NURSERY PAPERS
JUNE 2020

Supplying Australia's green cities

With the Australian urban population increasing, and the health benefits of green space becoming clearer, urban developers and governments are becoming increasingly interested in creating greener communities.

The Hort Frontiers Green Cities Fund brings together some of the world's best researchers in urban greening, from some of the country's top research institutes and universities as well as experts in horticulture and landscaping to put the non-food horticulture industry's best foot forward to make and keep our cities green.

This nursery paper provides an update on some of the projects within the Green Cities Fund, with advice on the changes growers, landscapers and greenlife practitioners can make in the short, medium and long term to drive value from the fund.

SUMMARY

- The projects within the Hort Frontiers Green Cities Fund address knowledge gaps found within four key themes: climatic and environmental, metrics and measurement, culture and community and knowledge and information.
- *DIY laneway greening – simplifying vertical greening at a community level* (GC17002) is an education project aiming to educate both consumers and councils on the best and most efficient ways to build vertical gardens in urban areas.
- *Greener Cities, Healthier lives* (GC15005) is providing systemic evidence on the health benefits of green space on people, from birth to older age. It will arm industry with evidence-based research to advocate for more green space.
- *Which plant where, when and why database for growing urban green space* (GC15002) is building an online plant selector tool that will help both the purchasers and growers of greenlife to plan greenlife for a warming planet alongside a national best practice guide for species selection across Australia.

Central Park Building, Broadway Sydney.

BACKGROUND

In 2015/16, research was undertaken to identify the key barriers that were stopping the growth of green space in our cities. It was the first time formal research was undertaken by the industry in Australia.

That initial research uncovered several factors which were hampering demand for greenlife:

1. Environmental concerns for the maintenance of greenlife
2. The lack of business case for greenlife
3. A lack of measurement and mapping of past, current and future greenlife levels
4. Community attitudes were not well understood or valued.

With a clear and defined list of challenges identified for the first time, the industry planned what is now the Hort Frontiers Green Cities Fund with a mission to ensure greenspace is prioritised, with community and government support.

As a Hort Frontiers strategic partnership, the Green Cities Fund can invest funds from both the broader research and supply chain, and levy funds alongside the commonwealth dollar.

Through investing in longer term research, the Hort Frontiers Green Cities Fund is driving demand for increased urban green space, ensuring Australia will earn a global reputation as a country committed to urban greening, adding to our international reputation of being a good place to live, work and do business.

With COVID-19 causing a rethink of how humankind sees its connection to nature, now is the time to ensure that Access to safe, nearby green spaces must be prioritised as critical public health infrastructure and not just an amenity for certain areas.

This communication has been funded by Hort Innovation using the nursery research and development levy and contributions from the Australian Government.
Hort Innovation Strategic levy investment | NURSERY FUND

It's time to grow up!

A Hort Frontiers Green Cities Fund project, *DIY laneway greening – simplifying vertical greening at a community level* (GC17002) is educating consumers and councils on how to ensure greenlife is prioritised, even when there is limited ground space, through education on green walls.

Green walls refer to plants growing either directly onto a wall or on supporting structures, such as frames, that adjoin a wall. Green walls using plants that grow directly on the wall surface or on a support structure attached to the wall are generally called green facades.

These systems usually have plants grown in the ground at the base of the wall and climb up the wall or use cascading groundcover plants grown in planter boxes to cover the wall.

As our cities get more dense and spatial constraints may limit the planting of traditional urban green space like parks or street trees, focusing on growing and selling plants which can take advantage of the green wall trend is future proofing your business.

Which plants to grow to maximise the green wall opportunity?

Evergreen plants are important for living wall systems, both for maintenance and aesthetics. In consultation with your customers, plants should be selected based on the desired outcome, whether it is for thermal insulation, aesthetic appeal or food production.

Bosco Verticale in Milan.

NATIVE PLANTS

WHITE CORREA
Correa alba

BASKET GRASS
Lomandra longifolia

BLUEBERRY LILY
Dianella sp.

SILVER LADY
Blechnum gibbum

COASTAL ROSEMARY
Westringia fruticosa

CRIMSON BOTTLEBRUSH
Calistemon citrinus

OTHER PLANTS

BOSTON FERN
Nephropelis exaltata bostoniensis

DWARF UMBRELLA TREE
Schefflera arboricola

DEVILS IVY
Epipremnum aureum

FIRE FLASH
Chlorophytum orchidastrum

FIDDLELEAF FIG
Ficus lyrata

GOLDFISH PLANT
Nematanthus glabra

UMBRELLA TREE
Schefflera amate

HEART LEAF
Philodendron hederaceum

WALING IRIS
Neomarica northiana

WHICH PLANT WHERE, WHEN AND WHY?

