytes and lithophytes
- Strappy leaves – aesthetic appeal of leaves swaying in the breeze

And placement should consider:

- Water requirements
- Light requirements
- Size
- Geotropism (orientation in response to gravity – some plants don't like growing vertically)

One of Robbie's photos showed a green wall about two metres high, of vegetative bags holding yellow-flowering *Bulbine bulbosa* with long strappy leaves; he has used weldmesh to hold felt and bags in place, but it does rust, especially when exposed to minerals in the growing medium.

Some of the native plants that Robbie has used successfully include:

Adiantum
Blechnum
Cheilanthes
Davallia
Pellaea
Carex
Dendrobium kingianum
Lomandra filiformis
L. glauca
Bulbine bulbosa
Libertia paniculata
Caesia parviflora
Murdannia
Brachyscome angustifolia
Ajuga australis
Bauera
Scaevola albida
S. ramosissima
Pseuderanthemum
Brunoniella
Trachymene incisa
Chrysocephalum apiculatum
Actinotus helianthi
Peperomia tetraphylla
Stylidium

Alongside the green walls Robbie installs habitat borders to attract pollinators, predators, visitors and observers; they include structures such as bee hotels featuring a variety of hollow lengths of timber.

Effective watering is crucial for the success of green walls and green roofs. Different strategies include:

- watering for about ten minutes, four times a day
- using a dripline systems that operates for four minutes every morning
- watering for four minutes in the morning and four at night (Marrickville Council Nursery)

Sometimes Robbie includes a weak solution of nutrients – the standard hydroponic nutrient mix – in the watering system.

Some plants do well on top of a wall where it is dry, for example the pink-flowered *Murdannia*, which has a succulent root.

Another green wall that Robbie illustrated included the following natives: *Dampiera*, *Pelargonium*, *Scaevola*, *Pellaea*, *Adiantum*, *Dendrobium*, *Viola hederacea*, Blue Mountains dwarf pine (*Pherosphaera fitzgeraldii* syn. *Microstrobos fitzgeraldii*)..

Robbie wrapped up his presentation with the comment 'If we'll all be living in cities in the future, green walls may be the way to go', and answered a number of questions from the audience.

HAVE YOU SEEN THESE PLANTS?

Valuable and historic potted plants have been stolen from the Australian National Botanic Gardens nursery, and we have been asked to keep an eye out for them in nurseries or landscaping. Some specimens are more than 20 years old and some are irreplaceable.

The photo gives a general indication of the size and appearance of the stolen plants.

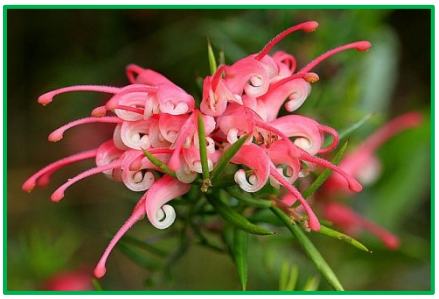
For a list of the stolen plants see http://www.cbs.org.au/index.php?option=com_content&task=view&id=266&Itemid=54.

THE JUNE PLANT TABLE

Hugh Stacy

Plants brought to our meeting on 1 June included:

Acacia podalyriifolia (Mt Morgan Wattle)
Alpinia caerulea (Native Ginger)
Banksia 'Giant Candles'
Banksia integrifolia ssp. *integrifolia* (Coast Banksia)
Correa baeuerlenii (Chef's Cap Correa)
Correa glabra
Grevillea 'Gold Fever'
Grevillea lavandulacea (Lavender Grevillea)
Trachymene incisa ssp. *incisa* (Wild Parsnip)



Grevillea lavandulacea
Jim Ratabago
https://commons.wikimedia.org/w/index.php?curid=11942641

Alpinia caerulea

Alpinia caerulea by Ethel Aardvark
https://commons.wikimedia.org/w/index.php?curid=4762954

Native Ginger occurs in lightly shaded sites of coastal rainforest on moist but well-drained soils, from the Gosford area into Queensland; as an understorey plant to 1.5 m in the south, it grows to 3 m in the north of its range. Alternate leaves on erect stems are large, to 40 cm x 10 cm, with short stalk, pointed apex and smooth bright green surfaces; the wide leaves are channel-shaped in section. The inflorescence is terminal, to 30 cm long, also glabrous, consisting of numerous flower clusters, white with yellow, in spring. Round fruits form, 10 mm diameter, ripening with a brittle blue shell containing three black seeds and white pulp.

