AUSTRALASIAN PLANT SOCIETY
NEWSLETTER

PENTACHONDRA

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***Tasmannia lanceolata,* Mountain Pepper**
Colonsay House

AUSTRALASIAN PLANT SOCIETY

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Chionochloa conspicua
Hunangamoho snow grass

EDITORIAL

Judy Clark

As I write this it's very wintry and we've already had some frost, but there are Australian plants flowering in my garden. More than half a dozen Australian fuchsias (correas) and three grevilleas (well, one's in bud) are cheering me up mightily and I remind myself that it won't be long till the days start to lengthen again, spring will be upon me before I know it, and my acacias will be flowering (fingers crossed!).

The cold of winter is about as far removed from the hot and humid day of this year's annual general meeting (report, page 38) as one could get. I always enjoy these gatherings, seeing old friends, making new ones, and talking about plants. I have wondered whether describing our yearly national meeting as an AGM might be a bit offputting but our meetings are certainly never stuffy. Discussion is quite informal and socialising and seeing as much of the venue as possible are regarded as just as important as APS business.

At every AGM we ponder where to hold the next one. APS members are located all over Britain and Ireland, with some in mainland Europe and even a couple in North America, so wherever the AGM is held it's going to be a long way from where many of you live. The venue needs to be interesting enough to attract a good attendance, but such places are not evenly distributed around Britain, and some of the most interesting are very peripheral indeed. We try not to favour one part of the country over another but choice of location is also limited by practical matters such as whether a meeting room is available, or whether a guided tour can be organised. So, mindful that the two most recent meetings have been quite central, and having the offer of a guided tour of a splendid collection of Australian plants, we will be meeting at the National Botanic Garden of Wales.

However, as I write no regional meetings have been organised for 2013. In the past these have included visits to public and private gardens, arboretums and specialist plant nurseries, as well as get-togethers at members' homes, often combining two or even more venues. A few years ago, with much trepidation about the state of my garden but wanting to meet other members, I volunteered to host a southern meeting. Those who came were kind and it was great to meet like-minded souls; I was really pleased that I had made the effort. In my experience there's usually a plant swap at these meetings, great for getting hold of plants that are not widely (or at all) commercially available, and they are also great for exchanging tips on propagation and cultivation. So if you have an idea for a place to go, or would like to act as a host, Amanda Kershaw, APS meetings secretary, would love to hear from you.

Although nothing has been organised there was some discussion at the AGM about other places to visit, The focus however was rather exotic: southern Ireland and north-west France. I have long wanted to visit the Jardin Exotique de Roscoff (www.jardin exotique roscoff. com/cms/), which apparently crams 3500 species and varieties of plants from the southern hemisphere into just 1.6 hectares. (For RHS members, it was featured in the January 2012 issue of *The Garden*). Anyone interested? If so do let Amanda know, because we could consider arranging something.

Another perennial AGM topic is membership. I was looking through some old Pentachondras and I see that at the end of the 1990s the APS had over 200 members. We don't now, though I believe a decline in membership is common to smaller plant societies. One key issue is how potential members get to know of our existence and the AGM report summarises some of the discussion about advertising ourselves. Hopefully the new leaflet will help, as will further development of the website. If you would like to contribute material to the website Keith Larkin, APS webmaster as well as chair, would be very happy. He would particularly like inspirational pictures and information about good places to visit.

I also agree with the member who wrote to me saying that in considering how to attract new members we need to ask why we ourselves are members. He said: *For my part I enjoy gardening and being Australian like the idea of having my own little Aussie backyard over here. …. I feel we should try reaching out to like minded people through organisations such as UK Friends of Australia.* Perhaps we could all think more laterally about where like-minded people might be found?

I joined the APS (in 1999 if I remember correctly) because I wanted to learn more about how to successfully grow Australian plants and because I wanted to know where I could get hold of more of them. I had recently moved, to a house with an empty garden, which got me interested in gardening. A chance purchase of a bottlebrush at a local nursery made me wonder whether I could grow other Australian plants. I asked my mother to send me some seeds, and then I found the APS and obtained more seeds. I also found out where I could buy Australian plants. Some nursery owners do belong to the APS. Should we try and get more to join?

Sadly, longstanding member Graham Hutchins of County Park Nursery died earlier this year (see page 6). His nursery was a real Australasian cornucopia and one of my favourites among the plants I bought from him is *Pelargonium havlasae*, a dainty perennial geranium endemic to the south of western Australia (photo page 9). So far it has not survived a winter

outside but plants in the greenhouse seed very freely so I have continuous supply. Another is a small slow-growing shrub that I bought as *Bauera rubioides* (photo page 9). The flowers of this endemic Australian species range in colour from deep rosy pink to white, and its common names include river rose and dog rose though it nothing like a rose. My plant has white flowers which appear throughout much of the year though mostly, and most profusely, in late spring. Initially I planted it in full sun, and nearly lost it to drought. It did much better once I moved it to a shadier and moister spot which is probably more akin to conditions where it is native: coastal heaths and forests in all the eastern states and Tasmania. The dark green leaves redden in the winter, presumably an impact of cold, but otherwise it has been quite unperturbed by recent cold winters. I now wonder whether my plant could be var. *microphylla* (regarded as a separate species, *B. microphylla*, by some[1]) as it has very small leaves and sepals that are not hairy.

Jeff Irons, a co-founder of the APS and our president until very recently, had a fall earlier this year and broke his hip. He is now back at home and I'm sure all members will join with me in wishing Jeff well and hoping that his recovery is as speedy as possible. This has not stopped him contributing to Pentachondra and in this issue he writes about the genus *Dianella*, common name flax lily. For some time I have wanted to have an article about dianellas in Pentachondra. Like Jeff I think they are underrated, not just because of their (usually) technicolour berries but also because they seem so undemanding. The main one that I grow has proved to be happy anywhere in the garden: all it resents is drought. The problem is that I'm not one hundred percent sure what it is because *Dianella* species are not easy to name (hence the captions to the photos on page 19). My plant was sold as *Dianella caerulea* but I think it is *D. tasmanica*. I have another plant that was sold as *D. tasmanica* and while I'm sure it isn't that I'm not sure what it is. Jeff takes a pragmatic view of such confusion; just buy one you like.

Strappy plants such dianellas haven't previously featured much in Pentachondra but there are two more in this issue, if you count grasses and suchlike as strappy. *Isophysis tasmanica* also falls into the strappy category, but I have to report it turned out not to be, *Isophysis* that is (see Pentachondra May 2012). Jeff Layman writes about how this mistake occurred. It's complicated, but as editor I too didn't check thoroughly that the plant he wrote about was in fact *Isophysis tasmanica*. Though, like Jeff, I've never seen this plant growing and had no reason to suspect that it was not what Jeff was told he had been given.

Now to places to visit. Did you know that there are around 340

species of Australian tree being grown in English gardens? I didn't until I read a recent article by Owen Johnson about the Tree Register[2]. Not all gardens containing Australian trees are open to the public but some that do and are can be read about in this issue. Owen writes about Australian trees in the gardens at Colonsay House in Scotland while, still in Scotland, Tom Hart Dyke enthusiastically recommends Inverewe Gardens, and not just for the trees. Abbotsbury Subtropical Gardens on the south coast of England, which a group of us visited in June, also holds some very tall Australian trees and much more besides. In between, geographically speaking, are botanic gardens in Sheffield and Cambridge and if you wanted to do a round tour you could finish in Wales, taking in the national botanic garden (and attending the 2013 AGM?).

Last but not least, are two article about escapees. Plants travel round the world through their seeds craftily hitching a ride and Gordon Hanson writes about how the wool trade has brought Australian plants to Britain and transported foreign and sometimes invasive species to Australia. And then there is little *Geranium traversii* which I found doing its best to escape from a garden in Bexhill.

Many thanks to everyone who contributed to this issue. If you've got time on your hands during the murky days of winter please consider writing something for the next issue. Meantime, let's hope for a moderate winter and a blooming good 2013.

Notes

1. See New South Wales Flora online, plantnet.rbgsyd.nsw.gov.au/floraonline.htm.

2. Johnson O, 2012, "The Tree Register", *The Plantsman*, New Series volume 11 part 4, December, pp 252-255.

APS NEWS

APS AGM 2013

The 2013 AGM will be held at the National Botanic Garden of Wales (NBGW) in the summer; the exact date has not yet been finalised) Situated near Llanarthne in Carmarthenshire, the NBGW is more than just the most visited garden in Wales: it is a significant centre for botanical research and conservation with an important collection of plants from locations around the world that enjoy a Mediterranean climate (for more information go to www.gardenofwales.org.uk/).

The meeting will include a guided tour of the Great Glasshouse which contains the southern hemisphere plant collections, led by the horticulturist in charge who also happens to be an Australian. Members who have provided an email address will be notified by email as soon as the exact date is known and full details will be provided in the May 2013 issue of Pentachondra. (If you don't have

email and would like details before then please contact Meetings Secretary Amanda Kershaw.)