***Which plant where, when and why database for growing urban green space* (GC15002) also known as the Which Plant Where project is a five-year research program that will investigate how current landscaping species will cope under more extreme climates in our Australia's cities. It will also identify opportunities for new species and varieties for the urban context.**

The program is targeted at growers, developers, landscape architects and landscapers as well as state and local governments.

It is also an important tool for growers.

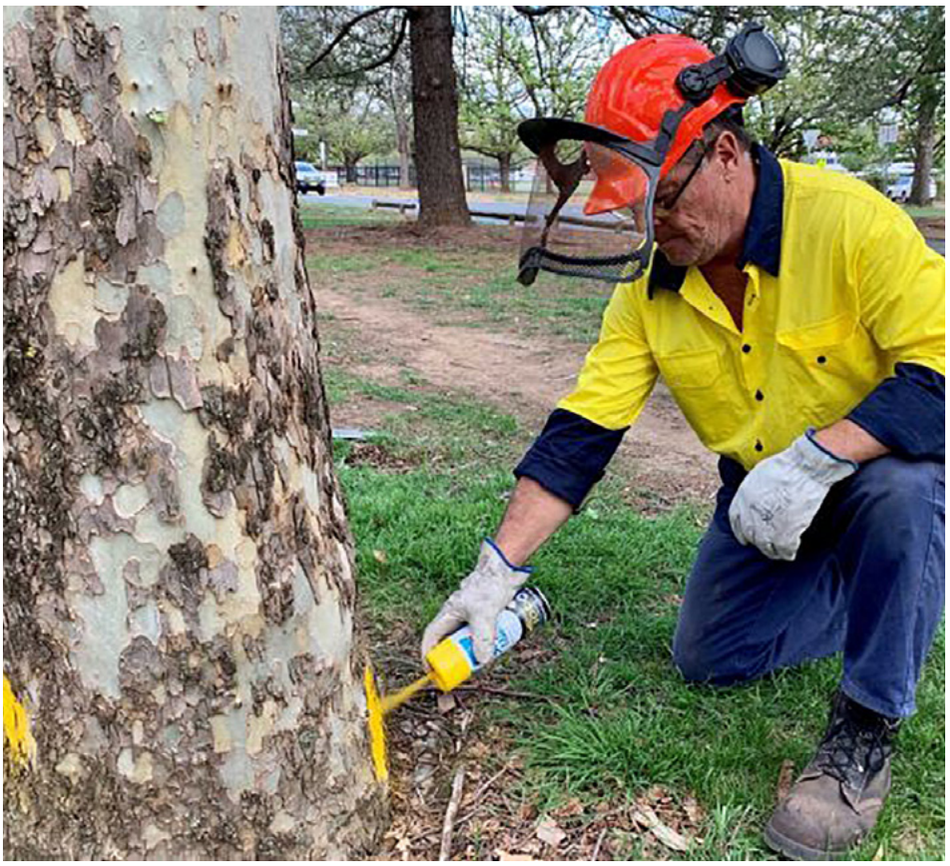
It has five core objectives:

1. Identify species that will be suitable in Australian cities under a changing climate
2. Increase species diversity in our landscapes
3. Drive market growth for the horticultural industry
4. Develop an online plant selector tool for a wide range of end-users
5. Develop best practice guidelines for the selection of new plants in the context of our changing climate

Plant Selector Tool

Progress continues to be made on the launch of the Plant Selector tool, designed to help greenlife practitioners select the most appropriate plant species for specific locations and purpose in our urban landscapes. The project team has been running a series of workshops around the country to collect feedback that will help develop the online tool. Once complete, a user will be able identify which plant species are most suitable for various urban contexts, such as street trees, parks, amenity etc.

This information is just as useful for the grower who will be able to consult the tool to make decisions their future plant inventory and identify species that will increase the pallet on offer.



Which Plant Where – In Canberra 28% of trees are no longer suitable for the area.

The tool will also benefit the entire industry by ensuring that a diverse range of species is recommended. This ensures that greenlife is more biodiverse, improving overall health of the canopy and resilience to pests and diseases.

A beta version of the Plant Selector tool will be available in late 2020/ early 2021, and the project team is encouraging growers to help test the tool.

Best Practice Guidelines

In addition to the Plant Selector tool, the project will complete a set of national, best practice guidelines for species selection.

These guidelines bring together the science and evidenced based research of the project alongside the wisdom of growers with generations of boots on the ground experience.

Once complete, the guidelines will serve as both an educational tool for practitioners and a marketing tool for growers and wholesale nurseries.

