SMART PEOPLE GROW PLANTS



A guide to careers in Australia's Greenlife Industry



Careers in Australia's Greenlife Industry

A career with greenlife is future focused and rewarding; and has an impact on creating liveable cities, healthy environments and protecting Australia's food security.

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A career with benefits

Imagine working in an industry where you meaningfully contribute to creating sustainable and liveable cities and suburbs, support the physical and mental health of Australians and underpin food security in Australia.

What if we told you plants are the answer to everything (well, almost everything...).

The industry needs professionals who want to rewild our cities and suburbs, improve the environment and feed the nation.

Cities & Suburbs

- Reduce heat island effect
- Shaded places
- Places for community
- Increase property prices
- Natural air filtration
- Cooler cities
- Reduced energy consumption
- Reduced urban drought
- Increased local commerce.

Healthy Australians

- Connection with community
- Improved physical health
- Improve mental health
- Greater worker productivity
- Indoor air purifiers
- Faster hospital rehabilitation
- Reduced disease
- Innate human connection to nature

Climate & Land Management

- Carbon sequestration
- Improved Biodiversity
- Water management
- Erosion control
- Food security



Trees reduce temperatures by up to **8 degrees Celsius**, reducing air conditioner use and carbon emmisions by an estimated **12-15% per annum**²



People working in a place with plants and trees are **17% more productive** than people working in bare spaces³.



74% of Australians see green space as a place for **relaxation**⁴. **73%** see their garden as a sanctuary for **mental well-being** and **89%** believe access to green space is a **Human Right**.



Trees and plants act as a **natural water filtration system**, they **reduce run-off** and **reduce erosion**.



Urban trees can help **improve air quality** for many different air pollutants in cities, and consequently can help **improve human health**⁵.



Customers could pay **9-12% more** for goods sold in CBDs with **high quality tree canopy**⁶.



Greenlife supports urban biodiversity of threatened species with 25% of plants and 46% of animals, intersecting with cities⁷



Come and work with us



\$2.6 Billion

annual farm gate value



Employing

Australian's

23,000



Over

1,600

Growers nationally



Over **2,500** plant retailers nationally



Considered an
essential
industry



67% of businesses nationally invest in new infrastructure



42% of businesses nationally invest in new technology



67% of businesses nationally employ tertiary qualified staff

The Australian Greenlife Industry is seeking passionate, innovative and hardworking individuals to embrace tried and tested horticultural techniques, sensible science and the latest in horticultural innovation to deliver over 2 billion plants into Australia's landscapes, buildings, backyards, kitchen windows and dinner plates.

Come and join an industry of over 3,000 businesses and 23,000 individuals who are committed to leading the greening of Australia.

There is a career pathway for everyone.





Where do you start?

A career path in Horticulture is only limited by your interests and motivation, there are many learning pathways you can take. But before you start you should consider the following steps for planning your career.

Step 1 - Know yourself! Are you made for horticulture?

What do I like doing? What don't I like doing? What am I good at? What do I know about my personality? What is my five-year plan? What do I want to achieve through my career? What don't I want? Horticulturists have distinct characteristics.

They are enterprising individuals adventurous, ambitious, decisive, energetic, enthusiastic, confident, and optimistic. They can also be persuasive, and motivational. Many are realistic - independent, stable, persistent, genuine, practical, and thrifty. Horticulturalists are strategic, engaging, solutions focused and innovative. They are life-long learners, flexible and adaptable. People in Australia's greenlife industry are resilient and hardworking experts.

They are highly educated, future focused professionals who want to make a difference.

Do you have any of these traits?

Step 2 - Find out more! It's all about the plants!!

What skills, experiences or qualifications do I have already? What skills or experience do I need? What can I expect from this industry? Are there any gaps between skills? Can I learn on the job? What options do I have to gain new knowledge, skills or qualifications? How far can I go?

Let us help you with that.

If you let them, plants will take you around the world. Horticulture is a global profession with large industries in Europe and America. Back at home, Australia's \$2.6 billion industry has experienced three consecutive years of growth. Horticulture is the science of growing plants. Greenlife encompasses all types of seed, plant, shrub or tree, including tissue culture, seedlings, herbs, vegetables, fruit trees, nut trees, vines and all plants in indoors and outdoors. Every indoor and outdoor plant, whether tall and shady, colourful, leafy or flowery, ornamental or edible – it started its life in the greenlife industry.

