Report on last meeting by John Knight …… Grevilleas

On a pleasant winter day, quite a crowd descended on the Glendeuart home and garden of Carolyn and Mark Noake to learn about the local species of Grevillea. But first things first, morning tea in the sunshine, with freshly baked rock cakes courtesy of Carolyn, and Jenny John's Chocolate Brownies, well remembered from previous meetings.

We assembled to hear from Mark how to best to access the Southeast Group's website, **southeast.austplants.com.au** and discover the information about our group, and link to many other sites which would benefit members. Those present were amazed how easy it was to negotiate the site and discover the wealth of information available.

Then followed a simple illustrated explanation of the plant features used by botanists when identifying Grevilleas. Firstly the Grevillea flower was discussed, using the excellent illustration from "The Grevillea Book" Vol 1 by Peter Olde and Neil Marriott, which describes the various parts of Grevillea flowers with succinct detail.

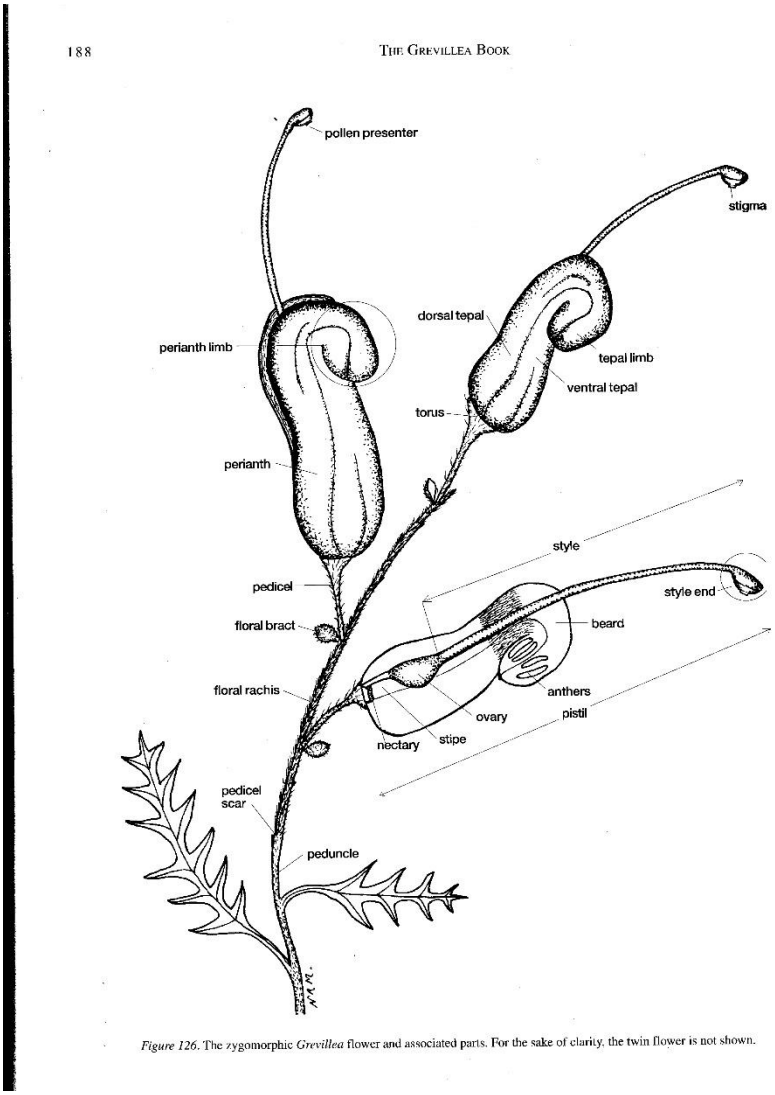
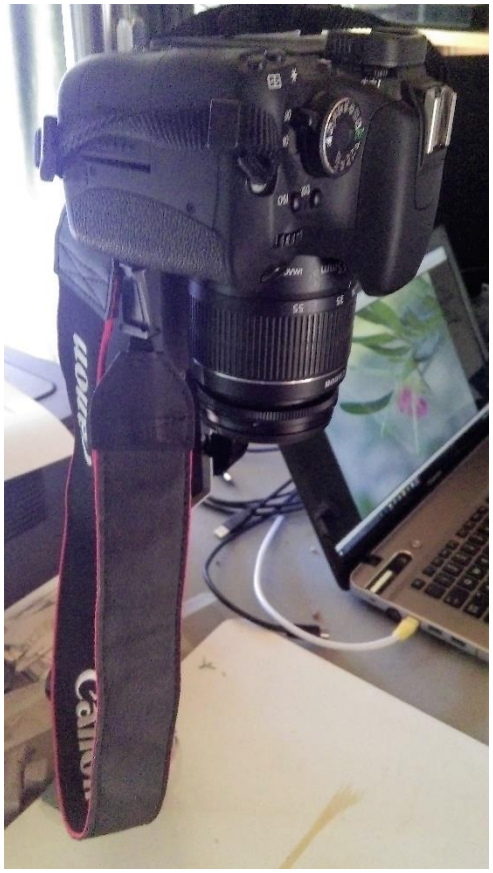


Figure 126. The zygomorphic *Grevillea* flower and associated parts. For the sake of clarity, the twin flower is not shown.

