

IPPS

Sharing Plant Production Knowledge Globally

the Propagator



International Plant Propagators
Society (IPPS) Australia

International Plant Propagators' Society www.ipps.org.au
Australian Region - Newsletter Winter 2015 - No: 46

It was a Great Conference

Memories ... Good Memories, that's what I have from the Newcastle conference. Congratulations to Doug Twentyman and the organising committee.

It was only a few weeks before the conference that we learnt that a severe storm system had affected the conference hotel where most were booked into, and where we were scheduled to have the gala dinner. We all had to find somewhere else to stay. The organising team helped working around this.

David Ponman worked tirelessly driving the bus to pick up people from outlying hotels and get them to the venue as well as driving on the pre-conference dinner and Saturday Hunter Valley tour.

As we drove around we could not but notice the storm damage with trees down everywhere. Some last minute changes to the program were again necessary, but host nurseries graciously accommodated this despite the damage.

The conference started of with a great welcome in the Newcastle

Museum celebrating the past steel-making heritage. Then on the Friday evening local volunteer guides fronted up for a special evening tour of Fort Scratchley built to protect Newcastle and the shipping lanes from war time coastal attack.

The Town Hall venue was great, you just do not often have the opportunity to experience being in lovely historic buildings like this. James Burnett a past Rod Tallis awardee and 6 pack helped out with sound management which was a challenge in this hall.

Conferences are not about bricks and mortar, they are about people. You had to admire the enthusiasm and joy of the Kiwis, who celebrated at the dinner with



the expensive WA wine bought in Wellington 2014. They challenged us to respond by attending their 2016 conference.

I can not remember many conferences where some speakers came with problems looking for solutions and others with answers to them. Now I am really looking forward to Adelaide in 2016 and catching up with everyone again.

Bruce Higgs



THIS EDITION

It was a Great Conference
IPPS Conference Dinner and Awards
Newcastle Conference Papers
Saturday Tours

Pre-Conference Tour
Question Box
IPPS: Who is a Propagator?
Reports
♦President's Comment

♦Executive Officer's Comment
News
Vale Ann Radke
Calendar 2015
Newsletter Editors Comment

President's Comment



Winter has been trying to arrive here with some good rain but long dry periods in between. For us this marks the start of the busy selling season. We have had the busy producing season and it is time to sell for us as our customers mainly want to plant in dry sites. We hope and pray for a wet winter!

There is no quiet time in this industry is there? If you're not flat out selling you're flat out growing.

The Newcastle conference went well thanks to a disciplined effort from Doug Twentyman and David Ponman. They kept it tight and neat with varied speakers and visits – both nursery and cultural. The result was a really worthwhile gathering.

It was interesting to lob into Newcastle and I was curious to see how much damage was on display following the wild weather they experienced in April. Obviously a lot of clean up work had been done and you had to look for damage but some water still lay around in places and some trees were down but being cleaned up. Nurseries suffered some damage and one of them that was originally on the itinerary for our road trip had to cancel. Some damage was still evident at others we visited and there were a couple of "close call" stories of major damage narrowly evaded!

Apart from the papers presented and nurseries visited, I always enjoy seeing the local attractions and learning why it is that people live where they do and not where we do! As it turns out Newcastle is a very interesting part of this big country. I was assured that it is the biggest city in Australia outside of the state capitals.

As always, for me, the best part of the conference was the bit we refer to as "networking". Catching up with old friends, finding new ones and getting to know them and talking industry talk with people who know what they, and you, are talking about. Everyone participated and I was especially happy that we got the auction, which raises money for youth initiatives, back on track. Over \$6000 was raised for these things.

Unfortunately we let ourselves down with youth projects in that there was no one who applied for the South African exchange position this year and there was no Rod Tallis award winner. All members need to be on the lookout for young people who can take advantage of these opportunities in future. Either one will be a great life experience and a boost for their background and for a future in the plant production industry.

Congratulations to Bruce, our esteemed editor, on his selection as our award of honour winner this year too.

We look forward to Adelaide next year. It's been a long time since the conference was held in South Australia. Put the 3rd weekend in May in your diaries now and get the full benefit of your IPPS membership. I'll see you then if not before.

Steve Vallance

Executive Officer's Report

IPPS Office

Executive
Officer's
Comment

**Newcastle
Conference** –

This year saw another great conference. A big 'Thank-you' to all the organisers of this years conference going by the feedback received majority of attendees found the conference informative and they enjoyed themselves. Considering the storm n flood issues only a couple of weeks prior to the conference, the organisers did a tremendous job in reallocating events and accommodation.