Thirsty bushwalkers have long enjoyed the mild gingery taste of this plant's new shoots, while its fruits are now being dried and ground for use as a spicy flavouring, or to add red colouring and sourness to herbal teas.

A specimen of Native Ginger from the Hunter River was described in 1810 by Robert Brown as *Hellenia caerulea* (Latin *caeruleus* = dark blue or sky blue, referring to colour of the mature fruits), but Bentham later transferred it to *Alpinia*, a large world-wide genus of plants within the family *Zingiberaceae,* which also contains the genus *Zingiber* and its member species *Z. officinale*, from the roots of which commercial ginger is derived.

Linnaeus coined the name *Alpinia* to commemorate Prospero Alpini, who became professor of botany at Padua university in 1593, when that cultural centre was part of

the Venetian republic. Alpini had previously studied medicine in Padua, but after graduating in 1578 he became interested in plants. In order to gain experience with exotic species he found a job as physician to the Venetian consul in Cairo, working there from 1580 to 1583. In Egypt he observed the cultivation of both coffee and dates. He became the first European to write about the coffee plant (Venice 1591); he also seems to have grasped the sexual difference between plants, writing that 'the female date trees or palms do not bear fruit unless the branches of the male and female plants are mixed together, or, as is generally done, unless the dust found in the male sheath or male flowers is sprinkled over the female flowers'. These notes show how the scientific method begins with experimentation and the recording of observations, even though their significance in this case remained generally unrealised elsewhere until developed by Linnaeus 170 years later in his overall system of classification.

Trachymene incisa* ssp. *incisa

This erect herb with a thick perennial rootstock grows in sandy soil in open or cleared woodland on the coast and adjacent plateaus of the Sydney area. It ranges north from Ulladulla and occurs from the coast to much further west in northern NSW and Queensland. Leaves arise on petioles 5-15 cm long, from the rootstock or low on the stem, and are divided into 3-5 lobes, while each lobe may be subdivided deeply and acutely; the outline of a leaf lamina[1] lies within a circle 4 cm diameter. The stem carries the inflorescence, a simple umbel 15 mm diameter consisting of 50 or so tiny flowers from a peduncle to 15 cm; peduncles may be terminal or axillary (forming a dichasium[2]), each one topped by a ring of 10 or more leaf-like bracts to 7 mm long, simple or acutely tri-lobed; flower heads stand about 50 cm high above ground, white or rarely pinkish, in summer.

***Trachymene incisa* flowers** by Paul Dudley
www.pbase.com/lambsfeathers/image/91986651

The taproot forms numerous tubers which are a traditional bush food for Aboriginal communities; these are eaten after baking in the coals of campfires or earth ovens.

Plants of this species are becoming available through sources such as the Sutherland Shire nursery. Some APS members are enjoying their flowers, planting them in sunny places near borders of rockeries or where they can find sandy crevices between the stones.

Liz Cameron recorded brief notes on some of the other plants that were represented on the table as part of the business notes from the meeting – see page 11. Editor.

[1] leaf lamina: leaf blade – see https://en.wikipedia.org/wiki/Leaf Editor.
[2] dichasium: with two secondary axes – see https://en.wikipedia.org/wiki/Inflorescence Editor.

Slender Grape – *Caraytia clematidea*

Graham Fry

At our May meeting, members discussed weeds (including some natives) they had brought along. Graham Fry talked about the native plant Native Grape or Slender Grape.

Cayratia clematidea grows as a scrambling herbaceous climber with stems to 2 m long, occurring on the edges of rainforests from north of the Shoalhaven in southern NSW to north Queensland. It's a pioneer species, filling sunny gaps, and this, combined with its soft foliage, can give it a weedy appearance. It can be easily pruned away, but it has the potential to smother small plants although it isn't vigorous enough to kill established trees.

Slender Grape flowers during Summer with clusters of small greenish-white flowers with four petals borne on long multiple-branched stalks. The berries that follow start off green and turn black as they ripen. Each fruit is 5-7 mm across and contains 2 to 4 seeds. The fruit are eaten by birds which disperse the seeds.

The leaves of *Cayratia clematidea* are compound and alternate and are comprised of five leaflets in a palmate (or hand-shaped) arrangement. The two leaflets closest to the stem on either side arise from the same vein branch. Normally the leaflet furthest from the stem is the largest, with the two closest to the stem are the smallest. The leaflets are lobed and are not glossy either above or below. The stems, leaves and flowers may have sparse hairs. The leaves normally have either a tendril or a flower inflorescence opposite them.

