What’s growing on?
Nursery Industry Video
FACTS AT A GLANCE
THE AUSTRALIAN NURSERY INDUSTRY

The nursery industry is a significant contributor to Australian horticulture.

It is currently valued at approximately $2.4 billion and employs up to 25,000 people across 1,651 production businesses. The nursery industry continues to grow and thrive, as does its contribution to the nation’s economic, environmental and social wellbeing.

Growers operate from all corners of Australia and produce a variety of greenlife: from ornamentals, trees and shrubs, as well as starter plants for fruit and vegetable production and stock for landscaping, forestry and revegetation.

The latest results from the Nursery Industry Statistics project show the value of the nursery industry grew by approximately 5% over the past two years, due to increased demand for greenlife and strong grower confidence.

Industry Profile

- 1.9 billion plants were introduced into our communities, workplaces and homes
- $2.4 billion in farm gate value
- 6,616 ha outdoor production
- 1,287 ha indoor production
- 72% plan to grow business over next five years
- 6 out of 10 growers are investing in infrastructure, technology and training
- 43% of growers are microbusinesses turning over <500k
- 21% of growers’ turnover >$2 million accounting for 7% of national turnover
- Production businesses often supply multiple products to various key customers.

Workforce

- 25,000 employed as full time, part time or casual
- 80% of businesses employ a qualified horticulturalist, which makes up 17% of the total workforce
- 35% of turnover goes toward wages with the average wage estimated at $60,000.

Key customers (% of businesses selling to)
- 67% Production nurseries
- 58% Retail nurseries
- 41% Landscapers, developers and builders
- 32% Direct to consumer
- 27% Government
- 20% Revegetation and forestry
- 14% Primary industry
- 8% Other

Production (% of businesses producing)
- 65% Perennials, trees and shrubs
- 30% Propagation plants
- 22% Indoor plants
- 18% Fruit trees, nut trees and vines
- 17% Herbs and vegetables
- 14% Bedding and potted colour
- 11% Other

This communication has been funded by Hort Innovation using the nursery research and development levy and contributions from the Australian Government. For more information on the fund and strategy, key investment visit horticulture.gov.au
Boomburbs: Sydney's urban sprawl seen from above - in pictures

When Andrew Merry exhibited his hypnotic aerial images of Sydney's new suburbia in 2006 many people could not believe they were taken in Australia. A decade on, he looks back on the series

• Australian Cities Week: how you can get involved
A shopping centre car park in western Sydney
20% MORE GREEN SPACES IN URBAN AREAS BY 2020
How have we done this?

1: Clear goal of success
2: Clearly defined benefits
3: Create partnerships
4: Sign up advocates
5: Generate conversation
6: Bring tools to market
446 ORGANISATIONS IN THE NETWORK

JOIN IN
Tools to Help

- **THE 2020 VISION PLAN**
  - The rough guide pathway to creating 20% more urban green space by 2020

- **OUR CAPITAL CITIES AT A GLANCE**
  - Australia's first national benchmark of urban canopy cover

- **THE INSTANT ANT IN**
  - An easy guidebook for anyone seeking to green an office space

- **HOW TO GROW AN URBAN FOREST**
  - The definitive step-by-step guide to establishing an urban forest strategy

- **THE DIRECTORY OF GOOD DESIGN**
  - 20+ leading urban green projects to inspire the creation of more

- **BLACK BOOK OF GREEN PEOPLE**
  - 20+ leading urban green space advocates to inspire others to join them

- **PARK-IT**
  - A helpful how-to for anyone seeking to turn a public grey space green in their neighbourhood

- **GREEN PEOPLE ARE FROM VENUS**
  - A discussion guide to make it easier for green space people and engineers to work together in creating better public spaces
Our method:

THE VHHEDA VULNERABILITY INDEX

(Vulnerability to Heat, poor Health, Economic Disadvantage and Access to green spaces)

A brand new tool that measures the vulnerability of an area based on:

**Heat:** On the hottest days, how hot does this area get?

**Health:** Are people in the area healthy and able to cope with prolonged, increased heat?

**Trends:** Is the area currently losing, gaining or retaining its green space?

The higher an area's vulnerability rating, the better able it is to cope.