Quite coincidentally, as it was agreed that our 2013 AGM would take place at NBGW Tony Entwistle was writing about his recent visit, an article that included the suggestion that it would make a good AGM venue! Tony's report can be found on page 24 and he certainly makes a convincing case.

New members

The APS would like to extend a warm welcome to new members Clive Caiger, Paul O'Byrne and Mary Rouw.

2013 Seedlist

The 2013 seedlist and application form will be sent out with the May 2013 newsletter as usual. If you can't wait till then you can get it by email from 31st March 2012. In the first instance please contact Judy Clark, Pentachondra editor, at editor@anzplantsoc.org.uk.

Pentachondra contributions

Any article that has at least a passing connection with Australasian plants will be appreciated but I would like to particularly like to read more about members' gardens. I doubt that I'm alone in this. Where do you garden? What's your soil like? And climate? What do you grow? What does best? What are your tips for succeeding, and for avoiding failure? The deadline for the next issue is **31st March 2013**, but you don't need to wait till then; any time will do.

Subscriptions are due

All subscriptions are due on 1st January 2012. If you **don't** pay by standing order please complete the enclosed renewal form and send it with your cheque (payable to Australasian Plant Society) to APS Treasurer & Membership Secretary Jeremy Spon. If you pay by standing order you will not have received a renewal form but please contact Jeremy if any of your details have changed.

Annual subscriptions remain the same as in 2011; £10 for UK members, €15 for members living in the eurozone and £15 for members living in the rest of the world.

To facilitate secure payment for overseas members without UK bank accounts we have set up payment via PayPal. Members who paid by this method last year will receive a Paypal payment request from the Treasurer shortly before the end of 2012. If you would like to start paying by this method then please contact the Treasurer. (Unfortunately we cannot make PayPal available to UK members because it is too expensive.) Overseas members can also send cash through the post but do so at their own risk.

Contributions should be sent direct to me as editor (for details see inside the back cover). Articles may be submitted electronically or as typed hard copy. If possible

Graham Hutchins

Graham Hutchins, an expert on the plants of New Zealand and Australia, especially Tasmania, died in June aged 82.

Graham was a longstanding APS member and many readers will have known him from County Park Nursery in Essex, which he began in 1955 with a second hand greenhouse to grow cacti and succulents. He moved on to alpines, trees and shrubs and began selecting and crossing many plants especially hebes.

Hebes became his main focus and this interest led to his first plant hunting trip to New Zealand in 1977. Exploring the wilderness he was amazed by the natural beauty and the diversity of the plants he found there. Three more plant-hunting trips followed, taking in mainland Australia and Tasmania as well as New Zealand.

Graham introduced more than 1000 plants to the UK and his plant breeding activities produced more than 300 new cultivars. In the 1970s and 1980s he exhibited regularly at RHS events, winning 26 gold medals including a gold at Chelsea the only time he exhibited there. His writings include *Hebes Here and There*, a comprehensive account of the genus published in 1999, and booklets on Pittosporum and Podocarpus.

He was well known for unusual plants and people travelled from far and wide to County Park. Fortunately the nursery will continue under the care of Graham's grandson Paul.

photos and drawings should be submitted electronically, preferably in separate files from articles, and not compressed before sending (don't worry about sending large files). The same goes for photos and drawings, whether to accompany articles or as stand-alone items (with a caption please). And don't hesitate to contact me beforehand if you have any questions.



CORTADERIA? NO, AUSTRODERIA

Jeremy Spon

A recent query from a non-member, concerning grasses they were interested in growing, had me baffled until I realised they were using a new name for a familiar old species. Thanks to the internet, I was able to establish that the plant they were referring to as *Austroderia richardii* was in fact one of the New Zealand pampas grasses, or toetoes, better known to us all as species of *Cortaderia*. As part of a new classification of a subfamily of the Poaceae by a group of botanists from around the world[1], a new genus, *Austroderia* N. P. Barker & H. P. Linder, has been created to contain the New Zealand species formerly in *Cortaderia*.

Two of these species, *A. richardii* and *A. fulvida*, are definitely in cultivation in the UK, and listed in the RHS Plant Finder. *A. richardii* is from the South Island, and is relatively hardy outdoors in the

UK (although probably less hardy than the South American *Cortaderia selloana*, the classic Pampas Grass). *A. fulvida* is from the North Island, and therefore likely to be less hardy (do any members have experience of growing it?) I can find no record of the other three species - *A. toetoe*, *A. splendens* (both from the North Island) and *A. turbaria*, the Chatham Island toetoe - having been in cultivation in the UK, and probably none would be hardy enough to grow outside except in very mild areas. *A. turbaria* is classed as Nationally Endangered, and is considered one of the most threatened in the Chatham Islands archipelago, although it is in cultivation in New Zealand and sometimes offered by nurseries there[2].

The RHS Plant Finder has not yet adopted the new genus name, but will probably do so in the near future, at which point we may see plants appearing in nurseries and garden centres under the new names - you have been warned!

References:

1. H. Peter Linder, Marcelo Baeza, Nigel P. Barker, Chloé Galley, Aelys M. Humphreys, Kelvin M. Lloyd, David A. Orlovich, Michael D. Pirie, Bryan K. Simon, Neville Walsh and G. Anthony Verboom *A generic classification of the Danthonioideae (Poaceae).* Annals of the Missouri Botanical Garden, 97(3) (Oct 2010) pp306-364.

2. New Zealand Plant Conservation Network website, www.nzpcn.org.nz/flora_details.asp?ID=14. (For members unfamiliar with it, this website is a superb and comprehensive resource covering the whole New Zealand flora, and is always bang up to date botanically speaking.)

SOME NEW ZEALAND GRASSES

© Gary Dunlop

In the last decade or two grasses have become popular garden plants, often as low maintenance planting in the USA in prairie style schemes, or mixed with perennials in large swathes as popularised by Piet Oudolf in Europe. However such expansive planting schemes are unlikely to be of interest to members of the APS. Grasses do not seem to have been featured in Pentachondra if my memory is reliable.

There are several grasses from New Zealand which might be of interest to some members. *Carex buchananii* (actually a sedge) forms a low brown hummock up to about 30cm high of variable colour. I grow two different forms, one pale coffee coloured and the other a darker chocolate brown (photo page 10). They make useful plants for near the front of a bed or even between shrubs, though in time the foliage does tend to become rather longer than desirable and look a bit untidy. It can of course be clipped back to keep a neater hummock shape. The seed heads are fine, and being

of a similar colour are barely noticeable visually. They droop over, though not as much as the foliage. However, the individual seeds may be small but each has a sharp barb or hook, so care should be taken when weeding around the plant after it has flowered; *Acaena* is not the only antipodean genus to use the method of relying on animals for seed dispersal. The plant does self seed but not excessively, and the seed can lie dormant for a number of years. Until this last year I had not grown *C. buchananii* for some years; I think they eventually died out dew to lack of nutrition. However, as I have been introducing some much needed nutrition into my soil with horse manure, and digging it in where possible, the disturbance obviously brought some seeds to the surface and several new plants have appeared in the last couple of years.

Another, though rather larger, low mounding grass is *Chionochloa flavescens*, which seems to be fairly undemanding. I obtained it as toetoe, the Maori name for all species of *Austroderia* (better known as *Cortaderia*; see article on page 8). One of the species is named *A. toetoe*, which is what I assumed that I was growing, but it was only recently when checking out the grasses in Cave and Paddison[1] that I managed to correctly identify the plant. My plants is not so attractive as the photos in this book show, and I suspect that it is more suited to warmer sunnier conditions. It has formed a clump about 1m across with the flower stems emerging at a low angle and barely extending beyond the foliage.

On a rather larger scale, *Chionochloa conspicua* (photo, front cover) is a substantial clump forming grass with highly ornamental flowers and seed heads. It forms clumps of foliage about 1m high, similar in size to medium sized forms of *Cortaderia*, with flowering stems reaching up to about 1.8m in summer. It does not seem to self seed, and lacks any undesirable characteristics. The panicles last well into winter.

On an even larger scale *Austroderia richardii* (photo page 10) is the medium sized version of three quite similar tall growing species of a genus more associated with South America. It has the merit of flowering in summer, rather than autumn, and with lopsided flowers rather than the upright plumes of their South American relatives. The leaves do have a slight serrated edge but not so vicious as that of their pandorean relatives which can easily slice through skin.

However, *A. richardii* seems to need cooler or moister conditions to show its full potential; I gather it does not grow well in the south of England. The downside of this attractive species is that in conditions that it likes it will self seed readily, even in clefts in bedrock, and quickly forms very strong roots, so even relatively small self sown seedlings are difficult to pull out of the ground.



Geranium havlasae



***Bauera rubioides* (?var. *microphylla*)**



***Carex buchanii*, chocolate coloured**



***Austroderia richardii* (formerly *Cortaderia richardii*)**

One plant self seeded into a floating clump of bog bean in an adjacent pond and even produced two flowering stems this year before I removed the whole vegetative raft from the pond.

Grasses may not be high up the agenda of those interested in growing antipodean plants but they can add a foil or contrast to plants more associated with antipodes and so do have their uses.

