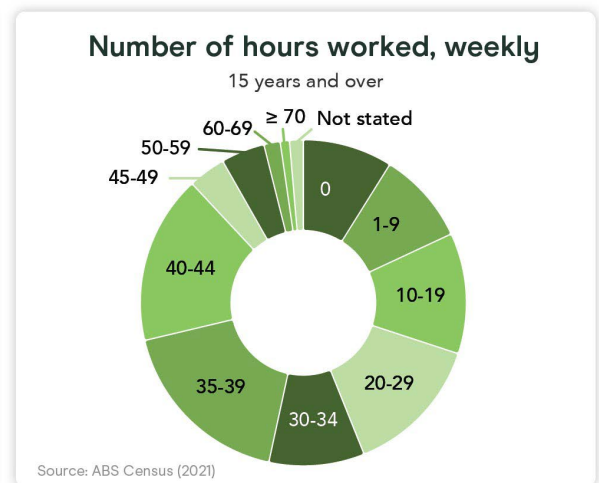
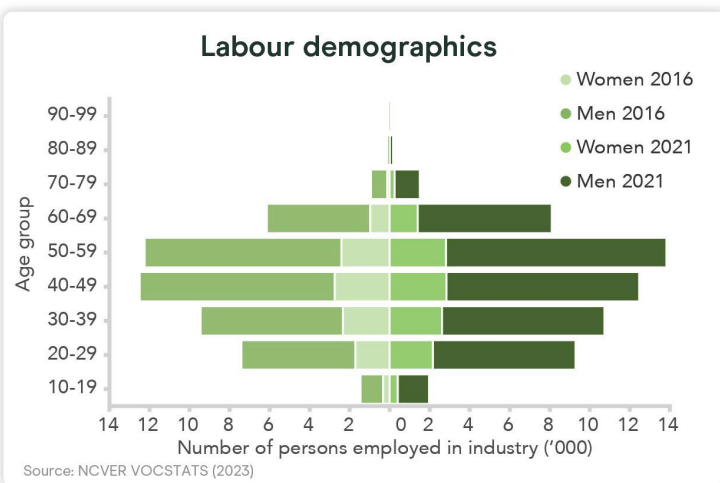
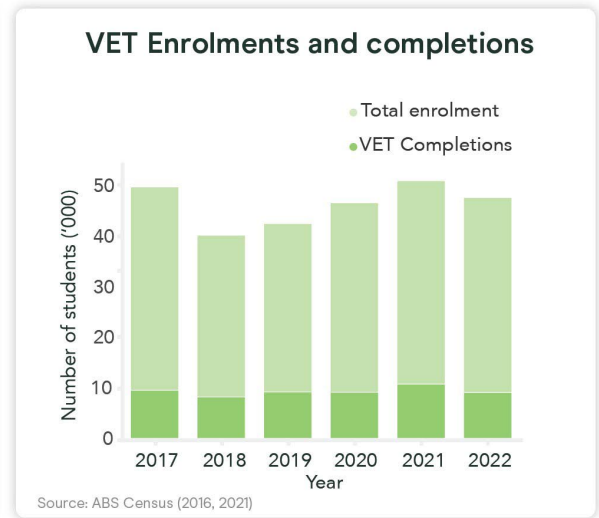
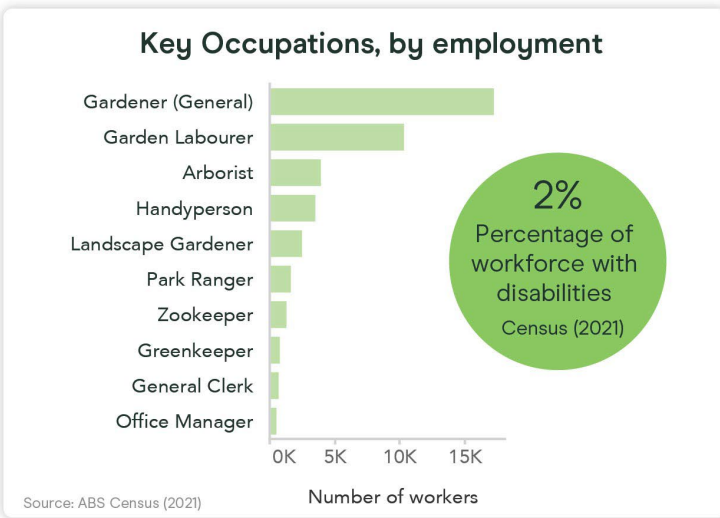
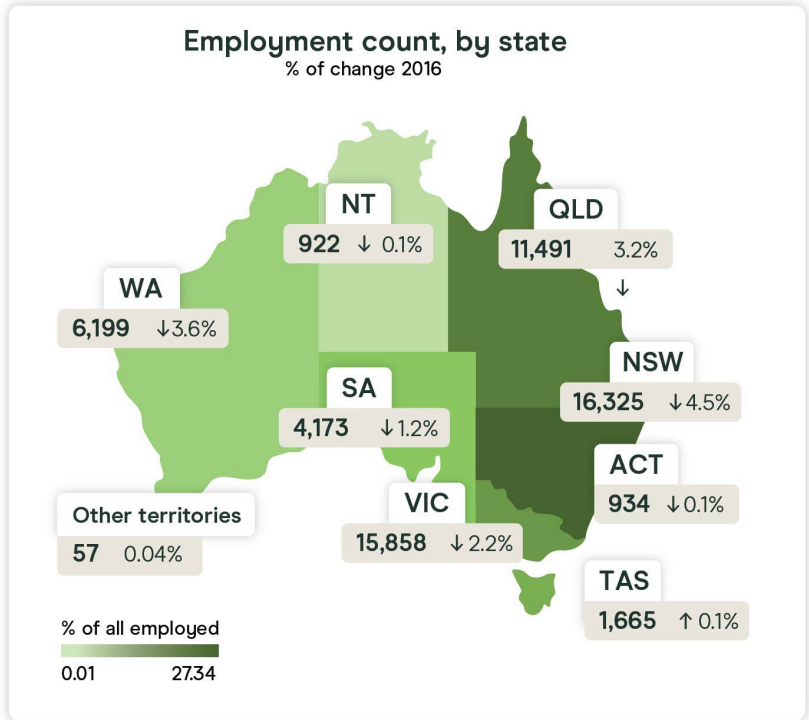