How to get involved

The success of this project relies heavily on the input, insights and engagement from the grower community.

There are three ways which the project is currently seeking engagement from growers.

1. Sign up to become a beta tester for Plant Selector tool.
2. Contribute to the best practice guidelines
3. Learn more – subscribe to the newsletter, which provides regular updates on the project

Please get in touch with Leigh Staas, Program Manager, Which Plant Where, Macquarie University via email, *leigh.staas@mq.edu.au*

GREENER CITIES, HEALTHIER LIVES

***Greener Cities, Healthier lives* (GC15005) is a Hort Frontiers Green Cities project that is providing evidence on the health benefits of green space on people, from birth to older age.**

In March 2020, the project team lead by Thomas Astell-Burt at the University of Wollongong released the latest evidence-based findings as part of the project.

Trees to help us sleep?

Researchers have been exploring the link between sleep and greenlife for some time and while a link has always been clear, previous research was not able to determine whether people who got better sleep tended to live in greener neighbourhoods or whether greener neighbourhoods caused better sleep. This would be a typical 'chicken and the egg' scenario.

Greener Cities, Healthier Lives addressed this gap. It investigated whether people with more green space within 1.6km had lower odds of developing insufficient sleep over about six years. The subjects did not move house during this time.

The study found 13% lower odds of developing insufficient sleep among people in areas where 30% or more of landcover within 1.6km had tree canopy, compared to people in areas with less than 10%.

Why should a grower care?

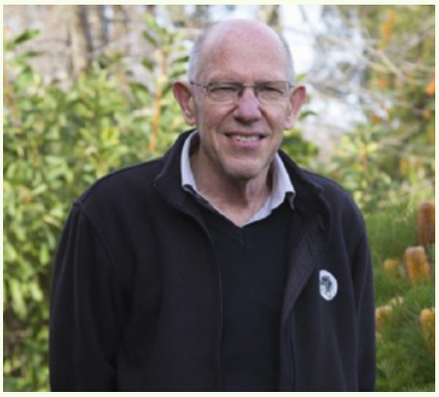
Improvement in sleep is just one of many benefits explored by this project.

As a society we risk de-prioritising green space if we assume we already know all the ways it benefits health. As projects like this continuously strive to uncover all the benefits, it is important that growers are engaging with the findings to help spread awareness. As a society we risk under valuing green space if we assume we already know all the ways it benefits health.

Scientific findings can play an active role in the strategy of your business, from planting decisions, to sales meetings and the development of marketing material.

Why Green Cities matters with David Mathews, Proteaflora

The activities that fall under the Green Cities Fund have never been more important.



Most of our population live in cities, we're one of the most urbanised countries in the world. As our cities get denser, there is less room for green space.

The Hort Frontiers Green Cities Fund is directing research funds into projects that generate science-backed evidence to support the case for more green. As growers, we are in the green business so its something we should all be engaged in.

As growers, we understand more than anyone the importance of long-term thinking. If we plant a tree today it will be years before a customer is realising its true value. And that's how we should think of the Green Cities Fund. It might not help you sell your next tree, but it's about defending and growing the future demand for green space.

That's not to say there aren't more immediate ways that the Green Cities projects can help your business today.

Firstly, Green Cities projects both completed and in progress can help guide the industry on the specific types of plants that are likely to feature in urban planning decisions. By being actively involved in the projects you can use this information to make planting decisions.

Secondly, by taking an active involvement in the projects you can contribute to the direction they head.

Thirdly, the research that comes out of the project can actually help you close deals and win customers. You can help customers make planting decisions for the future, backed by science.

Lastly, projects like Greener Cities, Healthier Lives, reinforce what an important industry we are. It proves the benefit we provide to society, and with that in mind we can even recruit and retain better staff.

So get involved – reach out to project leads or get in touch with Hort Innovation with ideas. The more engaged we can be in the Green Cities fund the better our future will be.

David Mathews is the Managing Director of Proteaflora and the industry representative of the Hort Frontiers Green Cities Fund Expert Advisory Panel.

LINKS TO RESOURCES

Resources for vertical gardens: ***http://www.itstimetogrowup.com.au***

Find out more about Which Plant Where: ***https://www.whichplantwhere.com.au***

Read more about Hort Frontiers here: ***https://hortfrontiers.com.au***

Read the Hort Frontiers Green Cities Fund here:
https://hortfrontiers.com.au/wp-content/uploads/2018/03/CSI-Green-Cities-Fund.pdf

PAST EDITIONS OF NURSERY PAPERS ARE AVAILABLE ONLINE on the GIA website:
https://www.greenlifeindustry.com.au/Section?Action=View&Section_id=46