Whether you are outdoors in a production nursery or garden centre, in greenhouses and labs or in an office, plants will be at the centre of what you do.

Whether you are performing essential hands-on work such as planting, potting, pruning or dispatching; advising your customers, promoting new releases, planning production cycles, crop rotation, irrigation schedules; managing plant nutrition or plant biosecurity; or marketing and selling greenlife, understanding the science of plants is the foundation knowledge of the greenlife industry.

Plants have seasons and so while horticulturists tend to keep regular hours, workloads are adjusted for the seasons to ensure plants arrive and thrive in their forever home, at the optimal time of year.

Look at all the opportunities the industry provides on page 8 and read the case studies in this guide for a first hand look at where Australia's greenlife industry can take you.

Step 3 - Make a decision and take action - Choose the Greenlife Industry!

What are my best work or training options?

How do they match my current skills and interests?

How do they fit with the existing job opportunities or with jobs that may come up in future?

What are the advantages and disadvantages of each option? What actions will help me achieve my work, training and career goals? What are the main challenges? Where can I get help?

Who will support me?

From a Certificate II to a Doctorate there is an education pathway and career for everyone.

The industry's tissue culture laboratories, plant breeders, production managers, operations managers, soil scientists, growing media specialists, plant protection experts, plant nutritionists, entomologists, horticulturists, growers, garden retailers, landscapers, environmental scientists, communicators, marketers, logistics, television presenters, garden writers and radio broadcasters, automation experts, policy writers, researchers, academics and educators bring the industry to life.

For more information review the education opportunities on page 7 or visit the Greenlife Careers Hub at www.greenlifecareers.com.au



Understanding the industry

What is Horticulture?

Horticulture is the science of growing plants.

Horticulturists apply scientific knowledge, skills and technologies to cultivate, propagate and grow plants. Their work involves plant propagation and cultivation with the aim of improving plant growth, yields, quality, nutritional value and resistance to insects, diseases and environmental stresses.

What is a Production Nursery?

Production nurseries produce plants in bulk for the greenlife supply chain. Their customers include retail garden centres, landscapers, large scale land managers, development projects, bush regeneration, forestry and fruit, vegetable and nut growers.

Some production nurseries propagate and grow on and others specialise in only the propagation stage or growing on.

Commercial nurseries produce and distribute plants, including ornamental trees, shrubs, and bulb crops and many of them specialise in particular plant types e.g. natives or rose. Some growers specialise based on their customers e.g. growing for landscape supply or growing for bush regeneration.

Most production nurseries consist of greenhouses, shaded and open areas outside.

Plants are commonly cultivated from seed, tissue culture or cuttings and are predominantly grown in pots or other temporary containers. Some production nurseries produce stock in the ground and sell them 'bare rooted' or without soil.

What is a garden centre or retail nursery?

Garden centres or retail nurseries house a wide variety of plants, flowers and trees that are sold primarily to garden owners. Some retail businesses also have commercial clients such as landscape designers.

Retail nurseries may not plant and propagate flowers and trees themselves but may purchase them from a production nursery or nursery wholesaler.

Retail nurseries and garden centres can offer very wide or quite specialised arrays of plants and garden supplies. Nurseries can sell indoor and outdoor plants, annual and perennial flowers and flowering plants, herbs, specialised local and Australian native plants, seedlings and propagated plants, vegetable and fruit seeds, seedlings and more mature plants, as well as trees of all types and ages – from seedlings through to fully matured trees.

Nurseries which offer semi-mature and mature trees often provide tree planting services to ensure the tree is properly transported and positioned. Nurseries will also work in conjunction with landscape architects on residential, commercial and civic projects.