Plans are well underway for next years IPPS conference in **ADELAIDE, SOUTH AUSTRALIA**. Make a note of the date for next years conference in your diary now –

ADELAIDE, SA – 19th to 22nd May 2016



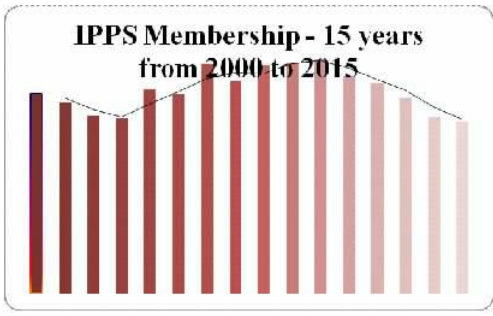
**"FOOD FOR
THOUGHT"**

**Membership
Subscriptions**

2015 A big thank-you to those members who have forwarded payments. A friendly reminder to everyone else, could you please tend to this matter at your earliest convenience. If you are having difficulty in paying your subscription (for

**BANK DETAILS: Bendigo Bank
BSB: 633-000 Account No:
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**If paying by EFT PLEASE PUT
INVOICE NO. OR NAME IN THE
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IDENTIFY WHO PAYMENT IS
FROM. THANK YOU**



whatever reason), please feel free to contact me so that we can discuss alternative payment options.

Australian Membership:

The membership stands at 190 Members (196 this time last year). Included in this are 5 Honorary Members (Ronald de Fossard, Peter and Lois Smith, Tony Biggs and Ian Gordon) and 1 Privileged Member – Marcus Petersen. There is still quite a few Members who have outstanding membership renewals to date and I will now need to follow up on these.

The following Members have tended their resignations for 2015.

Lyn Prossor

David East - May join again at a later date.

There were 8 new members who joined this year (and they are included in total of 190).

New Members are listed below:

- Mr. Zak Iqbal – Highsun Express – Ormiston QLD
- Ms. Lily Yue – China
- Ms. Rebecca Chow – China
- Ms. Julianne Zhu – China
- Mr. Edward Broadley – Broadley Green, Willunga SA
- Mr. Michael Gorman – City of Stirling, WA

The Australian Region Website has recently been updated so that members can sign in with their password and edit their own membership contact details, and view other society information.

IPPS Australian Region Board for 2015 - 2016	
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John Messina (03) 5024 8502	john@sunraysianurseries.com.au <i>1st Vice President</i>
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Luke Dent	luke@walumnurseries.com
Pam Berryman (07) 3829 9454	pjberry@iprimus.com.au <i>CEO</i>

- Mr. Bob Pearce – Pearce’s Nurseries NSW
- Ms. Leanne Scott – Tissue Culture Australia, VIC
- Ms. Michelle Jones – Shanghai Orisis Landscape, Shanghai China

telephone provider recently, please remember to forward your new email address onto me at pjberry@iprimus.com.au or pam@ipps.org.au

Pam Berryman

Change of Address:

To ensure Office records are kept ‘up to date’ it is very important for Members to notify me of any changed contact details. In particular, if you have changed your



IPPS Conference Dinner and Awards



Peter Smith Perpetual Golf Trophy

This year we were told that the classic had a clear winner, and no wonder as he normally plays off a 7 handicap. Tony Van der Staay who had won it for several years presented the prestigious sporting trophy to Frank Munda. As the bar has now been lifted who will meet the challenge next year in Adelaide?



IPPS Pewter Tankard This year John Messina received the IPPS Pewter Tankard from Steve Vallance in recognition of distinguished service to the society.

The **Award of Honour** was awarded to me this year, and this really took me by surprise. Thank you for your support with the newsletter over the last ten years.

Rod Tallis Award Unfortunately was not awarded this year. Please ask a potential applicant now to get their application in, or at the least to encourage some research so they can apply in the future.

Youth Auction

Each year an auction of items is held to raise funds to support youth initiatives. Peter Waugh, supported by our Six pack members assisting displaying sales items, ably encouraged us to spend a bit more than we were prepared for, but all for a good cause. We were impressed with the many items for sale including scarfs hand crafted by Pam Berryman.

This year Tony Van der Staay was successful in securing the IPPS silver plated Felco secateurs. They should look good in the office at Westlands Nursery.

Yates 6 Pack

Frank Munda from Yates Aust. Pty Ltd presented the "Six Pack" of Blake Connal (NSW), Michael Gorman (WA), Andrew Nguyen (WA), Beth Walters (NSW), Rebecca Chow (China), and Megan Blatchford (South Africa). Unfortunately we did not have an Australian exchange person go to South Africa this year, what a great missed opportunity for someone.

Many thanks go to the organisers and Yates our



sponsors of this youth initiative. Members of the six pack are sponsored to the conference, and are selected from a number of applicants. Please encourage some young members of your staff to apply for next year.

Conference Snaps

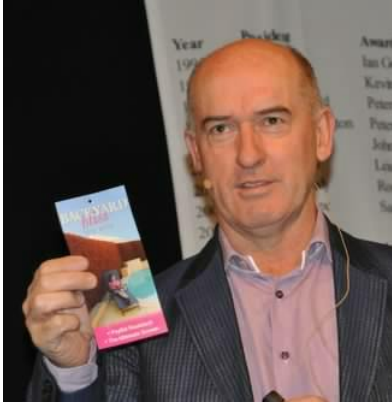
It was good to see that the NGINA Tubestock Growers Group had sponsored Leo Kindermann a young propagator from Gondwana Nursery to this years conference.

There are over 100 photos from the conference on the IPPS Australian Region Facebook page, they help show how great this event was. I hope to have some videos up on the site for some of the talks once I get time to edit them.