So where should all the trees go? In the most vulnerable places first.

The lower the number, the more vulnerable.
THE MOST & LEAST VULNERABLE

3.0 Rating
City of Bayswater, Town of Cambridge, Town of East Fremantle, City of Melville, City of Stirling

3.5 Rating
City of Joondalup, Town of Mosman Park, City of Nedlands, City of South Perth, City of Subiaco, City of Vincent

4.0 Rating
City of Canning, Town of Cottesloe, Shire of Kalamunda, Shire of Mundaring, The Shire of Peppermint Grove

4.5 Rating
Town of Claremont

5.0 Rating
City of Belmont, City of Swan, City of Wanneroo

1.5 Rating
City of Cockburn, Town of Victoria Park

1.0 Rating
City of Kwinana

0.5 Rating
City of Balcatta

TOP URBAN GREENING OPPORTUNITIES:
- City of Belmont (0.5)
- City of Kwinana (1)
- City of Cockburn, Town of Victoria Park (1.5)
- Town of Bassendean, Town of Swan, City of Wanneroo (2)
- City of Armadale, City of Fremantle, City of Gosnells, City of Perth, City of Rockingham (2.5)
- City of Bayswater, Town of Cambridge, Town of East Fremantle, City of Melville, City of Stirling (3)

WHERE SHOULD ALL THE TREES GO? WESTERN AUSTRALIA
**THE GREEN KEY**

In technical terms, a tree is a plant over six metres, while a shrub is under six metres. However, for an accurate comparison to our previous mapping report 'Where are all the trees?' we have used the following definitions:

- **Trees**
  Anything that looks like a tree from above, distinguished from shrubs by the shadows cast.

- **Shrub**
  Landscaped vegetation as well as bushland shrubs, crops and grapevines.

- **Grass**
  Cleared road sides, lawns, pastures, sites cleared for development and sporting grounds.

- **Hard surfaces**
  Asphalt, buildings, car parks, footpaths, sandy beaches, train lines, rocky coastlines and water.

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**KEY STATISTICS**

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<thead>
<tr>
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<tbody>
<tr>
<td>Tree Canopy Cover</td>
<td>22.27%</td>
<td>19.95%</td>
<td>2.32% Loss</td>
</tr>
<tr>
<td>Shrub Cover</td>
<td>8.73%</td>
<td>7.63%</td>
<td>1.1% Loss</td>
</tr>
<tr>
<td>Grass Cover</td>
<td>29.87%</td>
<td>31.19%</td>
<td>1.32% Gain</td>
</tr>
<tr>
<td>Hard Surface</td>
<td>39.13%</td>
<td>41.22%</td>
<td>2.09% Increase</td>
</tr>
</tbody>
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**SHRUB & TREE CANOPY COVER CHANGES IN WA LGAs 2011-2016**

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**GREEN COVER GAIN & LOSS IN WA LGAs 2011-2016**

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*From 'Benchmarking Australia's Urban Tree Canopy: An i-Tree Assessment, Final Report (2014)*
WA

THE GOOD NEWS

The City of Armadale currently has
46% URBAN TREE CANOPY COVER
- the second highest cover among urban LGAs in WA.

The City of Armadale has undergone a
13.2% INCREASE IN CANOPY.
Hard surfaces have had no significant increase.
Grassed surfaces have increased by 6%
Shrub-covered areas have decreased by 18.4%
This low incidence of shrubbery is most likely due to smaller plantings maturing and now being identified as tree canopy.

The City of Belmont has also undergone an
INCREASE IN TREE CANOPY BY 3.1%
This is particularly important as it has happened at the most vulnerable end of the scale (0.5).

Both the City of Belmont and the City of Armadale are two of THE MOST DEDICATED COUNCILS TO URBAN FORESTRY, with strong targets and committed urban forestry teams.