The tendrils of *Cayratia clematidea* help it to climb by wrapping around other plant stems or by adhering to a rough surface such as the bark of trees. The tendrils typically are three-tipped with the end forming a fork, however if the tendril doesn't find anything to attach to, it can branch several more times.

<u>Mistaken identity: Slender Grape or Balloon Vine?</u>

People new to bush regeneration often confuse slender grape with the exotic pest balloon vine (*Cardiospermum grandiflorum*) which has nine leaflets rather than five, but otherwise looks quite similar.

Fortunately (or unfortunately!) Slender Grape forms an underground tuber up to 5 cm in diameter from which it can reshoot. The tubers can be eaten: Aboriginal people prepared them by beating them on stones and then roasting them.

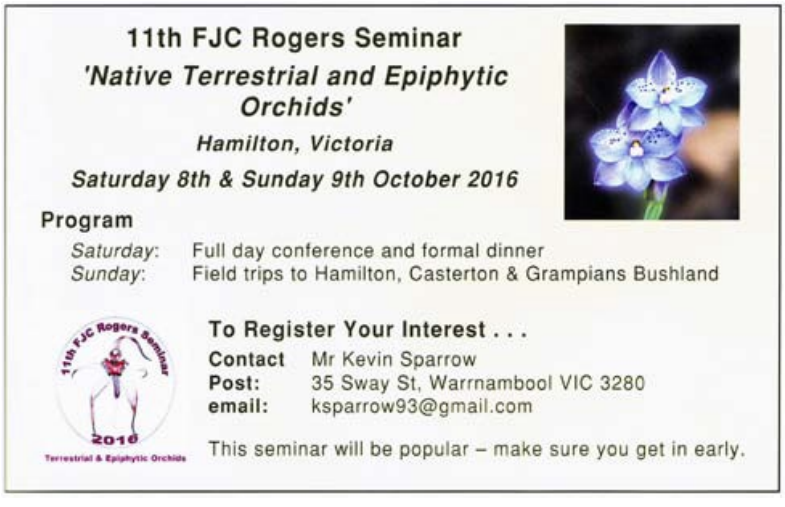
The plant often dies off in dry periods or during Autumn but sprouts again in Spring from these underground energy reserves. These tubers also give the plant the ability to re-sprout after fires.

My experience

Unfortunately, I have found Slender Grape a pest in my garden, spreading throughout and sprouting up everywhere. I have tried poisoning it with glyphosate, but without success. I think if the tubers could be found then it might be possible to kill it. However, tracking down the tubers is not easy as the stems are easily broken and then it is difficult to follow the trail to the tuber. However, the Joseph's Coat Moth (*Agarista agricola*), whose larvae use the plant, is very attractive.

Moth photo by Tom Tarrant – see https://commons.wikimedia.org/wiki/File%3AJosephscoatmoth.jpg .
All other photos in this article are by Graham Fry.

FJC ROGERS SEMINAR 2016



THE BUSINESS

East Hills Group Meeting – 1 June 2016

Meeting notes by Liz Cameron.

The June meeting was held at Lugarno-Peakhurst Uniting Church. The meeting commenced at 7.40 pm after a pleasant chat over a cuppa with visitors and members of other APS groups. Graham Walters (chair) welcomed our speaker and 24 APS members and visitors to the meeting.

Announcements:

- The date of the East Hills Girls High School Fete is Saturday 10th September; we have asked for a more prominent position for our stall and the school will try to accommodate that when all stall holders are confirmed; at that time it will also provide payment details.
- The Summer Hill Neighbourhood Feast is on Sunday 9 October but the event is open only to local businesses or community groups in Summer Hill; we may be able to make a case that our EHG group now encompasses that area.
- Reminder of the APS gathering in Tamworth on week-end of 20-21 August, followed by a tag-along trip to the Pilliga guided by Anthony and Annabelle O'Halloran. John Aitkin said a range of accommodation was available in Tamworth. A registration form is in the April issue of Native Plants of NSW and program on APS website at http://austplants.com.au/9-news/latest-news/374-2016-aps-nsw-get-together.html
- FJC Rogers seminar in Hamilton Victoria, 8-9 October featuring Native Terrestrial and Epiphytic Orchids; notice in June issue of EHG newsletter.

Speakers:

- July meeting speaker will be EHG member Dorothy Luther. Dorothy will talk about community-based revegetation programs, including Bushcare and feral street gardens, groups that are fighting back against the trend for inner city suburbs to become a concrete jungle.
- In August Sue Foster will describe the re-enactment of the Coo-ee March from Gilgandra to Sydney in which she participated last year, and the changing vegetation the walkers saw on the way.