Mark followed on with some close-ups of flower parts which he had photographed using his digital camera attached to a frame from an old film enlarger, shown below with a grevillea flower projected onto the computer screen.



A series of close up shots illustrated parts of the flower in great detail, bringing life and recognition to the drawing. Mark worked through a range of pictures which held answers to the questions posed as he worked through a key which he has adapted from the Flora of NSW Vol 2

We wondered at the diligent persistence with which Mark turned a book page into an interactive presentation which we could skip through, both forwards and in reverse, to check that we selected the correct choice in "keying out" a plant.

Mark said he designed this key as a train timetable,
using coloured line to join the selections to a plant name

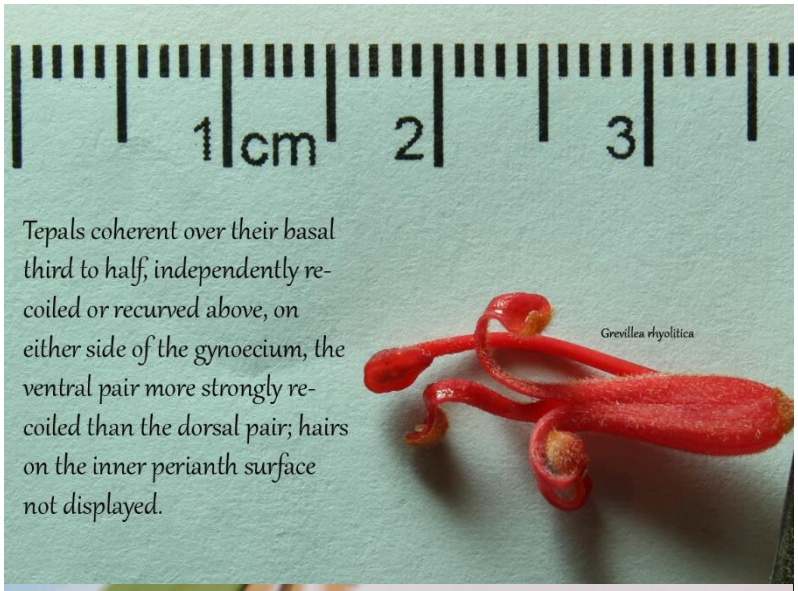
G. epicroca	Previously keyed rhyolitica ssp. semivestita
G. irrasa ssp. didymochiton	Yowrie form
G. epicroca	
G. oxyantha	oxyantha
G. rhyolitica ssp. rhyolitica	
G. rhyolitica ssp. ?	No. 73

KEY TO GROUPS

1 Ovary with hairs.
2 Leaves EITHER entire and linear, 6–30 cm long, 1–2 mm wide, OR 2–10-partite with similarly long and narrow lobes; margins of leaves revolute, enclosing all or nearly all of the lower surface (except for the midvein). ..... GROUP 1
2* Leaves entire, or toothed or divided; variously shaped, if entire leaves or ultimate lobes linear then <6 cm long and/or >3 mm wide and/or the undersurface exposed on either side of the midvein.
3 Inner surface of perianth glabrous. ..... GROUP 2
3* Inner surface of perianth with few to many hairs. ..... GROUP 3
1* Ovary glabrous.
4 Stipe of ovary short (<1.5 mm long), and swollen, almost as wide as ovary, and with a tuft of hairs on the ventral side. ..... GROUP 4
4* Stipe of ovary 1–12 mm long, slender, glabrous.
5 Conflorescences paniculately several- to many-branched, or rarely simple or basally 1–4-branched; unit conflorescences long-cylindrical or long-secund. ..... GROUP 5
5* Conflorescences simple, or basally 1–3-branched; unit conflorescences regular-umbelloid or shortly and broadly secund or a loose short cluster.
6 Gynoecium >23 mm long. ..... GROUP 6
6* Gynoecium ≤23 mm long.
7 Gynoecium 14–23 mm long. ..... GROUP 7
7* Gynoecium <14 mm long. ..... GROUP 8

These pictures illustrate a single Grevillea flower,
On the left is a naked ***G. epicroca*** flower showing the glabrous ovary

Lower left is the very hairy limb of ***G. rhyolitica***
and below right the distinct pyramidal shaped limb of
G. oxyantha



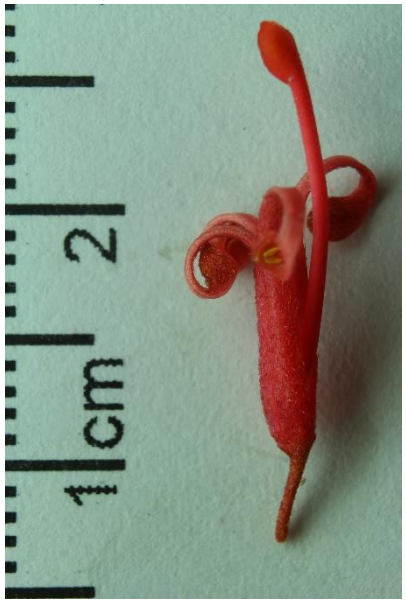
Mark described anthesis, which is when the tightly held style is released as the tepals roll back to reveal the pollen attached to their inner surface. This picture shows the tepals of ***G. rhyolitica*** with the 2 rear ones reflexed but the 2 front ones more strongly recoiled.

