



aih journal

#1/19

Features;

Interviews with The PlantHunter, Georgina Reid and student, Jarad Hicks
Practice works: excavation
WA: Waterwise and wildlife
Other news: Michael Casey on Horticulturists Tackle environmental Challenges



Michael Casey, AIH President

President's message;

Dear Councillors and Members,
What a great first quarter to 2019 with so many events and networking opportunities as well as new initiatives being continually added to the many benefits of being an AIH member.

In the last 3 months the Institute has represented members and promoted horticulture at the Perth Garden Festival, Melbourne International Garden Show, Plant Collectors Fair, Brisbane Garden and Plant Expo and the Singapore Horticulture Show just to name a few.

Our 'Walk and Talks' are extremely popular and providing members, friends and colleagues an opportunity to catch up with like-minded people while walking around a beautiful garden.

Our workshops are held around Australia with great success and I thank all the convenors for their hard work in both organising and



running these events. Very shortly we will be running our popular Taxonomy workshop in all states around Australia so please look out for news of these dates and locations.

I have recently returned from Singapore where I attended the Singapore Horticulture Show alongside fellow members Alan Bunnell MAIH (Vice President) and Dr Kate Neale AAIH where we all presented talks on the main stage at the Horticulture show alongside AIH Singapore Convenor John Tan MAIH. A big thanks goes to John for making this happen and for NParks for hosting us over the opening weekend. The show was a great success and one that should be placed in your calendars if you ever wish to visit Singapore.

By now you will be receiving your membership renewal notices and you may notice that Australian Distance Education has kindly donated a \$30 voucher to be used at their online bookstore. This promotion is for full membership renewals and is a very generous offer from John Mason and his team. I would like to thank John personally on behalf of all renewing AIH members and direct our members to John's business if they are interested in any online courses. Thanks John.

AIH are continuing to make great connections with other horticultural companies and we hope to be able to offer our members some great incentives and deals with these new contacts.

The Council are now starting to receive nominations for the upcoming awards night to be held in Perth. Let's continue to send through nominations for jobs of our own or colleagues or maybe nominate someone who has excelled in horticulture in other ways.

The upcoming conference is taking shape and I have been lucky enough to see the current line-up for the speakers at the event and am quite excited about what will be showcased on the day. Our National Council led by Neville Passmore are working hard on this event and I thank them all for their work to date. Check out the website for more details and look out for emails detailing the line-up and other announcements.

And last of all our new AIH quarterly journal will be out soon and is full of horticultural stories, interviews and other relevant information. A big thanks to our Communications Manager, Tempe Macgowan, for her hard work.

I look forward to our National Council releasing more information over the next month regarding new events, networking opportunities and other horticultural news.

Regards,

Michael Casey

New look journal;

We have an ambitious new program for the newsletter and journal this year. The newsletter and aih.journal, have new formats. The newsletter is a more hands-on practical resource and the 3 times a year journal will be content-driven and practice-based so that you can build a resource for future reference. The journal will have longer articles, links and pieces by affiliated/ associated groups.

Ideas and articles from members will help us guide the newsletter and journal forward into 2019 and beyond. Contributions welcome now for the monthly h-news and h-journal coming out in April, August and December 2019.

Communications Manager/editor, Tempe Macgowan

Feature interview; The Plant Hunter, Georgina Reid

AIH award winner , Georgina Reid's blog, the PlantHunter has a broad appeal. Her passion and philosophy about the power of plants is now seen in her new book.

How and why did the PlantHunter evolve and who selects the stories/ contributions to each issue?

GR: I launched The PlantHunter in 2013 after a decade of working as a landscape designer in Sydney. Prior to studying landscape design, I completed a degree in journalism at university. The publication arose as a result of many years of working with and thinking about ideas of connection between people and plants, I realised I had a lot of questions and thoughts around the importance of this relationship.

I was keen to write more about people and plants. but the ideas I wanted to explore didn't fit into existing publications. So I decided to start my own. The focus of The PlantHunter has always been about highlighting the importance and value of the natural world, using the subject of plants and the setting of the garden as a framework, as an entry point to larger conversations.

The PlantHunter is a purposefully small operation. I am the editor, and I write around half of the content on the site, whilst being supported by various talented writers and photographers. Each month we explore different content themes. These help to frame the stories and provoke new and interesting perspectives.

Can you make some suggestions to horticulture students/younger HIA members for when they go into the workforce?

GR: Horticulture is a wonderful industry. It's the best. There's a real passion to be found within people working with plants. It's incredibly nourishing work.