# 3.15. Amenity Horticulture, Landscaping, and Conservation & Ecosystem Management

## Amenity Horticulture, Landscaping, and Conservation and Ecosystem management

ANZSIC A7313, A8921, A8922



### 3.15.1. Industry sectors (ANZSIC Classes)

- Gardening Services
- Nature Reserves and Conservation Parks Operation
- Zoological and Botanical Gardens Operation

Key insights from industry sector infographic and other data	Priority
Labour shortages	High
Potential new skills requirements	Medium
Lack of workforce diversity	Medium

Australia’s numerous public and private green spaces can be enjoyed thanks to the hard work of the Amenity Horticulture, Landscaping, and Conservation & Ecosystem Management industries. Drawing on a vast array of skills, the workforce cares for and maintains vast natural areas and bushlands, Indigenous Protected Areas, coastal landscapes, national and state parks, public gardens, sporting grounds, and green spaces, and supports private gardening and growing activities. As climate change mitigation becomes a global priority, there is a growing demand for skills and labour across these industries, including to sustain biodiversity, and to restore and rehabilitate landscapes with ecological and cultural importance.

The skills and knowledge applied by the Amenity Horticulture, Landscaping, and Conservation & Ecosystem Management are highly contextualised, as demonstrated in the qualifications corresponding to specialised job roles in The National Training Register. These include:

- Conservation and Ecosystem Management (Certificates I, II, III, Diploma, Advanced Diploma)
- Permaculture (Certificates I, II, III, Diploma)
- Arboriculture (Certificates II, III, Diploma, Advanced Diploma, Graduate Diploma)
- Parks and Gardens (Certificates II & III)
- Nursery Operations (Certificates II, III, IV)
- Sports Turf Management (Certificates II, III, Diploma)
- Landscaping (Certificate II)
- Landscape Construction (Certificate III)
- On Country Management (Certificate III)
- Aboriginal and/or Torres Strait Islander Cultural Sites Work (Certificate III)
- Landscape Construction Management (Certificate IV and Diploma)
- Landscape Design (Certificate IV and Diploma)
- Nursery Management (Diploma)
- Community Group Coordination and Facilitation (Diploma)