Below top; representatives of the Tubestock Growers Group with Leo Kindermann, and 6 Pack Below with certificates



Newcastle Conference Papers



Wes Fleming

Our Key-note speaker spoke about the history of Flemings and their recent changes in strategy with his talk on *“How to Innovate and Invigorate the nursery industry”*. Wes is well known for his involvement and successes in the Chelsea Flower Show. All through he said the plan was to promote the industry, their company, Melbourne and Australia. He now has access to politicians at all levels. He reminded us that we are the best at what we do and we do not recognise how important we are.

Ross Clark known for his contributions to Natspec *“Purchasing Landscape Trees”* and the 2nd edition in 2003 *“Specifying Trees”* spoke about the value of trees and standards as well as the latest Australian Standard in: *“Onwards and outwards – root growth for quality”*.

This was a very interesting paper. A few of the reflections after explaining the value of trees focussed on these benefits only being realised with



successful trees. This involves planning, understanding what the goal is and selecting

the right species for the location, and the stock should be of the highest quality. There was some discussion of J-roots, circling, knurled and girdled roots. *“How much are we costing our customers if we don’t grow trees to these standards?”*

David Moore Research and development manager for HIA (formerly HAL). David brought us up to date with the changes in this paper *“Effects and changes with R & D in the industry”*.



Megan Batchford told us how she changed careers from fashion design to plants. It was through plants that she found a purpose for her life, and now she is studying for a further degree while working for Kirstenbosch Botanic Gardens. She explained her passion for the fragile flora of South Africa, permaculture and organic plant production and ecology.

David Hancock gave an excellent paper *“Towards new nursery industry protocols for Phytophthora control”* with a focus on revegetation work. The potential threat to biodiversity in revegetation by introducing die back from infected stock is the reason for potentially tighter standards in the future. This should involve improved control over sowing of stock from accredited suppliers, improving the accreditation system to current threats, developing soil testing protocols and agreeing and documenting protocols

for business recovery.

Mark Adamson told us he was not an influencer and gave us his insights as to what things could be with his



paper on *“Food for thought – nurseries into the future”*. I liked his metaphor of the British shoe industry that makes quality product at a high price and finds there are not enough trained people around.

At Heritage Gardens they focus on their plants rather than merchandising. He believes that the value of real estate in cities will force many small retail nurseries out and they may be replaced by chains or by pop-up shops in spring or satellite shops with display stock (maybe florists) fed from a central location. In terms of economies of scale and small nurseries he felt that growing plants is relatively inexpensive, it is selling them that is expensive.

Lisa Burton In her talk *“Climate Variability and Risk Management in Nursery Production”* spoke about:

- Climate variability
- Likely changes
- How they may affect nursery production
- How to assess risks and plan marketing
- Where to find useful sources of information
- What some of the opportunities may be.



An important document referenced was the Intergovernmental Panel on Climate

Change Fifth Assessment Report of 2014.

Lorena Ruiz "Propagation from Seed of Three Native Australian Species important for restoration"



with the objective of native vegetation in the Borders Rivers Gwydir Catchment

area of NSW. In ground propagation from seed was considered the most viable method for large scale revegetation. Methods of improving germination for *Eremophila debilis*, *Capparis lasiantha* and *Alectryon oleifoliosus* were discussed.

Sharon Brown took us through the steps in "Revegetating degraded farmlands in northern NSW".



Various solutions to revegetation were outlined along with

the practical problems that need to be addressed.

Jeff and Joshua Cooke from Pot 'n All told us about new possibilities through their paper on "Innovative Marketing Experience". The major innovation discussed was the "Take a Look" app for potential younger generation gardeners. The aim is to



provide information using modern smartphone technology to these gardeners with a low skill base. "Providing information that engages the consumer and focuses on end use is the best way to do this".

Karen Smith from Greener Publishing and editor of Hort Journal



brought us up to date with "Trends overseas". Among other things Karen told us what the fashion

colours would be over the next few years.

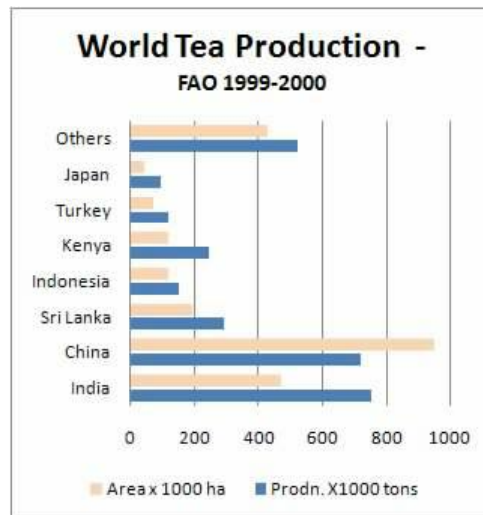
John Robb gave a very good overview of "Green Tea in Australia",



and his paper received the editors **Anita Boucher Award** for best in the conference.