WHERE SHOULD ALL THE TREES GO? WESTERN AUSTRALIA

Horticulture Innovation Australia

2020 VISION
**CITY OF SUBIACO**

Gray Stead  
Manager Operations and Environment

The City of Subiaco has more detailed thermal imagery to identify heat islands and future planting areas that relates to its new town planning scheme. A more detailed strategy will be outlined in their new urban forest strategy by the end of 2017.

**CITY OF VINCENT**

Anita Marriott  
Sustainability Officer, Policy & Place

Our team has looked at the RMIT report for our LGA and we have found nothing that contradicts our expectations. We are yet to receive our own set of canopy data for the period in question, which means that we have not had the opportunity to compare RMIT’s findings to our own dataset.

By way of comment, we found it interesting that all the areas of heat vulnerability and greening opportunity identified in the RMIT report for our LGA are on State Government controlled land, where we have little if any influence on plantings. We can however use the information to advocate to State Government, particularly as we had already identified those areas as a priority for greening.

**CITY OF KWINANA**

Sarah McCabe  
Sustainability Officer

This is the first heat mapping data the City has had access to for our Local Government area. It will be useful for an upcoming review of our Climate Change Mitigation and Adaptation Strategy.

We feel the map is broadly accurate given our experience on the ground. It was noted that there are a few vegetated areas that are classified as hotspots. One large one in particular we noted had been burnt recently and wondered if this had affected the results. There is also another spot that is adjacent to Bollard Bannash wetland and we wondered if the black soil may have affected this.

There is a large suburb (Bertram) that is undergoing a street tree planting program as it has very little vegetation. Given the lack of street trees in this suburb, it was surprising that this was not a hotspot. Belgravias is noted as a hotspot which matches our understanding of street tree coverage. There are other areas that are noted as hotspots that were recently cleaned. It would be interesting to see how they change after urban development.
Why our poorer suburbs could be up to 10 degrees hotter than their wealthier neighbours

ELLEN LUTTON  NEWS EDITOR  |  SEP 27, 2017

Poor and disadvantaged Australian suburbs are at risk of being more than 10 degrees hotter than greener, wealthier areas, an RMIT University study has found.

The research found Australian metropolitan areas have experienced a loss of vegetation equivalent to the size of Brisbane in the past three years, risking heat spikes – particularly in less-affluent areas.

The Where Should All the Trees Go report – produced together with CSIRO Data61 and the University of Western Australia – examines greenness levels in Australia’s metropolitan areas and found a strong link between the affluent areas of towns and a lack of heat.
Dear 202020 Vision,

The city of Whittlesea has just started working on developing our very own Urban Forest Strategy. We are following the guide that you have developed and it has been an immense help so far. We would like to request a copy of the VHEDA index that you developed for our LGA in particular divided by suburb if that is available. Please do not hesitate to contact me.

Thank you in anticipation

Sara Seif | Urban Designer
City of Whittlesea
Your work has galvanised many & has provided a foundation that we have been able to build on

Maree Grenfell
Acting Chief Resilience Officer
City of Melbourne
The target is to achieve 40 per cent Urban Tree Canopy cover across the Greater Sydney Region by 2036.

This target has been nominated based on international and national best practice precedents and is pending detailed investigation. This is proposed in conjunction with detailed targets based on three urban conditions identified below:

- **CBD Target**: 15 per cent tree canopy cover in CBD areas
- **Medium-High Density Target**: 25 per cent tree canopy cover in urban residential (medium to high density) and light commercial areas
- **Suburban Target**: 40 per cent tree canopy cover in suburban areas
**WHAT WE’LL DO**

If elected in 2018, a Marshall Liberal Government will provide funding through local councils to help keep our suburban streets green.

Street trees provide enormous benefits to our neighbourhoods, enhancing social and environmental outcomes and increasing the liveability of suburbia.

Trees help to improve air quality and visual amenity as well as providing shade. They are also a haven for birdlife.