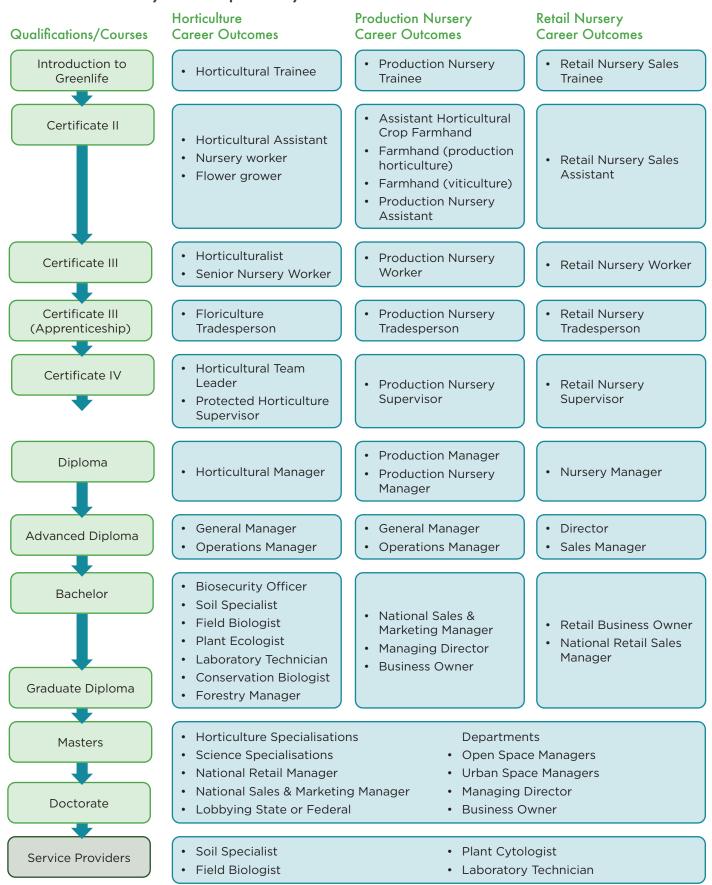
Garden centres also stock garden supplies and various types of garden equipment. Some garden centres will also stock barbecues and garden furniture and accessories, including chairs, tables, umbrellas, plant pots, ceramic pots and planters. Water features and equipment are another specialty item offered by some garden centres and nurseries.



Job roles in the Greenlife Industry

Below is a flow chart which demonstrates the different education pathways and important roles within the greenlife industry. Education providers including registered training organisations (RTO's), vocational training (TAFE) and higher education institutions (University) offer courses in horticulture, supporting key learning competencies for the greenlife industry. Visit <u>www.greenlifecareers.com.au</u> for information about which training providers offer courses.

Greenlife industry career pathways



Other roles within the Greenlife Industry

Sciences

- Biosecurity Specialist
- Plant tissue culture lab technician / specialist
- Agronomist
- Botanist
- Ecologist
- Ethnobotanist
- Entomologist
- Plant Breeding
- Plant Genetics
- Plant pathologist
- Research and development roles
- Plant Health Scientist
- Biological Scientist
- Conservation Biologist
- Soil specialist
- Laboratory Technician
- Horticulture Supply Chain Specialist
- Plant Nutritionist
- Plant Pathologist
- Plant Physiologist
- Plant Biologist
- Plant Morphologist
- Conservation and Land Management
- Field Biologist
- Habitat Restoration Scientist
- Ecologist
- Conservation Biologist
- Plant Ecologist
- Plant Geographer

Engineering

- Greenhouse Engineer
- Industrial Engineer
- Environmental Engineer
- Agricultural Engineer
- Robotics Engineer

Media & Communications

- Communications officer
- Graphic Designer
- Photographer / Videographer
- Product designer, Innovator, Inventor
- Garden Writer

Marketing and Sales

- Marketing and Promotion
- Sales representative / Account Manager

Administration

- Business administration
- Procurement Officer
- Accountant, Finance and Payroll
- Systems Coordinator
- Human Resources
 Manager
- Work Health and Safety
- Quality Assurance
- Data management

Dispatch and Logistics

- Dispatch
- Dispatch Manager
- Truck Driver
- Operator Ticketing and Labelling
- Forklift Driver
- Storage Controller
- Logistics Manager

Service Technology Providers

- Agribusiness / input supplier
- Precision Agriculture/ GIS/ Drone specialist
- Entomologist
- Training provider/ teacher
 / lecturer in Horticulture
- IT consultant

Management & Administration

- Business, sales, HR,
- Business, sales, HR, Marketing
- Procurement Officer
- Accountant, Finance and Payroll
- Systems & Data management









Chris Sargent

Industry loves

I often say I believe I have one of the best jobs in the world. I can live in the magnificent state of Tasmania and get to travel the world. I have the opportunity to meet wonderful people, hear their inspiring stories and be apart of their life and horticultural journeys. They welcome me into their lives and businesses and are happy and proud to share their experiences.