Reference:

1. Cave Y and Paddison V, 2002, The Gardener's Encyclopaedia of New Zealand Native Plants, Godwit Publishing

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DIANELLAS

Jeff Irons

When I looked for *Dianella* in Pat Anderson's five year index to the APS Newsletter (2003) there were only four entries, the most recent being for December 2002, and I do not remember it being much referred to in subsequent issues. The genus deserves more mention than that. Dianellas, commonly known as flax lilies, do not take up much space and many are suitable for part-shade. They bear colourful blue fruits seen in late summer. Their flowers are also blue, but do not make as much of an impact (see photos page 19).

The plants are found in the Asia-Pacific region. Some readers may wonder why a group of plants not found in Greece is named after a Greek goddess. The answer lies in the fact that Diana was not only a huntress, she was also Queen of the woods. The first Dianella was found in a wood, so the name means "little queen of the woods" and is an obvious reference to the plants' beauty. That alone should make us want to grow them.

When Mount Stewart Garden took over the National Collection of *Dianella* it found that every plant was named wrongly. When a Wisley botanist was given the task of writing the section on *Dianella* for a recent encyclopaedia he went down to the Wisley plant centre and found that the plant being sold as *Dianella* 'Margaret Pringle' was very different from that in the plant's description. I was given a 10cm high plant with pale blue fruits under the name *D. tasmanica.* I could find no reference anywhere to the species bearing pale blue fruits, nor to it being as small as this one.

These three incidents make me think that when buying dianellas one should ignore the name and simply choose the plant because it is liked. Dianellas are defined and separated by their filaments, anthers, leaves, leaf sheaths and roots. Even if one has a botanical key it cannot be used for hybrids (more of which have become available in recent years), so we come back to the fact that you should not assume that the nursery's name is correct and instead buy a plant because you want a dianella and like what you see. In what follows I take most

Keep up to date

If you want to be kept up to date with events by email **please make sure we have your current email address.** Members who do not have access to email and would like information about meetings in advance of the next issue of Pentachondra should contact the Meetings Secretary (contact details are inside the back cover).

of the species listed in the current Plant Finder and simply describe major differences. There are many more species than these; Australia alone has twenty-two. Seed raised plants will differ in height, vigour and fruit colour, so all should be grown on and the best selected for keeping.

D. brevicaulis has been split off from *D. longifolia*. The flowers are on short stalks, about half as long as the leaves; consequently they are not well displayed and neither are the fruits. Although it is in my garden, I do not regard it very highly.

D. caerulea is so called because of the colour of its flowers. It is a variable colony forming species, and is between 0.2 and 1m high. Some forms have dark reddish leaves and they can be in a fan or a tussock. The fruits can be pale or dark blue in colour. This is a good species for both the garden and a container. My specimen, collected in the Blue Mountains of NSW was killed by the cold of the 2010-2011 winter, when the minimum temperature reached -12^{0}C.

D. intermedia is rarely more than a foot high and in cultivation is usually much less. Flowers and fruits can be pale to dark blue in colour. I think it probable that the small plant given to me as *D. tasmanica* will turn out to be this species. Its wild occurrence, on Lord Howe and Norfolk islands, indicates that it is unlikely to be very cold tolerant.

D. longifolia includes the former *D. laevis.* A compact tufted plant, it can be up to 1m tall and prefers dryish soil. Leaf edges can be saw toothed or smooth. The fruits can be dark blue or purple. My specimens, grown from Tasmanian seed, showed that the species is aptly named, for the narrow leaves were up to50cm long and the flower stalks about half that. The fruits did not stay long on the plants, which died during the 2010-11 winter.

D. nigra is New Zealand's only species. About 70cm high it forms a tuft with rhizomes that spread out slowly, forming offsets. The fruit of seed raised plants varies from a dull dirty white to a dark glossy blue. 'Margaret Pringle' is a selection with variegated leaves, often with a pink edge. I have not grown this species.

D. revoluta can easily be recognised by its leaves. Usually they have a distinct V shape, but more importantly their edges are rolled back. It is a vigorous species, up to 1m high and spreads

by rhizomes. The shiny fruit is dark blue. I have two forms. A commercial one never fruits but the collected one does and has self seeded. This is a good garden plant, long lived and handsome in late summer and autumn The selection 'Hartz Mountain' was collected at the foot of the road to Tasmania's Hartz Scenic Reserve. Once one reaches the plateau car park, about 3000ft higher up, the mountain's foot is a good three hours walk away.



Dianella flower

D. tasmanica occurs in both Tasmania and mainland Australia. In contrast to *D. longifolia*, it prefers moist soil and is shade tolerant. The height of this vigorous clumping species can be between 0.5 and nearly 2m. The fruits, up to 2cm long, are dark violet to blue. This is another good plant for both garden and container. Some plants sold as *D. tasmanica* could be *D. prunina*, a species I do not know.

More common in garden centres than they once were, dianellas are easily grown plants that add interest to the late summer garden or patio. They are easily propagated from either seed or division.



NOT ISOPHYSIS TASMANICA

Jeff Layman

In the May issue of Pentachondra I wrote an article about *Isophysis tasmanica*. Unfortunately, the plant which I thought was *I. tasmanica* has since been identified as *Gethyum atropurpureum* (*Solaria atropurpurea*), a rare Chilean native. How did this mistake occur?

The easy answer is a combination of carelessness and poor research. Although true, matters are perhaps a little more complicated than that. Firstly, I have never seen *Isophysis* growing, not even its leaves. That would have helped. Secondly, although the "bulb" came from the South African Bulb Group (SABG), I had no reason to suspect it wasn't what was listed (even though it was not a South African plant - it was listed amongst the "other" plants in the same way that our seed list has a few non-Australasian seeds). I had also contacted the person who supplied the bulb to check that what I had flowering was what she had seen when her bulb flowered. The correction came from another member and has only very recently appeared in the SABG Newsletter (Number 22, June 2012), despite the fact that the bulbs had been offered for at least

a couple of years. I should have been suspicious when what I had been sent was quite obviously a bulb or corm, and not a rhizome, but as I noted in the first article sources on the internet never mentioned what the underground part of the plant looked like or what it was botanically. I should have stayed with the descriptions in Bryan's book[1] (mentioned in the last article), and the Encyclopaedia of Alpines, both of which referred to it as growing from rhizomes.

When the plant flowered I was somewhat surprised, as *Isophysis* is reputed to be "difficult" in cultivation. At a first glance, the flower was similar to those of *Isophysis* photos on the internet, and those in my Bryan book. The reproductive parts were somewhat doubtful, but I assumed that these had not opened fully in my plant. The colour of the petals wasn't exactly the same as the internet or book photos, but I wasn't concerned about this as *Isophysis* is said to vary considerably in colour. According to the key to Tasmanian Vascular Plants[2]: "*They are usually dark purple (almost black), though occasionally yellow*". I would not describe the colour of the plant on the lower right photo on that website as "*dark purple (almost black)*", but just as "*deepish purple*". And, indeed, it does not look very much like the colour, or even petal shape, of the plant I grew. But now look at the middle photo on the top row. That colour and petal shape really is like my plant. So on that basis *Isophysis* is of quite variable colour and petal shape. However (and thanks to Judy Clark for this information) , Wrigley and Fagg[3] state: *"Flowers, 6 cm in diameter, held singly on stems 25 cm long, vary from yellow to dark purplish brown*". That reference to single flowers would have confirmed that what I had was not *Isophysis*, as there were around 6 flowers on the stem of the plant I had. But, unfortunately, I didn't have that book.

But what of *Gethyum*? None of the books I have mention it at all, even under its previous name of *Solaria atropurpurea*. There are a number of pictures of it on the internet, and I have no doubt it is the plant I have, even down to its unpleasant smell. If only I had seen an article from Kew published on 1 March this year[4]: "*The blackish flowers are of Gethyum atropurpureum, and look almost bat-like, with long, brownish black petals. This plant has a very unusual smell, and can fill an entire glass house with its unpleasant odour...* ".

Taxonomically, things are not simple. *Isophysis* is a member of the Iridaceae, albeit a rather primitive one. But it has also been considered a member of the Liliaceae. *Gethyum* was said to be a member of the Alliaceae; previously it was in the Liliaceae. But as with much taxonomy, there are differences of opinion. For example[5]: "*Alliaceae is the botanical name of a monocot family of flowering plants in the order Asparagales, more recently*

reduced to the subfamily Allioideae of the family Amaryllidaceae. The family and subfamily names are derived from the generic name of the type genus, Allium."

The family has been widely but not universally recognized. In the past, the plants involved were often treated as belonging to the family Liliaceae, and still are, in some long-running floristic projects in which obsolete taxonomic systems are still used. More recently, the family has been reduced to a subfamily of the Amaryllidaceae.

Successive revisions of the influential Angiosperm Phylogeny Group (APG) classification have changed the circumscription of the family. In the 1998 version, Alliaceae were a distinct family; in the 2003 version, combining the Alliaceae with the Agapanthaceae and the Amaryllidaceae *sensu stricto* was recommended but optional; in the 2009 version, only the broad circumscription of the Amaryllidaceae is allowed, with the Alliaceae reduced to a subfamily, Allioideae. I hope that's clear!