Annual donations: Decision on recipients of this year's donations was postponed until the July meeting when it was hoped more EHG members would be in attendance. Donations are usually sent in June to organisations such as WIRES, Australian Wildlife Conservancy, Bush Heritage and the EDO.

John Aitken announced that APS NSW would be making a submission on the draft Biodiversity Conservation and Local Land Services Amendment Bills; individuals are encouraged to make submissions too; closing date is 28 June 2016.

Graham Walters tabled several newsletters and articles which members were welcome to take home.

There were problems in connecting the speaker's computer to the projector, so while Graham Fry and Sue Foster resolved this, Graham Walters invited people to talk about the specimens they had brought for the plant table:

Rhonda Daniels – *Trachymene incisa* Wild Parsnip. Perennial herb native to eastern Australia in sclerophyll forest and cleared areas; prefers sandy soils and rock crevices. It has delicate pink and white flowers in small heads (reminiscent of Queen Anne's lace) and flowers all the time; best planted *en masse* to achieve a conspicuous display. Propagated by Sutherland Shire Plant Nursery where tube stock costs about $2.30. Robbie Renu, the evening's speaker, said it goes well in green wall plantings.

Graham Walters – *Grevillea* 'Goldfever'. Low spreading shrub with flowers for most of the year, prefers full sun. Angus Stewart recommends it as a feature ground cover plant for rockeries and shrubberies as well as for pots.

David Crawford exhibited four flowers:

Banksia 'Giant Candles' – a hybrid between *B. spinulosa* and *B. ericifolia*, first cultivated in 1979 after chance hybridisation in a Queensland garden. Broad spreading shrub that likes well-drained soils and full sun. Showy bronze-orange flowers up to 40 cm long appear in late autumn and winter. It may not set a lot of seed but birds like the nectar.

Queensland Silver Wattle or Mount Morgan Wattle *Acacia podalyriifolia* – silvery foliage and bright yellow flowers. It is very common in cultivation but David warned not to plant it near bushland because it has a tendency to spread, having very numerous, long-lasting seeds. Native to SE Queensland, it has become a problem in other regions including Africa, South-east Asia and New Zealand and California.

Correa baeuerlenii Chef's Cap Correa – vulnerable in its natural distribution on the south coast of NSW but commonly grown in gardens. A long-lived dense shrub with discolorous leaves (upper and lower leaf surfaces are different colours) that flowers in shade. Common name derives from the expanded base of the calyx, which gives the hanging flower the appearance of a chef's hat.

Correa ?*glabra* – another Correa with dark green foliage and pale green flowers. David was not sure of its exact identity but noted there are lots of hybridisations and cultivars amongst the correas.

Technical problems resolved, the evening's talk commenced at about 8 pm. The meeting concluded with an examination of the remaining specimens on the plant table, the plant raffle, and supper.

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COMING EVENTS – CHECK YOUR DIARY!

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

Saturday 2 July 2016 1 pm	**Menai Wildflower Group** propagation meeting. Illawong Rural Fire Brigade Headquarters
Wednesday 6 July From 7 for 7.30 pm start	**East Hills Group meeting** – Dorothy Luther speaking on **Holding back the concrete - Urban bush projects**
Saturday 9 July From 12.30 for 1 pm start	**Menai Wildflower Group meeting** – Greg Jackson on Georges River basin mills http://sydney.academia.edu/GregJackson/Water-Mills . Illawong Rural Fire Brigade Headquarters
Wednesday 3 August From 7 for 7.30 pm start	**East Hills Group meeting** – Sue Foster speaking on the **2015 re-enactment of the 1915 Coo-ee recruitment march from Gilgandra to Sydney**
Wednesday 15 June From 7.45 for 8 pm start	**Sutherland Group meeting** – **Frogs & reptiles of the local area** with Ken Griffiths. Gymea Community Centre, 39 Gymea Bay Rd, Gymea
Saturday 20 and Sunday 21 August	**APS NSW Annual Get-together – hosted by Tamworth Group**. Details: http://austplants.com.au/9-news/latest-news/374-2016-aps-nsw-get-together.html, or see the April issue of *Native Plants for NSW* which includes the registration form.
Saturday 8 and Sunday 9 October	**FJC Rogers Seminar – Terrestrial and epiphytic orchids**. Hamilton, Victoria. Details: page 9.

Participants in the APS NSW strategic planning workshop on 28-29 May.

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