The most significant honor for me is they entrust me and our business to manage the outcomes of their passion for developing new plant innovations.

Current Role

Managing Director Plants Management Australia

Responsibilities

For our clients, I navigate them through the world of new plant introductions from concept to consumer. This includes Market research, comprehensive trials, imports/ exports, propagation, and production through to licensing, distribution, PBR protection, and marketing. For our business, I am responsible for business development, relationship management, business strategy, custom software development, operating procedures, human resources, and company finances.

Skills required

In my role, you need a deep sense of integrity, self-belief and -self-awareness. You need to have both grit and empathy; a willingness to fail and re-learn, strong communication and exceptional listening skills. Ultimately, you also need persistence.

Qualifications

Since completing my apprenticeship I have also completed a Diploma of Frontline Management and Human Resources and am a Fellow of the Australian Institute of Management.

Career Highlight

A highlight would be the people who have nurtured and shared their knowledge with me, empowering my passion for plants. I am now able to share this knowledge with others. That's the power of greenlife - you will never know everything about it and every day is an opportunity to learn, educate and inspire.

I'm also very proud of the awards that I personally, and our business have achieved. Recognition through the Telstra Business Awards, AMP Innovation Awards and the Australian Government Export Awards instil in me, that our industry can match it with and, be as innovative as any other Australian industry.



Chris attributes his early passion for plants to his grandmother, Nell Wilson who was a plant collecting pioneer. Nell created a forest of indoor plants in her sunroom which consumed Chris as a child.

"I still have many plants in my house derived of cuttings from my grandmother's sunroom."

Growing up in Hobart, surrounded by Tasmania's pristine environment, Chris spent most of his spare time outdoors, and still does. Instead of following the family footsteps into accounting, Chris forged his own path into horticulture starting a four-year apprenticeship at age 18. His apprenticeship was served in both retail and wholesale greenlife organisations where he gained valuable experience in customer service, merchandising and plant propagation.

"This varied and diverse working environment allowed me to build a foundation of understanding- a cross-section of what horticulture can offer in both the wholesale and retail sectors."

At age 22, Chris travelled to the UK where his apprenticeship helped him land a role in one of the largest and most successful retail garden centres in the UK. This opportunity exposed him to several world leading horticultural expos including the Chelsea Flower Show and internationally renowned gardens across Europe where he learnt the international language of horticulture.

"You can be on the other side of the world, in a country where you can't read signs or speak the language, but still be connected to people through plants."

Chris returned to Australia via, Canada, The USA and New Zealand where the international language empowered him to connect the dots between retail and wholesale, plants, people and their stories. He found that if he combined all the skills he had learned, it would provide him with the foundation to guide plant breeders from their initial concepts through to the consumer, and everything in between. The result of this vision was the establishment of a horticultural plant management company.

"Horticulture has literally taken me around the world and back, time and time again. That's the power and scope our industry provides for anyone who wishes to connect with it."



Emma De Landre

Case Study

Industry loves

I love working outdoors and I love plants. There is always more to learn about plants, and they are easier to look after than people (laughs). Seriously, "teamwork" can be a cliché, but some of my greatest achievements have been because of the people I work with. You cannot do it alone. People in this industry are generally practical and a lot of fun to work with. Production of quality plants takes skill, commitment, and knowledge. I have been fortunate to work with so many professional growers from diverse backgrounds.

Current Role

Plant Protection Officer Greenlife Industry Australia

Responsibilities

My role is to provide businesses with technical advice relevant to plant production, promote nursery best practice management and act as the nursery industry biosecurity contact in NSW. This holistic approach contributes to efficient and sustainable plant production. I also audit businesses participating in industry accreditation programs including NIASA Nursery Production, Ecohort (Environmental Management Program) and Biosecure HACCP.

Skills required

To be successful in my role, it is important to have knowledge of plant production and biosecurity principles. Qualifications in horticulture are essential. I am also required to maintain professional certifications around business auditing and chemical training. Importantly, good communication skills and the ability to develop trusted working relationships is critical to successful engagement with industry.

Qualifications

Since graduating as an apprentice, I have also completed a Diploma of Horticulture, Certificate IV in Training & Assessment and completed the Masterclass in Horticultural Business with University of Tasmania. I am currently studying Horticultural Science at Charles Sturt University.