Most of the tea drank in the world today comes

from *Camellia sinensis*. Although green tea makes up a large proportion of this consumption most Australians are used to drinking black tea rather than green tea. Teas throughout South East Asia are regionalised to variety and even species. In Vietnam *C. Nitidissima* is used in some areas for tea. Even though the history of tea drinking is said to be some 5000 years old. It was Robert Fortune from the British East India Company who managed to smuggle seed and cuttings into India 200 years ago. It was however not until rust devastated the Indian coffee crop that tea growing really took off and led to the world wide industry we have today.



Australia only has about 100 ha under cultivation, whereas there is close to 1 million ha in China. Most of the Australian production is Japanese style tea (they are running out of places to grow it in Japan). In China tea plants are grown in undulating to steep valleys, in Japan plots are carved into the land, and in Sri Lanka it grows on cliff faces presenting harvesting difficulties. Chinese Green tea mainly comes from *C. sinensis ssp sinensis* whereas in Japan there are two main varieties of *Camellia sinensis* grown: Yabukita and Sayama Kaori. Others include Fushin, Meiryoku and Oku Midori. They have nice large green leaves and grow vigorously. With high wages here tea needs to be machine harvested and John showed us photos of expensive harvesting and processing equipment. The top 10 cm is harvested for green tea production. Plants are planted in double rows at 22,000 plants per ha. The first harvest takes three years and full production after five. The Australian production is worth about \$500 million of which \$60 million is for domestic use. There are plantations in Vic., NSW, Qld, Tas and WA.

John sees a need for the development of an Australian style of tea which also has some tourist potential. He is developing varieties with different caffeine levels and taste.

Mark Massey from AIS Greenworks presented a timely paper on



“Nutrient Recycling and Copper Fertilisation for Pathogen Control.

Initially he gave the reasons for having a system to

recycle water with lost nutrients. Then he talked about the basics of good site water management practice including regular testing for pH, EC and pathogens.

He then introduced us to the AquaHort® Copper Fertilisation system. After reviewing the pros and cons of various systems this latest approach looked promising especially for Phytophthora control in the nursery. The Cu²⁺ ions generated electrolytically by the system are applied by sprinklers at 0.2 to 2 ppm concentration. The copper ions apparently bind to fungal spores killing them (research work is being undertaken to investigate this). There are modules available to treat water from 3 to 200 m³ per hour. A Hanna Copper test kit (Model HI 96702) is available for monitoring purposes.

David Hancock

David, is an experienced WA re-vegetation expert with a long history of environmental volunteering and conservation committee involvement. David presented “Semi Selective Herbicide Use in Nursery Weed Control” based on trials on weed control using established revegetation

herbicides at low concentration with a permit for off label use in WA.

Warm clean water was used to dissolve granular



herbicides which were made up to 20 litres. These were tested on nine native species growing with weeds in pots in the nursery. Initial trials were with Triasulphuron (*Logran* at 60 ppm) and Metasulphuron (*Brush Off* at 30 ppm) and a 50/50 blend of the two.

Encouraging results were reported with Logran for Flick weed, and Cud weed as well as Liverwort (2 weeks), and the growth of *Bryophyta* mosses was stunted as well as *Oxalis* sp. and *Chamaesyce* species. The Metasulphuron was not as effective and the blend less effective. Small scale trials were recommended with other species of plants and they are intending to look at other class B herbicides and repeat the trials.

Dr Puthiyaparambil Josekutty

Presented a talk on *In-vitro Grevilleas*.



The **initiation (I)** phase uses a variety of media for different species. The problem here is contamination. The pubescent nature &/or

waxy stem is the source of most of the contamination. Successive disinfection with ethanol and bleach works best. Tissue death is an issue with some species and hybrids. Established techniques are available for the multiplication (M) and rooting (R) phases. Acclimatisation (A) is carried out in the greenhouse with fogging, and the porosity of the potting mix is critical. He explained the Propagatability Index (PI) as a measure of the likely viability for tissue culture of a species. Typically the value for a species in demand needs to be greater than 0.7. For some difficult to initiate species this value can be negative.

$$PI = I \times M \times R \times A$$

e.g. $PI = 0.5 \times 4 \times 0.9 \times 0.8 = 1.44$ could be a typical value for a good candidate species.

Matthew Mansfield



Gave a follow up paper on “LED Lighting in Propagation” to the Rod Tallis Award winning paper presented at last years Wellington

conference. For blueberries a 14% improved strike rate from cuttings and three weeks earlier movement from the prop house was achieved. It appears from the trials that although significant productivity gains are possible, a higher production level of initial cuttings was more cost effective than the high capital investment in lights.

Craig Ford from Sappi Forest Products, Shaw Research Centre in South Africa gave a very interesting talk on “Reducing establishment risk by using superior planting stock - Giving our plants the best chance”. Sappi nurseries produce 54 million trees each year comprised of a mix of various eucalypts and pines from cuttings and seed.

Factors affecting plant survival and growth include:

- Genetic variability
- Nursery practice
- Handling and transport of plants
- Time in holding nurseries
- Silviculture practices in field.



One variety of *Pinus patula* hybrid (PPTL) was chosen for the study. Optimum colour, and

length of cuttings and age of plants and balance (ratio of height to root collar diameter) for optimum survival and growth were reported. Small plants do not catch up.