I am not exactly knowledgeable when it comes to diagnostic botany. That way it may have been possible to immediately see that the "*Isophysis"* was not *Isophysis*. Even when it is possible to find such information, it is very specialised. The following is a description of the Allioideae[6]: "*Flavonoids, cysteine-derived sulphur compounds +; raphides often 0, styloids +; laticifers +; leaves (spiral), sheath closed, long, shortly ligulate [Allium, at least]; flowers medium sized; T ?connate; A connate or adnate to free; (stigma wet); style solid; ovules 2-many carpel, in two ranks, campylotropous (anatropous), (micropyle bistomal), nucellar cap + (?0), obturator +; seeds angular, exotestal, other layers of testa collapsed or not; (endosperm pitted); chromosomes 2-20 𝜇 long; (cotyledon not photosynthetic).*"

That is way above me, I am afraid. There are other descriptions on the internet, but I have no doubt that revisions will take place making those descriptions out-of-date.

I suppose that for most of us the best way of identifying a plant would be a label in a botanic garden and a good photograph. But not everything in a botanic garden is labelled, and as to whether or not it is labelled correctly, well I really couldn't comment.

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2. www.utas.edu.au/dicotkey/dicotkey/irid/gIsophysis.htm

3. Wrigley JW and Fagg M, 2003, Australian Native Plants (5th edition), Reed New Holland

4. www.kew.org/news/kew-blogs/alpine-rock-garden/spring-arrives-in-the-alpine-house.htm

5. www.sccs.swarthmore.edu/users/08/ajb/tmve/wiki100k/docs/Alliaceae.html

6. www.mobot.org/mobot/research/apweb/orders/asparagalesweb.htm#Alliaceae

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AUSTRALASIAN WOOL ALIENS IN BRITAIN

Gordon Hanson

For nearly a hundred years raw wool was imported in huge quantities into Britain from Australia, New Zealand, South Africa and America. Surprisingly complex methods were employed to clean the raw wool in the UK before it was ready for weaving. This involved not only very hot water and detergents but also high temperatures and caustic soda! The 'scourings' separated from the newly cleaned wool were used by local farmers as a slow acting nitrogenous fertiliser and a binder in particularly sandy soils. Any remaining viable seeds originally entangled in the sheep's wool were thus, at last, returned to the earth they were originally designed for but instead of the soil of the southern hemisphere they found themselves in British fields as far from their native home as it was possible to go.

In the years before wool waste was used as an organic manure, it was simply dumped or allowed to be carried away as river effluent from the factories involved. During the 1880s it was noticed that many strange plants were turning up in the vicinity of wool waste tips in West Yorkshire, and during the period immediately before the First World War Ida Hayward made a study of the alien plants growing at the river's edge near the wool cleaning factories in Galashiels, Scotland.

Just after the Second World War John Dony began investigating the arable fields of Bedfordshire. This preceded his "*Flora of Bedfordshire*" (1953) in which he records no less than 127 different wool aliens in the Luton area where he taught; by 1966 the Bedfordshire score reached 323. Later, in his "*Flora of Hertfordshire*" (1967) only two dozen wool aliens are listed; just two Hertfordshire farmers at that time were still using wool waste manure.

My own interest in 'shoddy aliens' began in 1970 when John Dony escorted me round some of the fields in the Flitwick and Maulden area. In a single day we observed 34 of the aliens and the following year exactly the same number, but not all the same species. In 1972 I located the only two farms in Hertfordshire still using wool waste and found around 40 wool aliens including *Erodium stephanianum* which had not been observed in Britain since 1937.

The mecca for wool alien hunters at that time was the Blackmoor Fruit Farm (Hampshire) which used vast amounts of wool waste as a top dressing and over the years between 1971 and 1974 over 150 different aliens were observed each year. Because of the

spiralling cost of transport, the lorry loads of wool waste ceased in Hertfordshire and Hampshire during 1973, while the last two Bedfordshire farmers continued using it on their incredibly greensand fields until 1980. Since then my annual autumn visits to a single farm near Flitwick have resulted in seeing rarely fewer than 20 wool alien species (50 in 1995) ; this indicates the persistence of the buried seedbank over a 30 year period.

My own early home growing experiments using a few plastic bags full of shoddy manure obtained from the lorry-dumped heaps in the farmers' fields were exceptionally fruitful and produced over 50 different non-British species. Since 1970, I have seen 700 different wool aliens although this is only about a quarter of those recorded in toto. Around 15 years ago I obtained a large (and very smelly) parcel of wool waste from a Yorkshire rhubarb farmer and raised 30 wool aliens from it. Unfortunately, every single one was British as it turned out that the wool had originated from Wales! Since 1980 raw wool has been generally cleaned in the country of origin so the importation of new Australasian wool aliens has now virtually ceased. (Details of the cleaning process can found by googling 'WRONZ wool scouring'.)

A high proportion of wool aliens turn out to have originally come from European countries and were brought over to Australasia accidentally, or deliberately, by the immigrants of that time. It seems that the urban weeds of Australia are now 95% Mediterranean. Those appearing regularly in the shoddy fields were various species of *Medicago, Trifolium, Erodium* and *Amaranthus*. Other foreign seeds were also brought in from South Africa and the New World and then became part of the immense Australian weed problem.

I am not going to delve into the details of wool alien grasses except to say that some 430 different ones have been recorded in Britain over the years! True native Australian wool aliens include *Erodium cygnorum* (photo page 19), *Rumex brownii, Acanthospermum australe, Calotis cuneifolia, Cynoglossum australe, Brachyscome ciliaris, Vittadenia triloba, Psoralea cinerea, Cotula coroniopifolia, Cotula australis, Nicotiana suaveolens, Emex australis, Atriplex australasica*, and *Acaena nova-zelandiae*.

The following wool aliens are all found growing in Australia but were brought there from elsewhere. Many are now terrible weeds and the Australian Government spends over 1.5 billion dollars a year on trying to keep them under control. From the Mediterranean come *Centaurae calcitrapa, Trifolium resupinatum, Hibiscus trionum, Brassica tournefortii, Heliotropium europaeum, Silybum marianum* and *Erodium malacoides*; from

America *Solanum rostratum*, *Amsinckia micrantha*, I*bicella lutea*, *Bidens frondosa*, *Cosmos bipinnata* and *Soliva sessilis*; from South Africa *Monsonia brevirostrata*, *Berkheya rigida*, *Cotula bipinnata* and *Senecio pterophorus*; and from North Africa *Carduus pycnocephalus* and *Carthamus lanatus*.

A few wool aliens found in Britain have actually never been seen in the world before! An example is *Lepidium fallax*, probably from South America.

Reference:
Clement EJ and Foster MC, 1994. *Alien Plants of the British Isles*. Botanical Society of the British Isles.

GERANIUM TRAVERSII: GOING WILD?

Judy Clark

In summer 2011 a botanist friend brought me a specimen of a rather beautiful small geranium that she had found growing on waste ground on Bexhill promenade[1] and that she had been unable to identify. It turned out to be *Geranium traversii*, a species endemic to New Zealand's Chatham Islands[2]. I returned to the location in summer 2012 and it was still there, growing as strongly and flowering as happily as it had the previous summer. It is not a species known to have naturalised in the UK and, as far as I have been able to discover, this sighting seems to be the first recorded of it occurring outside of a garden, albeit not very far outside. The garden is directly above the promenade, with a very steep slope down to it. Concrete steps allow access to the promenade and there were also several small plants lodged in niches on the these steps.

It could hardly have chosen a better place to escape to. Its native habitat is coastal dunes and cliffs and the area where it was found effectively mimics this environment, dry and windswept. The photos on pages 20 and 21 show *G. traversii* growing in Bexhill and in the Chatham Islands, where it grows on dunes on Chatham Island and on limestone at Flowerpot Bay on Pitt Island[3].

As these photos show *G. traversii* makes low mounds of soft green lobed leaves with saucer-shaped flowers held above them. The colour ranges from white to pink with some darker veining at the base of the petals and because the petals narrow at the base to form claws the sepals are visible at the centre of the flower.

Despite being such a pretty plant it doesn't seem to be widely available in the UK. A quick web search did not produce a single seed source while the RHS Plant Finder lists only one supplier of the species. One reason could be that *G. traversii* is apparently not fully hardy in the UK[4] though I would think it must at least survive



Left*: Dianella ?tasmanica,* Royal Botanic Gardens , Melbourne

Below*: Dianella* fruits





Left:
***Erodium cygnorum*, a wool alien found in Bedfordshire. In Australia it is called blue heronsbill or blue storksbill.**



Dunes, east coast of Chatham Island



***Geranium traversii* on the dunes**



***Geranium traversii* on limestone, Flowerpot Bay**



***Geranium traversii*,**
Bexhill seafront



***Geranium traversii*,**
Cambridge University Botanic Garden



***Geranium* 'Sea Spray'**



Eurabbie
Eucalyptus globulus
ssp. *bicostata)*
at Abbotsbury
Subtropical Gardens

in other coastal gardens where conditions are suitable. It certainly ought not to mind strong winds; the Bexhill plants must be buffeted by the brisk southwesterlies that frequently blow up the Channel. Or it might be that it is difficult to grow, though an offset from the Bexhill plant is currently doing well in my front garden and I haven't given it any special treatment.