Career Highlight

There have been many memorable moments in my career including a Flame Tree planting with Jimmy Barnes in honour of Steve Prestwich, Cold Chisel's drummer. I have collected seed and propagated a rare tree species myself which is now growing in a complete forest at The National Arboretum, Canberra. I am also proud of managing a crew to deliver 540,000 potted trees over winter despite record breaking floods while at Ferrero in the NSW Riverina. Emma grew up in Yass in New South Wales and Canberra, starting her career in horticulture at seventeen with an apprenticeship working at a retail nursery, Pialligo Plant Farm.

"I've always been interested in plants for as long as a can remember. I started a herb garden as a teenager and I regularly visited a local nursery to buy herbs. In my last year of school they offered me an apprenticeship – and I said yes."

After completing her trade certificate, Emma spent many years developing skills as a horticulturist in both the retail and production sectors. During this time, she also began writing a garden column for The Daily Telegraph as 'The Garden Doctor'.

"I was contacted by the editor for comment on a story. When it went to print the information was out of context. I rang the editor to discuss. By the end of the conversation, they had offered me a job to write a regular weekly column."

Emma commenced a role as Nursery Technical Officer at Canberra Institute of Technology where she taught nursery subjects part time and in 2010, she began as Senior Horticulturist at the National Arboretum Canberra (NAC). This role focused on implementing the design masterplan and evolved into arboretum Project Manager.

"I was responsible for overseeing the propagation and planting of trees. developing contract specifications, coordinating design competitions, writing policies, landscape management and delivering the 'Water Security Project."

After the Arboretum opened to the public Emma was approached about another greenfield project with the Australian arm of Ferrero, Agri Australis, in Narrandera NSW. They were establishing a 2,000 Ha hazelnut orchard and needed a Nursery Manager to produce tree stock from mother plants for internal plantings and out growers.

"I started as the Nursery Manager and coordinated intensive production of hazelnut trees with a team of 8 locals and up to 80 labour hire during the peak season."

I am currently studying Horticultural Science at Charles Sturt University to develop skills in science subjects such as botany, plant physiology and microbiology. While I received significant study credit for my extensive industry experience, the skills I am learning support me in my Plant Protection Officer role and general knowledge of plants.

Daniel Ewings

Industry loves

In my current position I have the perfect mix of plants, horticulture, and people. I am lucky that in any one day, I can be outside in the field then meeting with staff and customers. I have had the opportunity to travel Australia and the world; and I love that what I do makes a massive difference to the environment and the wellbeing of our country. I especially love driving around Sydney and saying to my kids "See all these trees, Dad grew them."

Current Role

General Manager, Alpine Nurseries

Responsibilities

I am responsible for the oversight of the business departments of sales, inventory management, finance, marketing, site operations and distribution. I also take a special interest in training and development. My key task is to provide support to the department managers to ensure they achieve their goals.

Skills required

To be successful in my current role as General Manager of a production nursery, you need to have experience in all the different aspects of greenlife production businesses and the supporting qualifications. I have employed people of all ages, backgrounds, and work history. The common theme with all these people is a passion for plants, the outdoors, and the environment but if you have passion for what you do, it is a lot of fun and can take you many places.

Qualifications

Since graduating as an apprentice, I have also completed Certificates in Arboriculture, Parks and Gardens, Frontline Management and Work, Health and Safety. I also have a Diploma of Horticulture; a Cert III in LEAN manufacturing and have recently completed the Masterclass in Horticultural Business with University of Tasmania.

Career Highlight

I have many. Winning the Nursery and Garden Industry Australia National Young Leader was a great professional boost. I have also been fortunate to complete horticultural study tours of Sri Lanka and Europe, attending the world's largest Hort Trade Fair in Germany. But my biggest achievement to date is holding management positions where I can develop and mentor young people in our industry. I am especially proud of developing the apprentice system currently used by Andreasens Green.



Born and raised in Western Sydney, Daniel found his love of horticulture early in life helping his father, a landscape architect, in a small nursery on the family's property.

"Growing up, I often tagged along with my father to look at different tree species in their landscapes and visit many plant nurseries - that's how I developed my passion for horticulture."

In 1998, Daniel began working with Andreasons Green commencing his horticulture apprenticeship, gaining his Certificate III in Horticulture in 2000. After a year travelling, Daniel returned to Australia and managed a small inner city garden centre.