This paper looked at many measurable characteristics of plant morphology and incorporated many of these into a Quality Performance Index (QPI) where better than 60 points are required before shipment. Factors included in this were:

Age (scored out of 20); Summer growth or winter growth maximum scores at 7 and 8 months respectively. Plants older than 8 & 9 months scored 0.

Plant Size (20, 10 max. points each) Height 10-20cm optimum, Balance <80 optimum.

Root Plug Status (score out of 30, 10 points max. for each); plug score - root plug colonised firm not hard with white & brown roots optimum; root spiralling - roots spiral less than half way around outside of root plug; J-roots - less than 90 degrees.

Plant Health (score out of 30); Mycorrhizae - fungus visible on root plug or roots swollen/ branched (5), Leaf Colour - needles deep green (5) green (10) yellow (0), disease - no sign (15).

A newer PQI specification has been developed and training provided to ensure a quality plant is delivered. Have you implemented a scoring system like this for your plugs?

Robert and Jamie Lanarch in their presentation spoke about their passion; Bromeliads – A *fossil rebirth*. The father and son team have spent many years breeding a range of bromeliads at **Bromeliads Australia**. They discussed how they



managed to get through years of poor sales through drought and the GFC and ill health, and looked for other market opportunities beyond supplying chain stores with a limited range. This started on their new plant breeding program for garden centres and florists with plants that had full leaf colour right through the year. Improved sun hardy plants were developed for landscape applications. They modernised their business system using ipads, and focused on service. They left us with the metaphor that as far as a business goes “it is easier to steer a moving vehicle rather than a stationary one”.

The final speakers gave us some Light Bulb Moments:

Peter Ollerenshaw on growing and training *Acacia howittii* prostrate into a much more valuable plant. With less than 10% strike from cuttings this plant is staked and in a year they sell for around \$35 each wholesale.



Photo Peter Ollerenshaw

Clive Larkman talked about simple things to do to save time and increase productivity such as having tubes in front of you when potting up, or already deciding where to cut a you reach for the plant material.

Angus Stewart spoke about taking cuttings from tissue cultured plants such as *Grevillea Robyn Gordon* with induced juvenility to improve strike rate.

David Cliffe after using pepper shakers with sand for seed raised eucalypts, he looked for a better way. He uses a fractionating aspirator to divide seed into four chambers by weight. A needle seeder is then used for seeding into hycos. Uneven germination was addressed by pretreating seed with a weak nitrate solution and seeding into 512 plug trays.

John Messina spoke about the value of sharing and encouragement through a mentor, who pushed him into things he would not attempt. “If you have something to share - just do it.”

John Teulon “Those who fail to learn from history are doomed to repeat it” - often a question would have saved many people a lot of time.

Tony Van der Staay told us how he sold some old weeping cherries in 200 litre bags that he would normally have thrown out. The first year he asked \$120 and sold them, the next \$250 and sold them as well. “What we were selling was time, and people are prepared to pay for it”.

Ed Bunker shared some reflections from the beginning of the society.

Doug Twentyman recounted how he moved from mechanical engineering to Forest Nursery in propagation then as production manager, his own tubestock nursery and TAFE teaching. It was in 1979 at the IPPS Hobart conference that “the light went on” for him.



Saturday Tours

Conference attendees split into two groups for field visits on the Saturday. One group went to the Central Coast region south of Newcastle and group two to the Hunter Valley.

Group 1 Central Coast

Ramm Botanicals

Ryan Weber (owner and IPPS member) welcomed us to their tissue culture nursery. This is a very steeply sloping site which has required a great deal of site works for the various buildings and greenhouses. Tour guides were knowledgeable and friendly, plants great and the catered morning tea was exceptional.

Ramm Botanicals are well known for the range of mainly native plants

they have introduced to the Australian market. It was interesting to see large numbers of blueberries and *Spathiphyllum* as well as a few *Anigozanthos* on tour.

Scotts Tubes

Greg and Candice Scott welcomed the visitors to Scotts tubes and graciously showed us around the site. We were not meant to be visiting them but the nursery we had been scheduled to visit had suffered considerable recent storm damage. With this in mind everyone was very impressed with the size, layout and cleanliness of the nursery and greenhouses. Scotts main customer is the Bunnings chain. As well as ornamentals, and potted colour they supply a large range of herbs including fresh parsley to supermarkets.

Bromeliads Australia

You could not help to notice a few things when we arrived here. One was the special effort our hosts had gone to welcome us with an IPPS display of bromeliads. The second was the amount of effort they had gone to fixing areas of their shade houses that had been storm damaged.

The range and variety of colours of bromeliads on display was tremendous. We started off the tour with an explanation and demonstration of their passion for breeding plants with both interesting coloured foliage and beautiful flowers.

The nursery is a Lanarch family owned business and members from three generations were our tour guides. We all felt welcomed as they explained what they do and what their aspirations are. Having a few bromeliad floral art displays and great afternoon tea was a bonus.