One of the biggest issues in getting younger people involved in the industry is money. Whilst it's very rewarding work, it's not easy to make a living, particularly when just starting out. I was speaking with a manager from a large wholesale nursery recently



Horticulture provides an infrastructure for caring for the world around us

and he told me they have a very hard time recruiting young apprentices because of competition with other trades that are paid better.

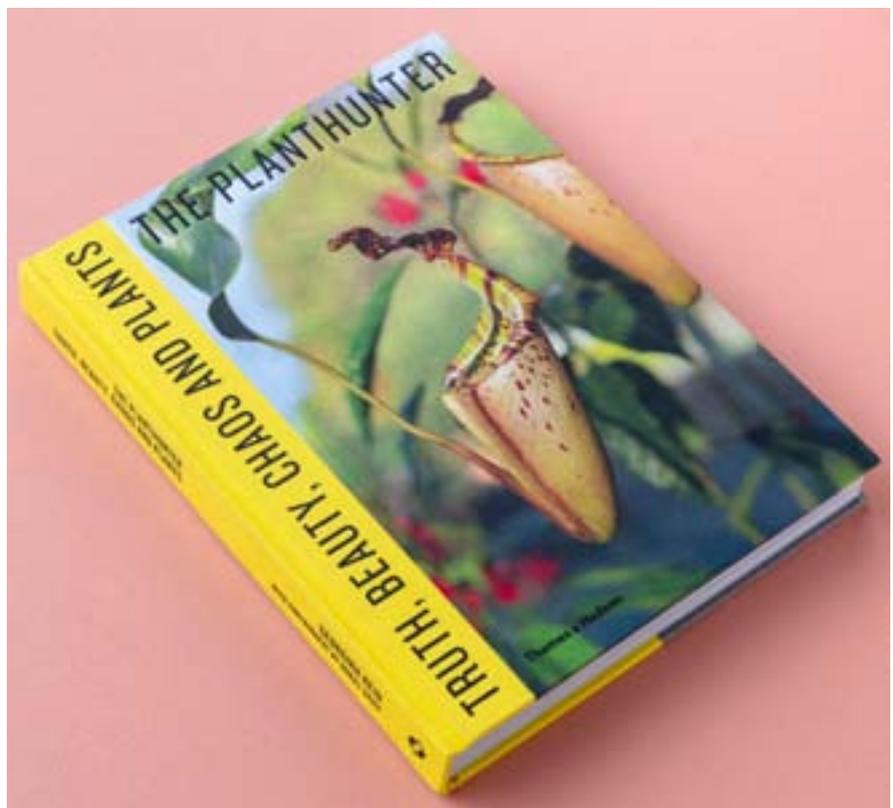
Money is an indicator of how much something is valued, and it's fairly clear that our society doesn't value plant people enough, though in my eyes, there's few more important things to be doing than stewarding our natural environment.

What are your burning issues for horticulture and the field in general?

GR: Horticulture provides an infrastructure for caring for the world around us. I think that in the future landscape architects and horticulturists will be increasingly valued as people who can help heal, grow and sustain landscapes in the face of increasing challenges relating to climate change and environmental degradation. I would love to see the horticulture industry positioning itself as a valuable and important solution to the challenges ahead.

Can you tell us about your new book?

GR: The PlantHunter: Truth, Beauty, Chaos and Plants is a combination of the five years I've spent exploring ideas and connections between people, places and plants in The PlantHunter. I guess the book is a refinement of my ideas around the importance of the garden as a place of dialogue between humans and nature. It, too, was important to capture the immersive nature of The PlantHunter website and imagery, and for it to be a stand-alone object.



The book is essentially about what it means to garden. It comes down to two words: care and action. The gardener not only cares, but commits to act, on behalf of the natural world. The



gardener cares in a way that is really important. Overall, the book is a re-imagining of gardening – to me, it's not simply as a set of tasks but a really important. Overall, the book is a re-imagining of gardening – to me, it's not simply as a set of tasks but a framework for engaging with the world, grounded in care and action.

The PlantHunter digital platform is too a garden. It's about growth and care and integrity. Nothing I do is about anything other than this. The PlantHunter is driven by message, not ego.

Georgina was interviewed by Tempe Macgowan

Interview; Jarad Hicks

Jarad Hicks is 32 years old. He has always had a keen interest in plants and garden design but his journey to get there is an interesting one. After completing the HSC in 2004, Jarad went to university and graduated with a double major in International Business and Economics in 2010. After two years of working in banking he set up a transport business with his father which he left in 2016. In 2018 he finally started employment in a Landscaping firm and, "discovered that landscaping is a vocation within the passion of gardening".