Time will tell if I should have done. On the Hebe Society website *G. traversii* is described as easy to cultivate[4] but a report on an RHS trial of hardy geraniums[5] states that it "*can be frustratingly difficult to cultivate*", and describes it as "*intolerant of winter wet*", not surprising given where it hails from.

This report recommends growing some of its hybrids instead, including the well-known *G.* x *riversleaianum* 'Russell Prichard', a cross between *G. endressii* and *G. traversii*. Other *G. traversii* hybrids have been produced by Alan Bremner[6], a plant breeder based in Orkney. The partially fertile *G.* x *antipodeum* is a cross between *G. traversii* and *G. sessiliflorum*, also a southern hemisphere geranium but one which is found in Australia and Chile as well as New Zealand. *G.* x *antipodeum* 'Sea Spray' is one cultivar listed in the Plant Finder. I have never seen it in the UK but I presume it must be like the *G.* 'Sea Spray' which I purchased in Melbourne for my mother's garden (photo page 22). Also listed in the Plant Finder as currently available are *G.* 'Orkney Pink' and *G.* 'Orkney Cherry', bred by Alan Bremner through multidimensional crossing of *G.* x *antipodeum* with both its parents and an un-named *G.* x *oxonianum*. I am not familiar with either of these hybrids.

Throughout this article I have referred to the Bexhill plants as *G. traversii*. As I have said these plants are almost certainly a garden escape and such horticultural literature as I have consulted[4,5,6,7] seems to agree that *G. traversii* var. *elegans* is the plant usually grown in gardens in the UK. Unfortunately this literature doesn't provide a clear account of the key differences between the species and the variety so I also looked at botanical descriptions in the online version of the Flora of New Zealand[8].

Both var. *elegans* and the species can have pink on the petals and the main difference seems to be that the flowers of var. *elegans* are rather larger than those of the species (though how much larger is not stated) and have darker veins on the petals. The Bexhill plants do have quite dark veins, though it is hard to tell whether they are significantly darker than those of the Cambridge Botanic Garden specimen[9] of *G. traversii* that I photographed in August (see page 21). The flowers of the species are stated to be 20-25 mm in diameter. My notebook records one flower diameter (29mm) , but

I haven't systematically measured the Bexhill plants and obviously I can't do more until they flower again next year. But in any case the Flora of New Zealand considers var. *elegans* a minor variant of *G. traversii* and botanically not worthy of varietal status, and, even if the two are considered different, the species name can encompass the variety. So, for the moment, *G. traversii* it remains.

References

1. Bexhill is a small town on the south coast of the UK

2. The Chatham Islands archipelago lies about 800 kilometres east of Christchurch on New Zealand's South Island. It comprises about ten islands, the largest of which are Chatham Island and Pitt Island.

3. I have never visited the Chathams and these photos have been kindly provided by fellow Sussex Botanical Recording Society member John Cole, who travelled there in November 2009.

4. Hebe Society website, http://www.hebesoc.org

5. Armitage J, Hardy Geraniums Stage 1, RHS Plant Bulletin Number 10, June 2005, page 8 (www.rhs.org.uk/Plants/RHS-Publications/Plant-bulletins/Hardy-Geraniums---Stage-1)

6. Bremner A, Geraniums from the North, The Plantsman, September 2008, pages 196-199.

7. Trevor Bath and Joy Jones, 1994, The Gardener's Guide to Growing Hardy Geraniums, David and Charles

8. Allan HH, 1982, Flora of New Zealand Volume 1, online at http://floraseries.landcareresearch.co.nz/pages/Index.aspx

9. Cambridge University Botanic Garden holds a national collection of geraniums.



LLANARTHNE REVISTED

Tony Entwistle

In May this year I revisited the National Botanic Garden of Wales in Llanarthne where we had our AGM in 2000. The Garden had then only recently opened. The attraction then, as this year, was the Great Glasshouse, the largest in the northern hemisphere and the biggest single span in the world. It measures 110m by 60m, has 785 panes of double-laminated glass and a minimum winter temperature of 9ºC.

In 2000 the plants were new and small. Now, twelve years later, all is mature and established. Sensibly, plants which grow no more than about 2m, or can be kept to this height, occupy most areas, so the glass house remains open and visible. In flower in the Australian and New Zealand section were many *Callistemon*, *Calothamnus* and *Melaleuca* (bottlebrushes, net bushes and paperbarks respectively). A patch of vivid blue revealed *Lechenaultia biloba*, and there were large mounds of *Jovelliana sinclairii* bedecked with white 'slippers' showing why it is called maori calceolaria. The South Africa section contained proteas, leucospermums and restios in bloom.

There have also been many improvements to facilities. There is now a café in the glasshouse and frequent free transport up and down the hill. The walled garden has been renovated and there is now a separate tropical greenhouse. This would be a good – and weatherproof – venue for another AGM. It may seem out on a limb but it is not far from the end of the M4 and easy to find as it is well signposted.

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ANTIPODEAN TREES AT COLONSAY HOUSE

Owen Johnson

Colonsay is a small island off the west coast of Scotland, surrounded by many miles of open water and forming the first landfall for Atlantic fronts, so its micro-climate is peculiarly suited for moisture-loving Tasmanian and New Zealand plants. The gardens of Colonsay House have been developed by several generations of the Strathcona family since the 1930s. They open on Wednesday and Friday afternoons through the summer, while the surrounding Woodland Garden has unrestricted access.

I visited this June while recording noteworthy trees in Argyll for The Tree Register (www.treeregister.org). Nobody had measured the trees on the island before, and so, not for the first time, it was my turn to 'discover' an important mature collection, including five 'champions' (the largest or tallest of their kind found in Britain and Ireland).

These champions are all antipodean. In the Woodland Garden, *Tasmannia lanceolata* (mountain pepper) has grown into an unquestionable tree, 8m tall and with a trunk 25cm thick at 60cm from the ground. The photo on the front cover shows it in flower. As in other Argyll gardens, the many mature New Zealand *Pittosporum* seem to show an intergrade between plants with small very wavy leaves (typical *P. tenuifolium*) and ones with broader almost flat leaves (*P. colensoi*); nevertheless, seedlings under one tree which was at the *P. colensoi* end of the spectrum had foliage just like their parent's. The largest of this type, in the Woodland Garden, had a main trunk 58cm thick at 70cm.

The southern part of the Walled Garden is densely planted with southern hemisphere trees (predominantly *Cordyline australis*, *Luma apiculata* and *Crinodendron hookerianum*), whose luxuriance and prolific regeneration are in remarkable contrast to the wind-shredded and sheep-nibbled native woodland outside the gardens. (The tree of choice for the original shelterbelts around the rhododendrons in the Woodland Garden, meanwhile, was *Griselinia littoralis*.) On my visit, the *Crinodendron* were in full crimson flower, and every bee on the island had made a bee-line

to the gardens. Rarer trees within this plantation include two old and rather bushy specimens of *Notelaea ligustrina* (mock olive), an olive-like Australian which has been in cultivation on and off for many years, but which I knew only by name. The larger was 8m tall with trunks to 28cm thick. This is not a showy tree by any stretch of the imagination, but at least putting a name to it was a challenge to relish.

This same planting has several old trees of *Hoheria lyallii* (mountain ribbonwoood), the largest 9m x 48cm. (In other west-coast Scottish gardens, plants labelled *H. lyallii* usually seem to be *H. glabrata*.) There are also two examples of *Carpodetus serratus* (putaputaweta), the larger and presumably older one a sturdy 5m, with the characteristic white marbling on green leaves. The smaller, in early June, was a watercolour of bronze, reds and mauves. I can find no reference to a purple cultivar; if this is a sport it could be worth propagating.

Among the New Zealand trees which are not national champions but are nonetheless impressive, *Nothofagus menziesii* by the lake in the Woodland Garden demonstrates how this is often the most daintily and luxuriantly beautiful southern beech in Atlantic gardens. *Fuchsia excorticata*, in the formal gardens near the house, was bushy but flourishing after the intense cold of December 2010 and, given high humidity, appears tougher than was feared: another in excellent health is in woodland shelter on the adjacent mainland at Arduaine. Vividly silver-backed leaves and luminous orange scrolls of bark make this is one of the loveliest fuchsias, as well as the only one to make a tree in Britain. As a centrepiece to the walled garden woodland, *Podocarpus totara* is 10m tall and exuberantly leafy. Growth this far north is slower than in Cornwall, but the species is potentially so long-lived that I think we should look forward to seeing monumental specimens, even in Scotland.