"Working in the garden centre was valuable learning experience. I gained important insights into retail operations, greenlife supply and customer service."

Daniel soon returned to Andreasons Green as the Site Manager for their flagship fifty-acre greenlife production site in Kemps Creek. He spent time boosting his skills by earning multiple trade certificates and he took an interest in approaches to apprenticeships to attracting new staff to the business. In 2014, Daniel was awarded the peak industry body's National Young Leader Award for his whole of industry perspectives on training and education.

"Winning the Young Leader Award is a career highlight. I honestly believe that award gave me the profile and boost I needed for career progression."

After ten years with the nursery and attaining his Diploma in Horticulture, Daniel started with Garden City Plastics (GCP). Here, he expanded his knowledge of sales and manufacturing, gained valuable domestic and global experience, and achieved his certificate in LEAN manufacturing.

"Two years on, I was asked back to Andreasens Green as National Operations Manager. The opportunity to manage all four production nursery sites and my passion for horticulture made the offer too hard to resist."

Daniel spent four years in the role where he was responsible for multiple departments across a multi-site operation. In 2020 he completed the Masterclass in Horticultural Business with the University of Tasmania. Daniel's solid experience and education perfectly positioned him for his most recent venture.

"I am now the General Manager for Alpine Nurseries. My focus for the next five years is on delivering premium stock, service and supply for our customers; and to ensure the business supports continued professional development and mentoring of our people."



Carole Fudge

Industry loves

I love the people. I love the plants. I love that I am still learning every day – that just keeps me interested! Most of all, I love that the work we do every day is important for the planet we live on. We all have a deep connection to nature and those of us who are fortunate enough to call it 'work' are the luckiest of all.

Current Role

Sales and Marketing Manager Benara Nurseries, Perth, Western Australia

Responsibilities

Key account management, tracking and managing sales, Greenlife production planning, pre-sale stock assessments, forecasting trends and strategic planning for marketing and communications.

Skills required

Good communication skills are very important, a love of people, love of plants and willingness to learn and embrace change. Adaptability is also needed these days as the world changes so quickly, as well as being a quick thinker and always solutions focused.

Career Highlight

I have been given the tremendous opportunities to regularly travel interstate to visit other nurseries. I've also travelled overseas to plant trade fairs looking for new plant varieties, innovation and marketing ideas.

I have been extremely privileged to join the Nursery Industry Advisory Panel for Hort Innovation. This has been one of the most meaningful experiences where I have worked alongside a talented team of industry professionals identifying strategies to highlight the importance of Greenlife in our lives and in our cities. This has been very rewarding and educational.



Carole grew up in Yorkshire, UK where her deep love for nature began by escaping to the woods and roaming the moors. Carole's mother, a keen gardener, shared her love of greenlife, teaching Carole the names of plants as they nurtured their garden of vegetables, flowers and trees.

"I didn't realise until much later that she was giving me a great gift of knowledge."

Carole arrived in Australia as a teenager and at seventeen, attended secretarial college to study bookkeeping. Carole's first role after college was in a Nursery. It happened to be a family run Retail Nursery, rather than an early childhood kindergarten as she had expected. Carole was mentored over the next few years learning more about plants, pests and diseases, the industry, the people and life lessons in general.

"I quickly worked out that I thoroughly enjoyed being in the nursery and was able to balance time working in the nursery with the plants and customers, with the bookkeeping in the office".

In her 40 years in the industry, Carole has held roles in retail and production nursery operations. During this time Carole has developed a sound understanding of greenlife practices as well as plant identification.

Carole has met some truly lovely, honest, hardworking and thoughtful people over the years in this industry. She explains there is a joy in watching things grow, the changing of the seasons and flowers unfurling. There are always challenges, failures and successes, dealing with the natural world, but there is a level of exhilaration and an energy that takes your breath away.

"Wouldn't change a thing, other than to say I wish I had gone to Horticultural College rather than secretarial college when I was 17!"



More information

More information about careers within the Greenlife Industry is available in the Careers Hub.

Visit<u>www.greenlifecareers.com.au</u> to access videos, more case studies, links to education providers and more.

This project has been funded by Hort Innovation using the nursery research and development levy and funds from the Australian Government. For more information on the fund and strategic levy investment visit horticulture.com.au

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