Jarad you are studying Structural Landscaping at TAFE what benefit are you getting from it?

"It creates a structure in which the workplace learning makes sense. This said, I am frustrated with the pace of teaching which seems to be rigid. If I was to change it, I would offer self-paced options and recognition of workplace learning".

Through AIH you have been aware of the Global Gardening Trust De Wiersse scholarship, what has happened?

"I submitted an interest and have been interviewed for it. I have been told that I am amongst the top 3 remaining candidates. I am excited at the prospect of participating in this very interesting project".

To know more about the Global Gardening Trust go to:

<https://www.globalgardeningtrust.com/>

You are an AIH student member, how do you see AIH?

"I see that AIH has created a higher professional standard to aspire to in the industry. I have enjoyed the workshops. They are reasonably priced for a student and the information mornings and walk and talks have open my eyes to a greater network of horticulturists and business opportunities now and in the future"

Jarad was interviewed by Patrick Regnault Registered Horticulturist RH0062 MAIH

New technology; blockchain technology and

This is the link to an article on blockchain applications to the horticulture industry by Gabrielle Stannus MAIH originally written for the NGIA.

Visit: https://www.ngia.com.au/Story?Action=View&Story_id=2519



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Horticulturists tackle environmental challenges

By Michael Casey

What is the role that horticulturists can play in responding to the biggest issues we currently face? Environmental issues such as climate change, urban heat impacts, soil loss and degradation, and water security risks are now urgent concerns for all societies.

The expansion and densities of urban environments are presenting us with newly required skill sets, and challenges in landscape design and implementation along with the materials that will now need to be available.

These changes in built-up environments deliver a handful of environmental and physical issues such as minimised areas where plants can grow, stored heat in buildings and roads, and altered micro climates, to name a few.

Food security will remain an issue with the expansion of cities and urban sprawl taking up valuable agricultural land. Our reliance on outdated farming methods and increased food miles will also open up opportunities for farmers to embrace urban farming, but to what extent still remains to be seen.

Therefore, the question regarding the role of horticulturists and to what extent they can assist in these areas of environmental decline and change are starting to be identified, and still in many cases, not yet discussed.

The Anthropocene is a new geological era in which human activity is the dominant influence on our climate, the environment, food and agriculture systems and even history is being written into the landscape. These challenges present opportunities for ornamental and production horticulturists, now and in the future. As our cities continue to grow it will require the participation of professionals in all fields, to design and deliver these complex projects.

Architects have a wonderful ability to adapt to this change through their designs and visions for our cities. Town planners can lay out cities and suburbs, allowing

for all the infrastructure required to keep its inhabitants moving around seamlessly. But there are large vacant positions that need to be filled by horticultural experts who understand these landscapes and environments, and can apply their knowledge of plants, design and management to help complete the new vision of our cities, and address the challenges that this, and the changing climate brings. The greening of these buildings, suburbs and cities is not easy and each project is different for a number of reasons, but the fundamental skill required is the knowledge of plants and their capacity to be grown and to survive.

Horticulturists from all sectors, can provide the expertise/ links to achieving overall green success in the urban built environment.

In Victoria, Frasers Property group are developing the old Burwood Brickworks, located east of Melbourne, into a new residential, commercial and retail development (mini suburb) that is aiming to achieve the Living Building

Challenge, which is regarded as the world's most rigorous building framework. It is set to deliver manicured gardens and landscaped open spaces, tree lined pedestrian greenways, interior-scapes throughout the shopping and dining precincts, and a rooftop urban farm that will deliver a true 'paddock to plate' service. All while delivering the most sustainable and liveable community promoting long term health and well-being to its thousands of visitors and residents.

Assuming the above-mentioned example will become the normal process of building and developing our suburbs and cities into the future, then a new set of skills will be required to achieve these design considerations, not only to plan and build, but to also maintain and continue the survival of urban green spaces. Horticulturists from all sectors, whether it be production, ornamental, design, construction or arboriculture can all provide the expertise/links to achieving overall green success in the urban built environment.

This coming September, Australian Institute of Horticulture will be hosting the biennial conference in Perth titled 'Horticulturists and Humanity: responding to the biggest challenges we face'. This conference will be a one-day event exploring and discussing themes such as cooling cities, urban foodscapes, soil health, plant sciences and how we, as horticulturists, can play a role in responding to these issues.