Tepals is a term botanists use to describe the perianth parts of a flower when these cannot be easily identified as petals and sepals.

The degree of hairiness, on both the inner and outer surface of the tepals, and on the ovary, is a key point to note when trying to distinguish the many species which were once included within the ***G. victoriae*** group

Grevillea flowers are arranged in groups or clusters known as conflorescences. These may comprise a few to many flowers and be borne on one or more rachis.

How the flowers are arranged on the rachis is also a clue to help determining its species



Grevillea epicroca 3 stages of flower development Before anthesis (note the style protruding through the rear of the perianth) At anthesis, when the tepals roll back to reveal the pollen and finally the tepals removed to reveal a naked style with the stigma just below the number 4 on the scale, the green ovary, and the greenish disk of the nectary sitting atop the torus (refer to the Grevillea drawing at the start of this article)

Mark worked through a range of local Grevilleas, describing their features and differences, and despite the nature of the presentation, not one snore was heard, nor one body fall from a chair. As a teacher in a previous life, Mark had a few tricks to keep us alert. Throwing the duster was not one of them.

On completion of this activity, members were ushered back into the garden to enjoy lunch in the sunshine, accompanied by a range of chattering, twittering and in some cases noisy, birds. (Rainbow lorikeets had decided to join us just in case some titbits were on offer)

After a pleasant lunch, President Margaret called the group to order, and offered members the opportunity to discuss their treasured plants in our regular "show and tell" session. Not surprisingly, many had brought along Grevilleas, showing that as a group we have quite a range growing in the various gardens. This whet the appetite for what was to follow in the extensive garden of Carolyn and Mark.

Christina Kennedy displayed a plant which many knew, but none could remember the name of. Luckily the answer was provided later in the day when she spied a plant in the garden with a label still attached. Good work Carolyn! The cultivar ***Grevillea* "Bonfire",** a cross between ***G. johnsonii*** and ***G. wilsonii*** has been around for a good while, and has been widely grown. It is a shrubby plant to 2m or more, with somewhat prickly leaves, courtesy of *G. wilsonii*, and brilliant red flowers well displayed through winter and spring.

As always, Jenny John can be relied upon to bring some unusual plants along, and did not disappoint with her choice spray of Grevillea. Jenny has a good selection of plants in her sprawling garden, and many no longer available in nurseries. We are indeed lucky that keen growers like her keep some of the older varieties alive, such as the exquisite ***Grevillea flexuosa*** she is displaying.

Margaret's new garden is quite a deal smaller than that on the Wagonga inlet, so she has to restrict her plants to those smaller forms. She delighted the group with a range of ***Grevillea alpina*** cultivars which are performing ideally in well drained soil in her new garden. It was noted that *G. alpina* forms have proved unreliable in more humid conditions, and would prefer a drier site with some overhead protection to survive for a number of seasons.

Jenny Vine brought along some tubestock of ***Graptophyllum excelsum***. This is a rainforest plant of eastern Queensland ranges, this has proved adaptable as far south as Melbourne. In cultivation it grows as a multi-stemmed shrub with glossy green foliage and a brilliant display of bright red tubular flowers during spring and summer. Although best flowering is achieved in full sun, plants prefer a sheltered site, where they will cope with dryness once established. Curiously few members took up the offer of a plant.

Maybe we are getting too used to Bunnings style gardens. If we are not careful that might be the only place we can procure plants.

Our role as Australian Plants Society members is to grow as broad a range of plants as we can.

Photo by Keith Townsend, from the ASGAP site 'Australian Plants Online'

The group by now was keen to get to the garden, comprising three and a half acres of Australian plants in a setting inspired by open grassy woodlands.

Old and new gardens *Photo Mark Noake*

Recent garden bed development has been extensive to accommodate their growing collection of Grevilleas and other Australian plants. Members were enthralled at the range of plants growing happily in well drained soils derived from granite. Drainage is managed mainly using above ground swales to divert heavy rainfall to a dam and away from garden beds. The swales are shallow and not perceptible but do their job well.

After another day in the garden. Carolyn's colourful collection. At least she can't lose them ! Photo Jillian Peck

Mark responds to questions about some recent plantings Photo Jillian Peck

A treasured and rare *Grevillea maccutcheonii* Photo Mark

It took quite some time to drag everyone away from the gardens, but the clock was heading towards evening as we assembled once again on the front lawn to thank our hosts. The head gardener can be proud of her work in recent weeks to get the garden in tip top shape. Mark assured us that he is not allowed to help. The time he spent, some days actually, in researching and preparing the computer graphics for this meeting, was warmly applauded. Our hosts were presented with a bottle of fine Australian wine, little reward, but nonetheless appreciated that night. Hopefully all attending went home enthused to try some new Grevilleas in their own garden.