Bruce Higgs



Group 2 Hunter Valley Tour

Albion Farm

After a brief stop at David Ponman's nursery on to Albion Farm 15 acres of orchard including espaliered olives, quinces etc., vegetable gardens and delightful landscaping the star of which was the hand cut and built sandstone bridge lovingly crafted by the property's owner Phillip Redman a retired vet with a passion for nature. There are 16 varieties of Wisteria thriving on the property.



Three related families live in the dwellings on the property including Phillip and his wife Sandy, Phillip's daughter Kate, husband Ged and children. Really lovely hospitable people

On the adjoining river flats is the oldest continuously operating farm in Australia dating back to 1812.

Kate is running a wedding services business in the old barn (circa 1815) and Ged is passionate about producing organic food.

The property suffered severe flooding in the recent deluge and

windstorms that hit the Hunter area leaving Ged with an additional problem of removing the European carp from the main dam.

Ged will be signing up to IPPS and it seems Phillip and Kate may follow.

Hunter Valley Gardens

Winner of NSW Tourist awards and hall of fame in 2007 these gardens were built between 1999 and 2003 by over 40 landscape gardeners, architects and engineers & funded by Bill & Imelda Roche (Nutrimetics Int. founders).

A few facts about the gardens:

- Covers 16 hectares divided into 10 differently theme gardens – Indian, Italian, Storybook, Formal, Chinese etc.
- 6000 trees, 600,000 shrubs and 1,000,000 ground covers
- 500,000 annuals planted each year

Fascinating gardens with something for everyone especially over the Christmas holiday season



when the gardens are decorated with fairy lights.

Tamburlaine Wines

At Tamburlaine Wines Pokolbin this pioneer of sustainable viticulture naturally produced one of the highlights of our tour namely an entertaining friendly joust between our tasting guru Nick (a High School teacher with qualifications in science, music, photography and a unique off beat sales approach) and Clive Larkman. The result: Clive bought 3 cases of wine and left ebullient as ever. Great fun. Pity about not seeing the vineyard's horticultural side but then again a good reason to visit again.

A huge thank you to David Ponman for collecting us from our hotel and driving us around all day.

- Alan Rate (Hornsby Heights Plants)

Trade Displays

As always trade displays are an important part of the conference. Thank you Yates, Hort Journal, OCP and Garden City Plastics with people from Everris for taking part this year.

Pre Conference Tour:

The pre conference tour was from Sydney to Newcastle (it's only an hour up the road).

Eight conference attendees decided to join Dave Ponman (official Bussie) and Doug Twentyman on an interesting tour of the greater Sydney area (all work of course). Well Dave outdid himself, driving through the Sydney traffic on morning one, using all available lanes around the city including metro bus lanes, however we found everyone (thanks to my I-pad directions).

First stop was out to Dural (the heartland of Nurseries in Sydney) with Alpine nurseries and trade market the first stop, we were welcomed by Peter Knox who was pleased to be able to show us around his impressive site, everything from small bulk quantity lines through to super advanced specimens. Alpine run three sites each a stand-alone operation, with the Dural site having a fairly substantial landscape trade market. Peter was leading a great bunch of staff who were very focused on their future and where the business was taking them. As usual we could have spent more time there exploring the whole site, even though we were there for at least two hours.

Next stop was Lunch at Swanes Nursery, a well established business with new owners taking over a few years ago. We were welcomed by Noel Deakin their Production Manager. Swanes are known for their outstanding roses, though a lot more these days are contract grown around the country. Rose wrapping and bunching was all the go, gearing up for Mother's day weekend rush. Also potted shrubs range had expanded since our last visit (2 years earlier) mainly catering for expanding appetite of the Bunnings stores and local landscape market.

Next stop was to catch up with Brent & Scott Tallis of Overland nursery fame, probably one of the smallest growers we caught up with, productions run around 150,000 units, growing mostly 140-200mm pots. Production was geared for Bunnings with quite a lot of forward contracts. A well oiled operation.

Then onward to Gosford for a bed and meal. With an early start next morning we visited a Japanese Garden attached to a community art centre. The gardens where great, but what blew us away was the exhibition of embroidery, it was a combination of machine and hand embroidery from Australia and the United States. More Oohs and Aahs and photos taken here than taken on day one of the tour.

Next stop back up in the hills was Andreasens Green's Mangrove Mountains site. Set on 40 acres of which 25 are under production was quite and eye opener. They had experienced 300+ mm of rain the week before we arrived and so you can imagine the driveways where under repair, though fortunately very little stock damage. An extensive range of plants including 2,000 bags of very big gum trees plus other. Their business is Landscape supply, the city of Sydney is their biggest customer and fussiest.

Andreasens have worked very closely with the new tree specification standards on root and trunk requirements.

Up the road we travelled onto Scotts Tubes, run by brother and sister Greg & Candice. Greg showed us around a very neat and tidy operation.



They grow Herbs (300 varieties), tube stock and flowering potted lines primarily for the Bunnings group. On the side Greg also grows parsley as a fresh crop (photo above) which he sells through and agent into the supermarkets. The propagation house has just had a major upgrade, with new misting heads, double skinned poly, and new aluminium doors, it looked great and Greg was very happy with his results. He had just finished building an extensive new shade/wind protection area to help the growing area. It was a great site.