See aih.org.au for more details.

Michael Casey
President
Australian Institute of Horticulture
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Practice notes; are our excavation standards fit for horticulture and landscape works?

When horticulturists do landscape works, excavation is often necessary. In many instances though we find the site already excavated and soil stock piled. This may have been done by cut and fill or from moving soil around the site to create a different land formation.

Cut and fill a problem that needs to be looked at

What usually happens to a cut and fill site? The excavated material is piled up on site irrespective of its natural layers. The top and sub soil layers are either mixed up or more often, the top soil is moved first to the bottom of the fill with the subsoil ending up at the top. This will create drainage problems for the cut as well as for the fill side if it is replaced in this way.

On the cut side, if vegetation is required, the root system will struggle growing into a highly compacted and waterlogged soil which will result in higher plant mortality. On the fill side, the fill has been deposited on an unripped existing soil will create an impervious layer. The new soil medium resulting from the excavation, will bring the issue of plants having to make roots straight into a soft soil where large air pockets may have developed. Another problem occurs when the newly planted vegetation roots become exposed as the soil settles.

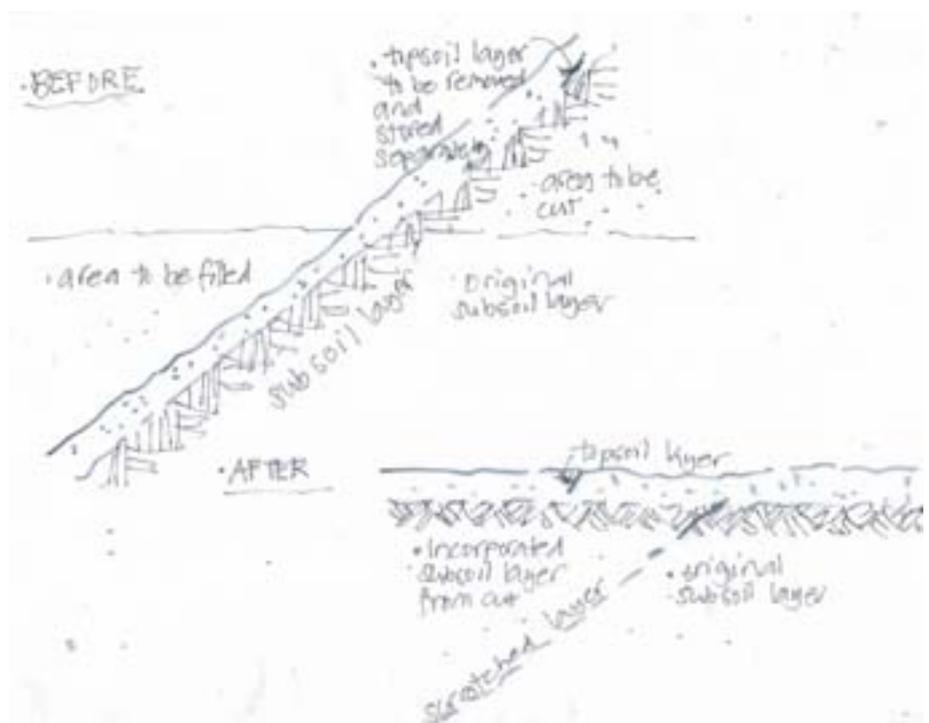


Diagram showing best practice for cut/fill placement

Shaping the land

When we are excavating soil for our own landscaping purposes we can have more control in how to proceed. We can separate the top soil and subsequent layers and, if creating a mound for instance, use the excavated soils to match the natural order of soil formation.

Looking at improving standards

In Australia, there are standards that apply to subsoil drainage but none to subsoil itself. In the UK, a new standard for subsoil (BS 8601:2013 Specification for subsoil and requirements for use) has been developed by BSI and supported by WRAP (Waste & Resources Action Program), British Society of Soil Science, the British Landscape Institute as well as several other organisations.

Cut and fill is a regular practice in construction in Australia. It is time that councils, architects, builders, engineers and the landscape and horticulture industry work together in a concerted manner towards a greater understanding of soils. This will ensure greater plant survival, better drainage and overall landscape result.

Patrick Regnault Registered Horticulturist RH0062 MAIH



Photo of cross section through a 'cut'.

A Waterwise wildlife garden

How to start a new garden that's both waterwise and wildlife friendly

A waterwise wildlife garden-selecting plants for Perth's unique soils and climate (linked to Activity 3 Boorna Waaginy, Rewild Perth).

