

EDUCATION AND TRAINING VITAL FOR A THRIVING INDUSTRY

Horticulture is a rapidly expanding industry in Australia, with an increase in the value of both the production and lifestyle sectors.

This means there has never been a more important time for horticulture, and the nursery industry, to continually improve the skills and knowledge of owners, managers and staff to ensure businesses remain strong and profitable in a changing world.

The industry is investing significant amounts in overcoming some of the barriers it faces, and this Nursery Paper addresses both the challenges and opportunities available.

Summary

- Education levels in the horticulture sector are low relative to the rest of the community
- Horticulture Innovation Australia (Hort Innovation) recently launched its biggest industry recruitment and leadership initiative in history
- There are many opportunities for nursery owners, managers and staff to improve their skills, such as the *Masterclass in Horticultural Business*



BACKGROUND

Education and skills development are vital to the development of strong, robust businesses and a competitive, thriving nursery industry.

However, there is a well-documented skills shortage in the agriculture and horticulture sectors.

Dr Jim Pratley of Charles Sturt University* has undertaken extensive research in this area and argues that the future for Australian horticulture is buoyant, but taking advantage of the opportunities could be compromised by the shortage of professionals in the sector.

The levels of education are low relative to the rest of the community and the offerings of horticultural education at universities are disappearing through lack of students.

The past 25 years has seen a significant decline in student numbers, graduates, course titles and descriptions of horticulture offered as applied science or horticultural science in Australia and New Zealand.

A 2008-2009 study** evaluated the opportunities for horticultural education, training and careers in Australia and New Zealand, and found that only 10 per cent of recognised universities in Australia and New Zealand offered horticulture as a stand-alone degree and fewer than 20 per cent offered horticulture either as a major, as a core discipline area, or as an individual subject.



This communication has been funded by Horticulture Innovation Australia Limited using the research and development nursery levy and funds from the Australian Government. Horticulture Innovation Australia

NURSERY PAPERS June 2017

IMPLICATIONS FOR THE NURSERY INDUSTRY

In comparison to the rest of horticulture, the nursery industry has a substantial proportion of staff with trade level qualifications. However, tertiary qualifications are less common than across the community.

The industry has also identified a lack of ongoing training, which means that people with technical skills are not necessarily equipped as well as they could be to move up into management and even business ownership.

Continuing education and training for all staff can help to take a nursery business to the next level; ensuring people gain a greater understanding of the supply chain as well as identifying areas for improvement.

As well, all horticulture businesses these days are dealing with more complex issues than in years gone by, so it is important to maintain and increase technical as well as business skills. For instance, greater movement of plants increases the need to be vigilant about biosecurity – not just from a technical perspective, but because of the risks a breach can pose to the profitability of the whole business.

There are many opportunities for nursery owners, managers and staff to improve their skills, from horticulture specific to more general business courses at all levels.

The risk to the industry, if more people ignore the need for ongoing development, is a vicious cycle where training providers stop offering courses that are not being filled, capacity is lost, and the industry finds itself without suitable courses to attend.



Participants in the inaugural Masterclass in Horticultural Business at their first face-to-face session in the 10-month program.

INDUSTRY INITIATIVES

To meet industry needs, teaching and training must encompass technical, business, marketing and leadership skills to keep workers ahead of the game and ready to tackle new industry and business challenges.

Considerable sums are being invested in the development of industry specific training programs and research to address the gaps in training that are critical for business development.

LEADERSHIP FUND

In the face of an ageing horticultural industry and a fast-moving technological landscape, during 2016 Horticulture Innovation Australia (Hort Innovation) launched its biggest industry recruitment and leadership initiative in history.

The Leadership Fund – part of Hort Innovation's new strategic coinvestment activities and ultimately involving a multitude of projects – identifies and builds future industry leaders at all stages of their career through investment in a host of new initiatives.

Why?

A study commissioned by Hort Innovation in 2015 suggested the industry outperforms the average business in Australia when it comes to innovation – with almost 80 per cent of horticultural producers reporting some form of innovation, whether it was new to the business or new to the industry.

The same study, conducted by the University of Queensland, also showed 72 per cent of horticulture growers are aged over 50.

The Leadership Fund will provide opportunities for horticulture professionals at all stages of their careers to propel themselves along a ladder of leadership. It will provide significant resources to attract a new generation to the industry by promoting the many and varied career paths in Australian horticulture. Leadership Fund co-investment projects currently include:

- Masterclass in Horticultural Business (LP15001), which, among its coinvested funding sources includes funds from the nursery R&D levy
- Attracting new entrants into Australian horticulture – promoting careers in horticulture (LP15006), which also includes nursery R&D levy investment
- National PhD scholarship scheme driving research innovation (LP15007)
- Churchill Fellowships (LP16002)
- Advancing women's leadership across the Australian horticultural sector (LP16000)

HORT MASTERCLASS

Supported by project LP15001, the Masterclass in Horticultural Business is the first course of its kind in Australia. It combines the expertise of one of Australia's leading horticulture universities, the University of Tasmania, with the currently number one ranked university in agriculture and forestry in the world, the Wageningen Research Academy in the Netherlands, as well as New Zealand's specialist land-based university, Lincoln.

Best described as a mini-MBA, the Masterclass is available to growers and people working in the supply chain looking to take their business to the next level.