Of course not all the best trees at Colonsay House are antipodean. The formal garden has the only semi-mature *Olea europaea* I've found in Scotland, the Woodland Garden has Scotland's biggest *Metasequoia glyptostroboides* (to date, with a trunk 87cm thick at chest height), while in a separate arboretum section of the main garden, a deciduous *Photinia* matches none of the (immensely attractive, but under-appreciated) species in cultivation and might possibly be a new chance hybrid of *beauverdiana* and *villosa*.



SHEFFIELD BOTANIC GARDENS

Peter Kohn

We are back in Sheffield and with no garden of our own yet our Australasian opportunities are very

limited. However, we have been helping in the Sheffield Botanic Gardens and I can report that we have just planted a *Telopia* (waratah) there and hope to be planting a *Banksia marginata* shortly.

The *Telopia* was raised from a seed set by the *Telopia* 'Burgundy' in our previous garden at Kerrachar (see issue 47, December 2011, page 34). That plant sailed through the bad winter of 2010-2011 and was still thriving this summer. As 'Burgundy' is a (natural) hybrid we are curious to see how its offspring turns out. We sowed several seeds but this was the only one to germinate. If it survives and flowers we will report back. The plant is in a border where the frost falls away and planted near to a thriving *Grevillea* and a couple of specimens of *Astelia chathamica* which are also looking healthy.

Further down the garden in the AGM bed an *Acacia baileyana* has been planted outdoors. We suspect this may be a long shot (and it isn't really thriving yet) but seems worth a try. We have raised two tiny seedlings (nominally 'Purpurea' but only one seedling has purple leaves) which we hope to grow on in our (nearly complete) new conservatory.

There is an Australian section in the restored pavilions at the top of the garden. These comprise three main curvilinear stone pavilions joined by two ridge and furrow sections and the whole is kept heated in winter allowing for a display of tender plants. These were originally built early in the nineteenth century to a design selected by Joseph Paxton. The five areas are each devoted to a separate geographical area with Australia in one of the large ridge and furrow sections.

The planting includes a large specimen of *Acacia baileyana*, astelias, callistemons and so on. However, the Curator, Ian Turner, is continually experimenting with more tender subjects outside and this winter the Medditerranian garden is to be redeveloped, again with representations of different geographical areas and I know he plans to try some plants from south western Australia. Although Australasian plants form only a small part of the plantings in the the Sheffield Botanical Gardens, entrance to the gardens is free and they are well worth a visit.



IDYLLIC INVEREWE

Tom Hart Dyke

APS members where have I been psychedelically transported to? I was deposited in horticultural heaven. Last October I 'escaped' The World Garden together with my dear sister Anya and her fiancé Stephen. My chlorophyll zipped through my lungs replacing north west Kentish air molecules with the energy of zinging fresh, sparkling even, far north western Scottish Gulf Stream endowed

entities. I was encompassed by my first encounter with the iconic fly agaric toadstools; had my coarse tongue subliminally licked the skin of that strikingly coloured yet poisonous toadstool? I whooshed in a further deep rasping lichen breath, scintillating my chilly billy nasal hairs and closed the lids over my horticulturally burning retinas. I was hazily in multiple far flung lands – Tasmania! New Zealand! South America! Upon opening my sedated eyes I confusingly remained in all of these regions: only idyllic Inverewe Gardens in Scotland has this hallucinogenic effect.

Inverewe is 'tropically' endowed, being perfectly positioned to take full plant filled advantage of the strong Gulf Stream influence, despite being further north than Moscow! This 54 acre botanical extravaganza seamlessly blends into the rugged landscape whilst overlooking a saline Loch Ewe bursting with bubbly seaweed. I had heard about the recent unusually low temperatures at Inverewe (-8ºC), and two storms with wind speeds in excess of 120mph in December 2011 and January 2012, so I was anticipating the worst.

However replanting and maintenance had rapidly ensued and there was plenty to satisfy Tom the plant nut who was bowled over by a range of plants from every corner of our green globe. Towering woolly tea trees (*Leptospermum lanigerum*), a splendidly buttressing Tasmanian cider gum (*Eucalyptus gunnii*), countless twisted trunks of the Tasmanian snow gum (*E. coccifera*) precariously spurting from rocky outcrops and endowed with hugely ornate stripy sumptuous bark, and peppery, tongue numbing (should you try chewing it!) *Tasmannia lanceolata*, coupled with a knock-out under storey, a pure stand of *Dicksonia antarctica*. All rushingly brought back delightful flashbacks of my plant hunting Tasmanian adventures from yesteryears.

New Zealand was also well represented with a superb unscathed, deliciously domed, 4m or so high specimen of *Metrosideros umbellata*, the delightfully prickly holly like leaves of tree sized *Olearia macrodonta*, and the similar holly like leaves of the wow factor *O. paniculata* (which has survived in The World Garden with minor damage). All of this combined superbly with the glossy foliage of *Pseudopanax laetus*, a nearby three-trunked *Cordyline indivisa* and natural regeneration galore of *Griselinia littoralis*, all sublimely topped off with an enviable 'sea' of *Myosotidium hortensia* (Chatham Island forget-me-not).

It would be botanically rude not to mention a couple of other stunners that engorged my already chlorophyll shot eye-balls! Hailing from Chile I give you *Fascicularia bicolor* subsp. *canaliculata* that was literally bursting out of the architectural rock faces. This

mound forming borderline hardy bromeliad, with dazzlingly red coloured leaves that are only produced to coincide with flowering, thus cleverly attracting ornithological pollinators, is a beauty. And, not to be too biased towards Chile, my poll position plant without a green shadow of a doubt goes to the half hardy small suckering shrub, *Philesia magellanica*, with irresistibly caressingly waxy sparkling flowers. It is the only member of this monotypic genus which is related to the Chilean bell flower (*Lapageria rosea*).

This is just a snapshot of what is a horticulturally kaleidoscopic National Trust for Scotland run garden that you simply have to visit. For further information on Inverewe Gardens contact (0844) 4932225. Meantime here's hoping for a mild 2012-13 winter!



APS MEETINGS 2012

Judy Clark

June: Abbotsbury Subtropical Gardens

Once you get to Abbotsbury Subtropical Gardens the only direction to go is back the way you came, so you're not going to pass by on your way to somewhere else. But, as the six of us who met up on a cloudy June day discovered, it's well worth making it a deliberate destination.

Abbotsbury's south coast situation, west of Weymouth near Chesil Bank, provides excellent conditions for tenderer species to flourish, being sheltered, sunny and enjoying the warming effect of the sea. It has a long history as a garden. Woodland planting began in the early 1800s and by the end of the century the gardens contained a huge collection of plants from all over the world. After the first world war neglect led to decline but after restoration begun in the 1960s and with much new planting after extensive storm damage in 1990 it now contains a rich selection of plants that prefer Mediterranean conditions from both northern and southern hemispheres, including many half hardy trees and shrubs.

Our visit focused particularly on the southern hemisphere garden (at least until I left, earlier than the others) where we saw plants from, among other genera, *Acacia*, *Eucalyptus*, *Olearia*, *Lomatia*, *Nothofagus*, *Leptospermum*, *Ozothamnus*, *Dianella* and *Corokia*. All were pleasingly arranged and clearly thriving but it was most frustrating that so many lacked labels. One which didn't was the round-leaf tea tree *Leptospermum rotundifolium*, shown on page 31. I think this is one of the loveliest tea trees. The specimen in my garden never really thrived, and died several years ago. Any tips on what it needs to succeed?

For me Abbotsbury had two particular surprises. The first was

not a plant but a bird; would you believe a kookaburra! Some are kept in an aviary near the entrance and you really can hear them call.

The second, which really shouldn't have been such a surprise, was the size of some of the Australian trees. I found out later (from the Tree Register, www.treeregister.org/) that an *Acacia dealbata* (silver wattle) we saw is the tallest in Dorset; in 2006 its height was measured at 16m. (To put this in a wider context the tallest specimen in Britain was measured at 25m in 2010; it grows in County Carlow in Ireland.)

Another tree at least as tall was a blue gum, *Eucalyptus globulus*, identified by John Purse as the subspecies *bicostata*, commonly known as eurabbie (photo page 22). The blue gum, a native of south eastern Australia, is not fully hardy in mainland Britain. Young trees can be identified by their large bluish- silver juvenile leaves but buds or fruit are needed to differentiate between the four subspecies.

August: Cambridge University Botanic Garden

At the APS we seem to have a knack for choosing fine weather for our meetings and on August 19 it was more than fine in Cambridge, it was the hottest place in England. Fortunately we had a cool meeting room kindly provided by the garden. Once the sit down part of the meeting was over, there were forty acres of beautiful gardens to explore. But it was not really the best day to be inside a glasshouse.

The glasshouses were our first stop. These hold plants not only from south west Australia but also the Cape region of South Africa and the Canary Islands, along with collections of tropical rainforest and arid land species. Australian species in the temperate house included a rather magnificent specimen of *Calothamnus quadrifidus* (common net bush) and both *Melaleuca decussata* (totem poles) and *M. lateritia* in flower. I was particularly interested to see the latter, common name robin redbreast bush (the photo on page 31 shows why), as I have grown it successfully (from APS seed) but I have never managed to get it to flower. Leave it in the greenhouse is obviously the answer! Also in flower were *Anigozanthus* (kangaroo paw) hybrids in delicate shades of pinky-red and cream (see photo page 32).