This is a condensed version of Neville Passmore's February 2019 Blog.

Why waterwise?

We live in a harsh hot spot and water is a precious resource. I believe the Water Corporation WA is doing a great job in matching demand with supply. They are "the principal supplier of water, wastewater & drainage services to over 2 million people in Perth and WA". Perth is transitioning from a dependence on dams and underground aquifers as the prime water supply, to desalination and aquifer recharge/groundwater replenishment because of climate change. They have a 50-year plan to secure Perth's water future supply which is at a large financial cost. **Visit: <https://www.watercorporation.com.au/water-supply/our-water-sources>.**

Part of the strategy is to reduce consumer water use by consumers. The "Low Maintenance Garden" is one response to both water and time shortages. 'Low Maintenance' is perceived as a no maintenance garden. No maintenance is a myth, as even plastic plants and lawn need dusting or sweeping occasionally.

So is there a legitimate form of low maintenance gardening? I believe there are two successful approaches that can give you an attractive garden with a minimum of hard work. Planting out small pot local area native plants with a couple of advanced trees or shrubs can give you a mature feel and still bring the benefits of reduced water and fertiliser applications. The locals are brilliantly adapted to local climatic conditions.

A second approach is by planting succulent plants most of which are exotic but now we are seeing an increasing selection of Australian succulents available in garden centres and have low water demands. Succulents can be planted as mature specimens and this helps to give a garden a less raw feeling. They too can be planted in autumn and winter and left to self manage with low moisture requirements.

Why wildlife friendly?

The world is in the throes of the 6th mass extinction and WA is particularly vulnerable to species loss due to the finely tuned flora and fauna that share our ecosystem. One of the great lessons that we have learned, in recent years, is that every living thing is connected through a complex web of biodiversity. Nowhere is this more revealing than through the DNA based counts of soil life organisms where the complexity and sheer numbers are difficult to comprehend.

When we plough soil, for example, we assist the oxidation of the humus layer. This can have a devastating effect on the soil life which in turn affects plant growth and all the organisms that use that plant as food, shelter or for nesting.

Plants labelled as “Australian natives” confuse many gardeners

Hand in hand with the general reduction of suburban block size, has been a reduction of trees growing along back fences. This is making new suburbs wildlife no-go zones which impacts microclimates and ecosystems. On the other hand, we are facing infestations of midges, flies and mosquitos. Birds, spiders and micro-bats exact a terrible toll on these nuisance insects. Micro-bats, while virtually unknown, exist in most Perth suburbs and can consume thousands of mosquitos in a single night. As a result of habitat loss these tiny flying mammals need assistance with breeding boxes. The benefit of encouraging these tiny nocturnal mammals back into our suburbs is a reduction of mosquitoes in particular.

What can we do to help to bring wildlife back into our suburbs?

There is no doubt that the leading contenders to help attract wildlife is by planting the plants that grew originally in your area. A good starting point is to go to your local council all of which have lists of indigenous plants list. Specialist native plant nurseries can help with the sourcing of these plants.

Local plants, once established, can survive without summer reticulation and high cost high analysis fertilisers. Small plants planted with autumn and winter rains can survive without irrigation, take root and slowly get growing.

Plants labelled as “Australian natives” confuse many gardeners as there is so much diversity of microclimates. Plants from cool climate rainforests in Victoria or alpine plants from Tasmania or even tropical plants from Far North Queensland are unsuited to a full sun position in a Perth garden as exotics such as hydrangea, cyclamen and azalea.

In contrast to deciduous trees from the northern hemisphere, rely on wind for pollination, whereas Australian trees are almost entirely pollinated by other organisms including insects, birds, moths, even marsupials. One local small tree wattle the Coojong Wattle (*Acacia saligna*) is known to support 130 different species of insects, which in turn become food for a wide range of birds and other local animals including lizards.

What do wildlife want in order to come into your garden?

Essentially this consists of food, water, protection and nesting sites. For example, if you wish to attract the Carnaby’s Cockatoo, a critically endangered WA bird that needs urgent help, there are a several plants that you can grow. There are different native hakeas that have large woody fruits that offer food sources for the black and white feathered cockatoos.

In our garden we have a large pecan nut tree in the back garden. The cockatoos monitor the crop with daily visits until the nuts are ripe. Then the whole mob descends on the tree over a couple of days when they strip the fruit and tip-prune the growth leaving an almighty mess on the grass below (see above). If we collect





Cockatoos feeding on nuts

five percent of the total I would be surprised but we're happy to share the bounty for the privilege of seeing these magnificent birds close-up. Planting other nuts including almonds and macadamias can also give these cockatoos a feed.