From here we travelled over the back highways, explored some convict bridges and eventually come across the village of Wollemi. Here we explored the settlement (and of course some of our group had to buy some trinkets) but the rest of us retired to the local pub and tried local ale (except our driver). We then made our way to Harrigans Irish Pub, in the Hunter valley. The Hunter district is widely known for

Photo Pam Berryman



its wine and horse studs, but more importantly the coal mines which have dominated the district for the last 40 years. The mines have caused massive employment problems for small and local businesses. They pay a whole lot more in wages.

Next morning we walked in the back gate of the Hunter Valley Gardens, a privately funded 60 acre display gardens with numerous themes throughout. I have been there on 2 previous trips and it was great to see that the standard had actually improved over the years. The gardens cater for around 200,000 visitors a year with their Christmas light show bring in excess of 100,000 people in December. The themes vary from Formal gardens, to story-book gardens, Italian grotto, Indian mosaic garden, Asian garden, Rose garden etc. we had time limit of 4 hours but as usual it took a bit longer to get everyone out. Whenever you are in the Hunter region make it a date, you will not be disappointed.

From oohing and aahing of the flowers, we then went and had to try a little wine, and then some chocolates and before you know it we heading for Newcastle to arrive at our alternative accommodation (due to storm damage at our original destination). A big thank you to Dave and Doug for getting us there and back. I highly recommend all pre-conference tours.

Tony vander Staay

Question Box

The following question was asked at the conference and kindly answered by Sharon Brown: *What is the current thinking on die back in Eucalypts especially in the New England area?*

New England Dieback: Is it too late?

Sharon L. Brown (PhD Candidate)
University of New England
Armidale, NSW



Dieback in a eucalyptus stand 5 km north of Armidale. Photograph by Sharon Brown

The dieback of eucalypts is a recurrent problem in all states of Australia, but nowhere is its devastating affects more apparent than in the New England region of New South Wales. The first incidence of dieback in the New England was recorded in the 1850's (Reid and Landsberg 2000) with outbreaks getting worse over time, and culminating in a major dieback event in the late 1970's and early 1980's. During this time thousands of hectares of eucalypt trees were lost (Curtis 1990). Chronological aerial photographs and vegetation mapping continue to show major losses of eucalypts. Ecologists from the University of New England estimate that at least 50% of eucalypt trees have vanished from the landscape (Nadolny 2015). The worst affected species are *Eucalyptus nova-anglica*, *E. conica*, *E. caliginosa* and *E. blakleyi*, although a there is a marked decline in most Northern Tableland's eucalypts (Mackay *et al.* 1984).

Dieback is described as a syndrome of tree ill-health (Reid and Landsberg 2000), which typically manifests as progressive dying back from the branch tips, and is often accompanied by a flourish of epicormic growth along the trunk and branches. In the New England region the fundamental causes of dieback

can be attributed to broad scale environmental change associated with land clearing and agricultural intensification (Reid and Landsberg 2000). Probably, the most detrimental change is the interruption of natural hydrological processes, which dramatically modifies the balance of water in an ecosystem. Other stressors, which healthy trees would normally be able to tolerate, such as drought, severe frosts and insect defoliation, act as tipping points from which recovery is not always possible. Tree loss is further exacerbated by the lack of recruitment and the natural senescence of aging trees (Nadolny 2008).

Currently, mitigation strategies are focused on the preservation of existing natural eucalypt stands and paddock trees, and tree planting. Both techniques are critical components of eucalypt re-establishment, however, it is important to recognise dieback as a warning sign of a sick ecosystem. Local history has proven that sick ecosystems grow sick trees, so in some instances, the level of intervention needed to shift dieback-affected areas into a trajectory of recovery is complex. In this sense, simple revegetation techniques, such as tree planting and direct seeding, only address the symptoms of dieback and not the underlying causes. The level of

HAVE YOU ASKED SOMEONE TO JOIN THE SOCIETY RECENTLY?

intervention required is dependent on the intensity of the degradation, which may range from mildly-affected to complete ecosystem collapse. When the damage sustained to ecosystems is irreversible, two courses of management action can be implemented. The first involves complete ecosystem restoration beginning from the ground up. Stock exclusion and reinstating water balance and soil condition would be important initial steps. The ultimate aim is to recreate an ecosystem that is resilient and self-sustaining in terms of its structure, function and species composition (Lake 2013).

Sometimes modified ecosystems require modified approaches to restoration. The novel ecosystem in an example. Novel ecosystems are composed of different combinations of species, and function differently to historical ecosystems (Hobbs *et al.* 2009). They are a useful management tool in cases where the existing ecosystem has been so dramatically altered that it is not possible to return it to its natural state. With appropriate planning and research, novel ecosystems can be designed to tolerate locally changed conditions and predicted changes associated with climate change.