Up to 30 selected industry leaders each year will be exposed to a 10-month program of learning that focuses on global trends in agriculture and horticulture, international business, innovation, value chains, and governance and risk.

The first Masterclass commenced in February 2017.

The online course material is supported by three face-to-face intensive sessions, including visits to businesses across Australia. The hands-on approach provides real-life examples and insight, encouraging participants to build connections and share industry knowledge. The course focuses on topics including people and culture, supply chain management, financial management, global trends and business development and strategy.

The nursery industry has recognised the value of this type of training, and committed levy funds to provide three scholarships to the value of \$10,000

For Cameron's Nursery owner Sonja Cameron, the masterclass is filling a gap in the market by providing high level financial, marketing and management guidance that is not available in all horticultural courses and programs.

"I started my career as a horticulture apprentice and my early studies at TAFE were all focused on horticulture skills, rather than business management and marketing, which didn't really matter at the time because I wasn't running a business," Sonja said.

"Now my children are older, I've got more time to study and develop those high level skills so I can continue to be a valuable contributor to the nursery industry.

"I'm really enjoying the course so far. There are six of us from the nursery industry and the rest are from different horticulture backgrounds but we're all facing similar challenges.

"The lecturers tailor the course to our own businesses to make the content real and relevant, and very practical. Each assessment is set around your own business and with the additional learning from the course, it enables you to make improvements immediately.



each year to guarantee places for nursery staff.

The 2017 scholars are Sonja Cameron from Cameron's Nursery in New South Wales, James Edge from Humphris Nursery in Victoria, and Heather Huxley from Horticultural and Landscape Supplies in Tasmania.

Future scholarship opportunities will be advertised through industry channels.



"The first module had a financial focus – all about profit, gross margins, planning and budgeting – great tools for my business. The second module, People and Culture, addressed how to best utilise people in business and the challenges that come with that. Supply Chain management is our current module which is all about improving the level of efficiencies within any business. We still have the rest of the year to go, so I am looking forward to what's coming next!

"If you work in the nursery industry and you're considering pushing yourself that little bit further, expanding your skillset and improving your business, I definitely recommend applying for the Horticultural Masterclass," Sonja said.



Whether you are brand new to the nursery industry or have industry experience and want to upgrade your qualifications there are a number of options available for you.

VOCATIONAL EDUCATION AND TRAINING (VET)

The Vocational Education and Training qualifications are designed to impart knowledge and training for job functions. Delivery at these levels is generally more practical or hands on.

The nursery industry's training currently comes under the AHC10 training package, which includes a wide range of agricultural, horticultural and conservation industries. The nursery industry is specifically aligned to two training streams: Production Nursery and Retail Nursery.

These training streams are available in Certificate II to Diploma level qualifications:

- Certificate II in Production Nursery AHC20710
- Certificate III in Production Nursery AHC31110
- Certificate IV in Production Nursery AHC40610
- Diploma of Production Nursery Management AHC50810
- Certificate II in Retail Nursery AHC20810
- Certificate III in Retail Nursery AHC31210
- Certificate IV in Retail Nursery AHC40710
- Diploma of Retail Nursery Management AHC50910

This Nursery Paper was funded by Horticulture Innovation Australia Limited using the nursery industry R&D levy and funds from the Australian Government. It is also possible to complete these qualifications as part of an apprenticeship or traineeship.

Other courses are available which specialise in different areas of horticulture. These include Arboriculture, Landscaping, Production Horticulture (Fruit, nut & vegetable farming), Parks and Gardens and a generalist Horticulture stream.

These courses may be useful in supplementing the industry specialist courses in Nursery Production and Retail Nursery. Providers of these courses include TAFE as well as private Registered Training Organisations (RTOs). For information on these courses, including learning outcomes and contact details of which providers can deliver accredited courses, visit the **training.gov.au** website.

HIGHER EDUCATION

Courses within the university sector are designed to prepare students for higher levels of management and technical specialisations.

The number of universities that offer horticulture as a field of study is limited

and, in some cases, horticulture can only be studied as a component of a broader agricultural or science degree. Some universities that offer horticulture as a field of study are listed below.

Charles Sturt University

• Bachelor of Horticulture

University of Melbourne

- Associate Degree in Urban Horticulture
- Master of Urban Horticulture

University of Queensland

• Bachelor of Applied Science (Urban Horticulture or Horticulture major)

University of New England

• Bachelor of Agriculture (Plant Production major)

University of Sydney

• Bachelor of Science in Agriculture (Horticulture specialisation)

Western Sydney University

• Bachelor of Sustainable Agriculture and Food Security

University of Tasmania

• Bachelor of Agricultural Science (Horticulture major)

LINKS TO RESOURCES

*Pratley, J. (2012). The workforce challenge in Horticulture. http://acda.edu.au/resources/horticultureVolume_24_Number_1_2012a.pdf
**Aldous, D.E., and McEvilly, G. (2011). Horticultural Education and Training Futures in Australia and New Zealand. Acta Hort. 920
Nursery specific training and education resources: https://www.ngia.com.au/Category?Action=View&Category_id=752
Hort Innovation's co-investment Leadership Fund: http://horticulture.com.au/co-investment-fund/leadership-fund/
Information on available training courses and providers: training.gov.au
PAST EDITIONS OF NURSERY PAPERS ARE AVAILABLE ONLINE, on the Nursery & Garden Industry Australia website http://www.ngia.com.au/Section?Action=View&Section_id=46