Below are examples of units of competency, which sit within these qualifications, that are unique to the skills and knowledge applied by competent workers in Amenity Horticulture, Landscaping, and Conservation & Ecosystem Management:

Unit title	Unique skills and knowledge
Construct vertical gardens and green facades (AHCGR1402)	The unit applies to individuals who build or install vertical gardens and green facades on new or existing residential or commercial buildings in consultation with architects, engineers and other building and/or landscape and horticultural professionals. It is suitable for individuals who decide on solutions to a range of complex problems during the building or installation process through research, analysis and consultation. Vertical garden and green facade installation or construction must meet all regulatory requirements of national, state, territory and local government authorities and building regulations, standards and codes.
Implement cultural burning practices on Country (AHCOCM304)	This unit applies to cultural sites workers and land managers who use cultural burning practices on Country to manage natural and cultural resources. It requires a high level of awareness and experience working with local cultures and Communities, and it is expected that this work will be undertaken as part of a team working under supervision in most cases.
Develop conservation strategies for cultural resources (AHCOCM502)	This unit applies to those who develop conservation strategies and management policies for cultural resources as part of the overall park management and planning process.
Manage sports turf renovation programs (AHCTRF506)	This unit applies to individuals who are responsible for assessing a sports turf surface and developing programs and procedures to implement renovation activities appropriate to the sport and sporting regulations.
Design a rural permaculture system (AHCPE419)	This unit describes the skills and knowledge required to negotiate with clients to develop a design brief, undertake a site assessment, develop design concepts and produce final design specifications for a rural permaculture system.

### 3.15.2. Drivers of workforce dynamics

#### The rise of conservation and ecosystem management services

The diversity and size of Australia's conservation and ecosystem management services has not yet been sufficiently captured in national datasets, including the ANZSCO and ANZSIC. This is arguably because they are considered to be support services embedded within larger industries, such as agriculture; however, the national and international movement to mitigate climate change and enact sustainable practices has seen a massive surge in interest and investment in this industry. This includes a greater recognition for the traditional methods and knowledge of First Nations peoples and businesses.

#### Labour shortages

The National Skills Commission's 2022 Skills Priority List data shows national shortages of the following occupations:

- Nurseryperson
- Arborist

- Gardener (General)
- Landscape Gardener
- Earthmoving Plant Operator (General)

There are also state-based and regional shortages in the following occupations:

- Conservation Officer
- Environmental Consultant
- Environmental Research Scientist
- Park Ranger
- Environmental Scientists nec
- Earth Science Technician
- Sports Turf Manager

These results are consistent with those from the Victorian Skills Authority who calculated that, to meet anticipated demand, Victoria will need an additional 700 gardeners and 350 garden and nursery workers in the 2022 to 2025 period.<sup>62</sup>

In 2021, women accounted for 22% of this sector and, while this was a remarkable rise of 8% since 2016, there may still be opportunities for a greater participation of women to address the labour shortages noted above.

### Amenity Horticulture, Landscaping, and Conservation & Ecosystem Management Summary

#### Workforce challenges

- Labour shortages.
- Workforce diversity and culture: gender disparity, long working hours.
- Recognition of, and collaboration with, First Nations businesses and methods.

#### Key evidence gaps

- The ANZSCO and ANZSIC have yet to sufficiently capture current and emerging conservation and ecosystem management services and occupations.

#### Workforce planning priorities

- Support industry to attract a diverse workforce to address imbalances and labour shortages. **(4b)**
- Collaborate with project leader, the First Nations Land and Sea Corporation, to develop immersive technology training and assessment resources to support delivery of the Respect for Country qualifications and Indigenous Ranger skills development. **(2c, 3c)**
- Review of the Diploma of Arboriculture and Advanced Diploma of Arboriculture to accommodate the specialist arborist unit AHCARB613 Conduct complex tree hazard and health assessment post-fire, which was developed in the FWP Bushfire project and recoded to AHC. **(3a, 3b)**