The synthesis of research into the various competing and compounding hypotheses for tree decline in the New England region brings us to one clear conclusion. Ecosystems are complex, dynamic and interconnected systems that are impossible to compartmentalise. New England dieback is clearly a multi-dimensional problem that requires further detailed study. Future remediation must focus on the main triggers of ecosystem decline. Ultimately, however, success will depend on absolute commitment and support from governments, NRM corporations, practitioners and landholders.

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IPPS: Who is a Propagator?

Quite often when you ask other growers why they have not joined the society they say “but I do not propagate plants these days”. I know that this or something similar has been the response a few times this year, and usually the person I was speaking to have had a misconception about the society.

Did you know that the society logo was changed a few years to take into account the broader use of the word “propagation” meaning the growing of plants? That’s why it is now sub-captioned “Sharing Plant Production Knowledge Globally” .

The Societies International website describes the mission as:

“The *International Plant Propagators’ Society (IPPS)* is an

international association of plant production professionals whose primary mission is to advance the art and science of growing plants, and to disseminate knowledge throughout the global community from and to those engaged in plant production.

Membership includes those with an interest in ornamental horticulture, vegetable and fruit plant production, floriculture, silviculture, plantation crop production, amenity horticulture, and all other fields related to the production of plants for public use.”

So bearing this in mind society membership should cover all facets of horticulture, even though in Australia at present membership primarily comes from ornamental horticulture.

The exit surveys of most of our conferences usually agree on the food being great, the talks worthwhile and the tours being of great value. But for most these meetings provide an opportunity to openly talk with other growers and meet up with old friends. The same can be said for our smaller regional meetings held across the country in-between conferences.

The conference this year in Newcastle was excellent, with speakers from a variety of fields; tours that catered for diverse interests; and great food at picturesque venues. Attendees came from a diverse range of horticultural fields and countries, reflecting well the broader appeal of the society to horticulturists. The annual

“Proceedings” book also reflects this with great practical information across the field of horticulture over 50 years.

At times the field day visit may not be to a plant nursery, never-the-less I have still learnt things from other related industries that often share similar problems and perhaps have different solutions. Sometimes this may be a simple instruction to staff or the way things are organised. In a broader sense these opportunities give you the ability to benchmark yourself against the best in your industry or a related one in Australia or overseas.

That is why IPPS is a worthwhile society for all involved in some aspect of horticulture to join. So next time you ask someone to join, be prepared to tell them the society is bigger than the name may suggest, and it really is for them.

Bruce Higgs

News

Vale

At the conference we sadly marked the recent passing in April of one of our well known members; Ann Radke. We wish to pass on our condolences to her husband Peter and their family.

Ann Radke started her working life as a high school science teacher, but always had a passion for the environment, bushwalking and native plants. So some 30 years ago she and her husband Peter decided to leave teaching and pursue their passion for native plants full-time.

“They established and operated Yuruga Nursery and its recent subsidiary, Clonal Solutions Australia in the Atherton tableland of Qld. These have become centres of expertise in new plant production for applications in tropical countries worldwide.”

Yuruga Nursery was known for its expertise in Australian tropical plants. “Since establishment in 1985, Yuruga has introduced over 1,000 tropical native plants into horticulture.” The nursery is accredited to Industry Best Practice standards (NIASA) and was awarded “Grower of the Year” by NGIQ in 2002.

With a *B Sc. (Hons) in microbiology* from Univ. Qld. and *Advanced Diploma in Horticulture* Ann was well placed to start a tissue culture laboratory. “Clonal Solutions Australia won the 2014 TNQ20 Tropical Innovation of the Year award for their work with elite genetics in crops in agriculture, forestry, biofuels and horticulture.”

Ann was recognised for her contribution to horticulture with many awards including:

- Rural and Remote Manager of the Year *Australian Institute of Management (AIM)* 2005
- Rural Woman of the Year Qld State Finalist *RIRDC* 2006



- Nursery Person of the Year *NGIQ* 2007
- As well as IPPS conference papers, publications include:
Growing

Australian Tropical Plants (*Frith & Frith*), 1993.

Newsletter Editors Comment

I would like to thank everyone who has contributed to the newsletter over the years, and acknowledge my appreciation for the Award of Honour I received at this years conference. It is a real privilege as I have learnt so much from being a member as well as meeting some great people.

The Newcastle conference was great. I feel I should also thank the many contributors of photos for the slide show I put together, and also the sponsors whose contributions were recognised at the conference.

If you are not already a member join up to the region’s **facebook site** - search for “**International Plant Propagators Society (IPPS) Australia**” and start contributing by “liking” it and posting. We now have over a hundred likes.

On the Facebook page we try to cover recent trends in horticulture both locally and overseas. There are a number of photo albums of events as well as video footage from Australian and other regions.

Don’t forget that this newsletter and many past copies are available on the IPPS website at www.ipps.org.au

Pass your extra printed copy of the newsletter around at work.

Bruce Higgs - editor
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2015 IPPS Diary

Japan Region	September 19 - 20	Maebashi Town, Gunma Prefecture
Western Region	September 23 - 26	Modesto, California
Eastern Region	September 25 - 28	Cincinnati, Ohio
European Region	October 7 - 9	Exeter, Devon, England
Southern Region	October 10 - 14	International Tour and meeting Tampa, Florida