A southern hemisphere, but not Australasian, plant that attracted attention in the tropical palm house was a jade vine, *Strongylodon macrobotrys*, because it was laden with large brown fruits. I had seen this plant before – you don't forget its hanging cascades of stunning jade coloured flowers – but never in fruit. In the wild it is pollinated by bats and it was only once the mechanism was understood that



***Leptospermum rotundifolium*, Abbotsbury**



***Melaleuca lateritia,* Robin redbreast bush, Cambridge**



***Ammobium alatum*, Winged everlasting, Cambridge**



Hybrid Kangaroo Paws, Cambridge

flowers were pollinated successfully in the UK. It seems that CUBG is one of the few places in the UK, along with Kew and the Eden Project, which has the knack of getting it to fruit[1]. The plant belongs to the pea family and is actually closely related to runner beans! You wouldn't think so from the pods.

The jade vine is native to rainforests in the Philippines where it is endangered. Another rainforest plant that attracted attention, this time because no-one could remember having come across it before, was a young *Stenocarpus*, a member of the Proteaceae. The genus comprises about 25 species of which 10 are Australian endemics. Rather stupidly I didn't write down the full name of the CUBG plant but the species most commonly grown in Australia is a native of Queensland and New South Wales, *Stenocarpus sinuatus*, known as the firewheel tree because of its bright red flowers with stamens arranged like spokes in a wheel. If you want to see one, I can only suggest August in Melbourne. *Stenocarpus sinuatus* grows in Maranoa Gardens[2] which is one of Australia's oldest native gardens, free to visit and well worth seeking out.

Other Australian species occupied borders outside the glasshouses. One which took my eye was *Ammobium alatum*, an everlasting daisy. It has white flowers with yellow centres that turn to brown as the seeds form, and the ribs or wings on its stems give it its common name of winged everlasting (photo page 32). I can't recall coming across it before in Britain, but it is listed in the RHS Encyclopaedia[3] so it must be (or have been) grown more widely than in Cambridge. Has anyone any experience of doing so?

In its native New South Wales and Queensland *A. alatum* grows in grassland and open woodland in cooler and moister areas, where it is perennial, but it may grow as an annual in harsher conditions. It has become naturalised in Victoria, Tasmania and the Australian Capital Territory, with the places it has colonised including roadsides[4]. The RHS Encyclopaedia suggests it may be hardy to -5ºC and it has been recorded as a (rare) casual garden escape in Britain[5]. All this suggests a certain toughness, but maybe it is just not tough enough, or maybe it falls prey to slugs and snails, the achilles heel of another everlasting daisy, the superb annual *Rhodanthe chlorocephala* ssp. *rosea*. In any case I hope our seed manager will be able to obtain some seed for the APS seed list so I can try growing it.

Not far from the glasshouse is the Terrace Garden, recently redeveloped as a showcase for the flora of New Zealand. Unlike many Australian plants few New Zealand natives are really showy but many of them have their own quirkiness. I confess to a soft spot for *Raoulia* and *R. hookeri* was one of the plants growing there, a silvery-green mat with tiny straw

coloured flowers. My fondness for *Raoulia* may be partly ascribed to having cracked how to grow *R. hookeri* and *R. australis* in my garden (really good drainage and full sun) but I do find them attractive, especially in flower when tiny groundsel like flowers scatter themselves over the mats. Mystifyingly, to me, the common name of the mat-forming raoulias is scabweed.

Acaena (bidibidi, piri piri burr) I am less enamoured of as those that I have tried have proved thuggish. I still grow the pretty *Acaena saccaticupula* 'Blue Haze' as ground cover but it needs watching. The Terrace Garden has great carpets of *Acaena*, including *A. novae-zelandii* and *A. inermis*. The fruits of many *Acaena* species are spiny and those whose fruits have barbed spines, such as *A. novae-zelandii*, spread very easily by latching on to fur, clothing and the like. Several *Acaena* species have naturalised in the UK and *A. novae-zelandii* is apparently particularly problematic because it likes the same sorts of sites as rarer UK native species, including cliffs and dunes[6].

In contrast, a small *Hebe* covered with white flowers looked very pretty and there was plenty of variety. Among other species I noted *Phormium cookianum*, *Geranium traversii* and *Cassinia retorta* 'Ward Silver'as well as carexes and phormiums.

One area I missed was the Limestone Rock Garden which apparently also contains some plants of Australasian origin, and had we visited earlier in the year we would have seen more species in flower in the glasshouse. For me that's just an excuse to make the trip to Cambridge again.

Notes

1. For more information see www.kew.org/plants-fungi/Strongylodon-macrobotrys.htm

2. For more information go to www.boroondara.vic.gov.au/our-city/parks-gardens/feature-garden

3. Brickell C, (editor-in-chief), 2008, Royal Horticultural Society A-Z Encyclopaedia of Garden Plants (third edition), Dorling Kindersley

4. New South Wales Flora online, plantnet.rbgsyd.nsw.gov.au/floraonline.htm.

5. Clement EJ and Foster MC, 1994. *Alien Plants of the British Isles*. Botanical Society of the British Isles

6. Plantlife, www.plantlife.org.uk/wild_plants/plant_species/pirri-pirri-bur.

BITS AND PIECES

Grandifolium or grandiflorum?

In the December 2011 issue of Pentachondra (number 47, page 34) Peter Kohn wrote that *Leptospermum grandiflorum* had proved completely hardy and was untouched by the 2010-11 winter. His minimum of -3.5C may be responsible for the lack of damage but this is not a very tough species and it is likely that he actually has *Leptospermum grandifolium.* A nursery in southern England with a



The HARDY PLANT SOCIETY

Inspiring the cultivation of hardy perennial garden plants

The Hardy Plant Society encourages interest in growing hardy perennial plants and provides members with information about familiar and less well known perennial plants that flourish in our gardens and how to grow them. This friendly society offers a range of activities locally and nationally, giving members plenty of opportunity to meet other keen gardeners to share ideas and information in a convivial atmosphere. The activities and work of the Society inform and encourage the novice gardener, stimulate and enlighten the more knowledgeable, and entertain and enthuse all gardeners bonded by a love for, and an interest in, hardy perennial plants.

- **Local Groups** - Over 40 Local Groups spread across the UK
- **Specialist Groups** - For those with interest in a particular plant family
- **Seed Distribution Scheme** - Including sometimes difficult to find varieties
- **Shows and Events** - Exhibits at Major shows plus many Local Group events
- **Conservation** - Conserving older, rarer and lesser-known plants
- **Publications** - Colour Journal, National Newsletter plus a series of quality booklets on selected plant families
- **Photo Library** - A wide range of images of hardy plants available for loan

If you are interested in joining us, please contact Pam Adams on Tel: 01386 710 317 or visit our web site at www.hardy-plant.org.uk

large wholesale and a small retail business has for many years sold *L. grandifolium* as *L. grandiflorum*. It is easy to work out which one you have. The very tough *L. grandifolium* has dark green leaves and blooms in late spring/early summer. The decidedly tender *L. grandiflorum* has greyish leaves and flowers in late summer/early autumn.

Jeff Irons

A website with superb photos

Somewhat doubtful about a comment concerning cultivation of *Dampiera* (see Pentachondra issue 47 page 5), I decided to have a look at some websites mentioning *Dampiera* and its propagation from seed. In doing so I came across a blog with some of the best photos I have seen of wildflowers from the Esperance region in WA: http://esperancewildflowers.blogspot.com/. I can forgive the many photos with fingers showing for those without! I suppose that the fingers give a sense of scale and hold the flower steady and upright, too.

Jeff Layman

Callistemon names

The Australian National Herbarium appears to have overcome the *Melaleuca*/

Callistemon/ *Calothamnus* etc. problem by creating a number of sections within Melaleuca. So although the plants are technically *Melaleuca* they can still be referred to by their old names. Incidentally the black part of the name refers to fire blackened trunks and or branches. I've given away all my books but believe the type species is *M. leucadendra*, which was first seen with a fire blackened trunk and white branches.

Jeff Irons

Tasmanian species on the web

Trying to identify a plant that I had been informed came from Tasmania I came across the very useful key to Tasmanian Vascular Plants (www.utas.edu.au/dicotkey/dicotkey/key.htm). It doesn't use technical botanical terms and is accessible by type of plant or by family or genera if you already have some idea of what your plant is. Each choice is accompanied by a photo that illustrates what you need to look for and as you proceed through the key the site keeps tabs on past choices. I found it very easy to use even if I couldn't find the plant I was looking for. Just as well because my correspondent later told me that the plant came from South Africa!

Judy Clark

Seed and plant sources

I recently came across two sources for Australasian species that are new to me. The first is a UK nursery specialising in New Zealand plants and seeds with the same name as its website: www.nzplants.co.uk/.It is based in Norfolk but trading seems to be wholly web based.