A Marshall Liberal Government will work with local government to implement a ‘Greening our Neighbourhoods’ initiative.

Our plan will enhance the existing street tree management plans of councils, ensuring the roll out of street tree planting involves the local community.

**WHY WE’RE DOING IT**

Significant pressure is being placed on our urban environments as the State Government vigorously pursues its urban development infill agenda.

The government’s ‘30 Year Plan for Greater Adelaide’ has a target of increasing infill from 70% of new developments to 85% in established urban areas, including Gawler Township.

Meanwhile, Adelaide’s tree coverage is amongst the lowest of the state capitals. Its proportion of tree canopy is 27% - less than half Hobart’s, which is the highest at 59%.

There are also marked variations between Adelaide suburbs. A 2020 Vision report breaks down the tree canopy within each of Adelaide’s 19 metropolitan council areas. The proportion of tree coverage ranges from 44% in the Adelaide Hills to only 12% in Port Adelaide Enfield.

*Tree canopy coverage has been measured and reported on in a report by 2020 Vision.*
2.0 LOCAL GOVERNMENT URBAN FOREST ISSUES

GENERAL CANOPY DECLINE

Invasive development and increased density plus issues such as climate change and some community attitudes towards trees are placing pressure on urban forests.

The 2017 report Where should all the trees go? showed a decline in established vegetation across Perth and Peel. Of particular concern was the decline of larger trees on private land and the UHI effect in outer urban areas. The following information pertains to the Perth to Peel Local Governments in Western Australia.

19.95% Perth's canopy cover in 2016
30% Average canopy cover in Australia's capital city CBD LG areas
2.32% Perth's overall canopy loss from 2009-2016
85% of Perth's tree canopy is on private land
51% of all LG in WA have seen a decrease in shrubs
41% of all LG in WA have experienced a significant loss of canopy

Figure 1. Statistics for Perth and Peel Local Governments in Western Australia. (Adapted from 2020 Vision: Where should all the trees go? Research Update September 2017.)

Creating Greener Places for Healthy and Sustainable Communities

Ideas for Quality Green Public Space in South Australia

Green space loss

Evidence shows that most of Adelaide’s metropolitan areas have experienced a decline in the quality of its green space. Adelaide’s tree coverage is amongst the lowest of Australia’s capitals. Its proportion of tree canopy is 27% - less than half of Hobart’s, which is the highest at 59%. There are also marked variations between Adelaide suburbs. A 2020 Vision report assessed the amount of green space in Adelaide’s 19 metropolitan council areas. The study found tree canopy ranges from 44% in the Adelaide Hills to 12% in Port Adelaide Enfield. There was also a reported increase in hard surface. The loss of green space is a trend being experienced across most Local Government Areas (LGAs) in Australia, declining by 2.6% from 2009-2016. For the City of Adelaide that is the equivalent to losing Victoria Square/Tarnitanyangga every seven years.

The total area of the Adelaide Park Lands is 930,000m². Victoria Square is 23,000m². A 2.6% loss of the Adelaide Park Lands represents 24,180m²
Our goal

100 urban forests

2013/14
15 councils

2017
84 councils
WHO'S WITH US?
Bringing community along on the green space journey
GOOD NEWS

Q: How important are different aspects of your locality and community?

![Bar chart showing the importance of various aspects of locality and community]

- **Urban green space**: Very important
- **Walking trails**: Somewhat important
- **Cafes & restaurants**: Somewhat important
- **Permanent street parking**: Very important
- **Shopping centres**: Somewhat important
- **Farmer’s markets**: Somewhat important
- **Bike tracks**: Somewhat important

*Image: Growing Together Vision*
PEOPLE USE GREEN SPACE FOR:

- 74% RELAXATION
- 51% WORK / LUNCH BREAKS
- 61% EXERCISE

So it’s important in our commercial areas too, regardless of private green space individuals may have.
NTENANCE IS THE MAIN CONCERN (5

Jewel of Woollahra council's crown, Cooper Park is overrun with weeds and feral animals, say locals
THANK YOU