Frog -friendly gardens need seasonal access to water such as a pond. Predators are likely to be around so we need to build in protection in the form of ground cover plants that can also include some spiny low shrubs such as the Prickly Moses acacia. Predators can also exist in the water such as Koi fish which are frog predators.

We have one under a tree and this is a has become a meeting point for all manner of birds, even though it' one species at a time.



Tadpoles in a fishpond

If you are planting shrubs and trees with the goal of attracting nectar-feeding birds, the best approach is to aim for diversity. Here is a cautionary tale of giving birds too much of a good thing.



Garden bird pond

With the arrival in WA of a selection of tropical grevilleas, such as 'Robyn Gordon' which flower all year round, nectar-eating birds such as the local, New Holland Honeyeaters and wattle birds, were presented with a never-ending feast. When the birds started showing signs of poor health an investigation found that these were niacin deficient. Instead of visiting many different nectar sources across the seasons they were honing in on the year round flowering grevilleas. So the message here is to reduce the number of tropical grevilleas and plant a range of local types instead.

How do you prepare your soil for planting a waterwise garden?

Most soils in Perth consist of low humus, infertile, free draining sand. Adding compost is the best way to add life to these soils. Dig a hole twice the width of the pot in which the new plant is sitting. Take the plant from the pot and examine the root system. If you can see a pattern of horizontal roots circling the potting mix it's important to stop this patterned root development. To overcome this problem cut through the roots using a knife and working from top to bottom.

Next use the empty pot as a measure and fill it twice with quality compost, then mix this into the backfill soil. Use this mix to surround the root ball. I recommend making a saucer shaped moat around the plant to hold water. Next water the plant in well, give it a few minutes to soak in then give it another drink.

It is a good practice to cover the soil with a mulch to a depth of 50 to 75mm. This helps to hold precious moisture close to the root system of your new plant. Avoid adding any fertiliser at planting time, as there is a danger of burning young roots. My approach to feeding is to regularly apply and organic composted mulch to maintain the 50 to 75mm depth. This might mean a couple of applications per year. Composted mulch breaks down and eventually forms humus in the soil. This is of great benefit to soil living organisms the real drivers of plant growth.

Neville Passmore. Registered Horticulturist RH0060

Project review - Park Road Boardwalk, Noosa Council



This is from Noosa Council's Project News, April 2018.

Noosa Council has started work to replace the 420m section of the Park Road Boardwalk from Little Cove to the Noosa National Park entrance.

Project Summary

The upgraded section of the Park Road Boardwalk is anticipated to be an iconic experience to any visit to Noosa. Key features will include:

- pathway widths ranging from 2.5 to 5m
- expanded viewing platforms
- decking with unique accoya timber - a sustainable modified wood
- decking eventually grey to blend into the environment
- Interesting seating and resting stops at the key viewing sites
- significant trees incorporated into the boardwalk
- improvements to existing stairway access
- unobtrusive LED lighting.



Photographer Juanita Bloomfield. courtesy of Noss Council, QLD.



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A long term member receives an OAM



Paulene Cairnduff OAM

Paulene is one of the garden gurus on the gardening radio program in Canberra but that is only a very small part of her role in horticulture.

Paulene spreads the word on the benefits of gardening and helping anyone who was interested in gardening. She works in her own garden, in community gardens and is a member of many garden clubs in the region. Paulene was a long standing committee member for Open Gardens Australia which she also co-ordinated with a committee and successfully ran the plant fairs.

Paulene is a wonderful ambassador for horticulture and the lifestyle gardening brings to people. All we need is her energy and vision to see what can be achieved.

A well-deserved award to horticulture and gardening.

The new Communications Manager/editor



Formerly I worked as a landscape architect/urban designer mainly in the public domain on such projects as the redevelopment of Hyde Park, Sydney and the Tree Master Plan for Centennial Park.

When working in the UK in the 1980's, I was encouraged to write for the British Landscape Institute's newsletter and did reviews for them and Landscape Architecture Australia. The idea was always with the intent of fostering a broader involvement and interest in design and environmental values.

From there I kept writing for professional, and later commercial, architectural and design magazines and even writing a book on the work of Vladimir Sitta. Alongside writing, I was involved with the AILA as President (1995), doing PR work for conferences and other smaller professional groups such as the HCA.



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