The second is an interesting seed supplier, Windmill Outback Nursery (www.australiaplants.com/ index.htm), which is, strangely enough, based in Virginia, USA! I've no idea if they get their seeds from a supplier in Australia (although I would guess that they do), but in any case there is some quite useful information on the site if you browse your way through it; for example a short comparison of Western Australian and Eastern states banksias.

Jeff Layman

Eucalyptus and other nurseries

Over the past few months I've had various bits of correspondence about eucalyptus nurseries. Keith Larkin told me about Grafton Nursery in Worcestershire (www.grafton-nursery.co.uk/kangaroots.htm). Obviously I don't get out enough because I didn't know that their displays at Malvern and at Gardener's World Live both received awards and that the nursery was featured on Gardeners Question Time earlier this year . While the "Kangaroot" tag might be a bit gimmicky I am impressed by the quantity of information provided on their website, including copious advice on how to choose a eucalypt

which, crucially, reminds readers that most of them grow into large trees (if not very large trees).

John Purse told me about Uklyptus (www.uklyptus.co.uk/eucalyptus-home.htm), a company based in Wales. Their website reminds readers that younger plants are more tender than established ones, a comment that reminded me that I'd seen a table on Milligans website (milliganseeds.co.nz) listing first winter frost hardiness for a large number of eucalypt species. However as this characteristic is related to seed provenance in the UK their information should be treated more as a guide. Unless of course you want to grow your own and purchase seed from Milligans (see Pentachondra issue 47 page 26.)

Jeremy Spon wants to know if anyone knows more about Kings Barn Trees in Sussex (www.kingsbarntrees.co.uk) which offers the largest selection of eucalypts of the nurseries mentioned here . I don't; maybe there are readers who do?

Finally I note that all these nurseries use Air-Pots for growing their plants. Such consensus suggests that the resulting plants must be better than those grown in ordinary pots, as claimed (for more see Pentachondra issue 43 page 34).

Judy Clark

Lower Kenneggy Nurseries

For some time Amanda has urged me to visit Lower Kenneggy Nurseries owned by APS member Stephen Mules. An article in *The Garden* of August 2012 also offers a glowing recommendation. Go to www.rhs.org.uk/Plants/RHS-Publications/Journals/The-Garden/Past-Issues, click on Issues, then 2012 Issues, then August, and scroll down to find a pdf of the article.

Judy Clark

Bluebell creeper: what's its name?

The ANPSA website has a useful section on plant name changes[1]. Browsing through it recently I noticed that in Australia the bluebell creeper has had its name changed from *Sollya heterophylla* to *Billardiera heterophylla*. The latter is also the accepted name on Kew's plant list[2] with *S. heterophylla* as a synonym.

Now bluebell creeper has an RHS Award of Garden Merit so I decided to see whether the new name is recognised by the Plant Finder. It is, but *S. heterophylla* remains the preferred scientific name. Delving further, I found that the Plant Finder cites another scientific synonym for bluebell creeper, *Sollya fusiformis*, which I had not come across before. Back to the plant list: it treats *S. fusiformis* as a synonym of *Billardiera fusiformis*, but not of either *B. heterophylla* or *S. heterophylla*. Curiouser and curiouser. It turns out that the underlying issue is whether *B.*

fusiformis should be regarded as a separate species or included within a broad definition of the species *B. heterophylla*. How broadly *B. heterophylla* is defined is a taxonomic judgement, not a matter of right or wrong, but at least in Western Australia two species seem to be accepted with the main difference being that *B. heterophylla* is a shrub and *B. fusiformis* is a climber[3].

Judy Clark

Notes

1. Australian Native Plants Society (Australia), http://asgap.org.au/changes.html
2. www.theplantlist.org
3. http://florabase.dec.wa.gov.au

Illustration acknowledgements

Judy Clark: pages 9, 19 (upper picture), 21 (lower pictures), 22 (top picture), 31 and 32 (upper picture)
John Cole: pages 21, 22 (top picture)
Gary Dunlop: page 10 and back cover
Gordon Hanson, page 19 (lower picture)
Owen Johnson, front cover
John Purse, page 22 (lower picture)
David Ware, page 32 (lower picture)
Wikimedia Commons, page 19 (left hand side)

The editor wishes to draw attention to the fact that neither she, nor the APS are answerable for opinions which contributors may express in their articles; each author is responsible for the contents and substance of their work.

The Australasian Plant Society

Minutes of the Annual General Meeting 2012
Held at Cambridge University Botanic Gardens on 19th August

Members Present:

Tom Hart Dyke – President
Keith Larkin – Chairman
Jeremy Spon – Treasurer/Membership Secretary
Judy Clark – Newsletter Editor
Amanda Kershaw - Meetings Secretary
Dennis Blundell
Tim Darrington
Robin Drodge
Jeff Layman
David Ware

Guest

Helen Silver

1. **Apologies for absence.**
   Apologies had been received from Jeff Irons, Tony Entwistle and John Purse.

2. **Minutes of the previous meeting.**
   These were approved without amendment.

3. **Matters arising.**
   There were none which were not covered by agenda items.

4. **Secretary's report.**
   As the Secretary's duties had been split among various committee members, this item covers comments from both Judy Clark and Amanda Kershaw. Judy reported that in her capacity as contact point for enquiries, she had dealt with the usual questions about plants, but nothing more significant. Amanda asked for ideas for venues for future meetings. Tim Darrington suggested gardens in and around Roscoff in North-West France, and also gardens in Southern Ireland; in both areas, many Australasian plants can be grown outside.

5. **Treasurer's report.**
   The Treasurer reported that the financial situation was still healthy, as shown by the accounts enclosed with the May 2012 issue of Pentachondra. Costs were being covered by subscription income, and our reserves were substantial in the context of our normal annual expenditure. Membership had again fallen slightly, but there was a steady trickle of new members which almost offset the numbers resigning or failing to renew their membership. As of the date of the meeting, membership stood at 116.

   There was as usual some debate on ways of increasing recruitment. The Small Societies Days at RHS Wisley were suggested as good opportunities to promote the Society and it was agreed to investigate this further, with the Spring 2013 day possibly being targeted. Tom Hart Dyke offered to display membership leaflets at The World Garden, and the Treasurer was able to give him an interim allocation. Judy Clark was still aiming to produce a new colour leaflet, and it was hoped that this could be made available to Tom for 2013. Tom also offered to provide a link to our website from the Lullingstone site.

   Amanda suggested Steve Mules of Lower Kenneggy Nursery, who sells many Australasian plants, might also be willing to hand out leaflets.

   Keith raised the question of the scope of the Society, and whether meetings with talks might be more appealing to members. He also appealed for more content for the website, as it was agreed that this was an important and cost-effective way of advertising the Society. He particularly asked for inspirational pictures, and suggestions for places to visit. He would aim to further enhance the website, probably in November, when suitable content

had been received. Other places the Society could be publicised were briefly mentioned - Facebook, and the Scottish Rock Garden Club's online forum. The committee would try and investigate these further.

6. Newsletter Editor's report.

Judy appealed for more contributions for the Newsletter, and summarised the increases in postage costs which had significantly raised the cost of sending out the Newsletter. She asked whether members would like to see more colour photos, but it was agreed that it would be better to have supplementary material, (not just photos, but weblinks etc.) on the website. She would investigate the possibility of using the inside of the Newsletter cover for photos, as this was already printed in colour on the outside. There was some debate on how to get more members to contribute, and it was agreed that more on members' experiences in their own gardens would be particularly welcome.

Judy also announced that she now had a complete set of back numbers of Pentachondra. It was suggested that it might be a good idea to have a full index to articles on the website, and Keith said he would look into this, as well as Jeff's suggestion that weblinks could be given in the form of Q-codes - these would probably be easier to implement on the website.

Judy was thanked by the Chairman for again doing such a good job in producing our Newsletter.

7. Seed-list Manager's report.

Neither the Chairman nor Treasurer had heard from Richard Christmas, so no report was available. It was not clear how many members had ordered seed this year, and the Treasurer also commented that the profit or loss on the Seed List was difficult to determine as Richard had not claimed any expenses for the last two years. Several members, including Officers, had experienced considerable difficulties contacting Richard, which was felt to be unfortunate. However it was clear that the actual seed distribution was still working well, and Richard was thanked for all his hard work.

8. Election of officers.

All the members of the Committee were willing to continue in their present roles. The Chairman proposed that all these officers be elected en bloc; this was seconded by Jeremy Spon, and approved unanimously. David Ware proposed a vote of thanks to all the committee for their work over the last year in keeping the Society running.

9. Next Year's AGM and other meetings.

After some discussion it was agreed to investigate the National Botanic Garden of Wales as a venue; it had been recommended by several members, and Tom Hart Dyke had contacts there who he offered to sound out. Amanda agreed to liaise with Tim Darrington on a possible visit to Roscoff.

10. Any other business.

None.

The Chairman then thanked everyone for attending and supporting the Society, and the meeting was closed.