

There's a misconception that native plants and compost don't mix. But with the right planning and preparation, compost can support and sustain native species, transforming and rejuvenating urban and residential land.

## What is commercial compost?

Commercial compost is made from food and garden organics (FOGO) waste, which is collected from households and businesses.

This material is turned into compost at commercial composting facilities. There are different methods of composting, all of which speed up the natural decomposition of materials into nutrient-rich organic matter.

Commercial compost is required to meet strict Australian standards to ensure top-quality products.

## Episode 6: Compost for natives

In previous episodes, we've explored the role compost plays in development and infrastructure projects, for urban greening and building better roads, and for sporting fields and parks.

But in this new episode, we're digging a little deeper into how compost benefits native plants.

We talk to the curator of Wollongong Botanic Gardens and a technical manager at SOILCO about a thriving tiny forests project. We also chat with Landcare NSW about the potential use of compost in larger scale environmental restoration projects.

## Planning and testing

Experts say the importance of soil testing cannot be underestimated. Sending a handful of soil to a reputable lab for testing at the start of a project, before investing in plants and soil improvers that may be unsuitable for your site, is a small investment that can save time and money in the long run. It's a smart, first step towards healthier soil and plants that are more likely to survive.



## Misconceptions around nutrients

There's a general misconception that native plants are sensitive to high levels of nutrients like phosphorous, but it's not as simple as that.

A study by Kevin Handreck from the CSIRO tested around 2,000 plants and found certain types are less sensitive to phosphorous than others. See More Information following for a link to the report.

Michelle Bulger from SOILCO explained that in her experience, in situations where compost has been used and plants have died, it's usually because of poor drainage or root rot, or because the soil they're growing in is very coarse and devoid of nutrients.

Again, it's important to use the right amount of compost and use a mix to suit the needs of the species being planted.

"It's not a one-size-fits-all solution. You do have to consider your soil type, what you're planting, and your plants' needs before you make any decisions on soil improvers."

– Michelle Bulger, SOILCO

### Climate resilience

Compost improves the structure of soil and can improve water retention by up to three times more than standard practices.

It can create the right conditions for the rapid establishment of plants, by encouraging roots to grow down and out faster. In turn, this improves plant survivability because they're better able to access rain when it falls and access subsoil moisture.

Compost is part of a future solution as businesses and organisations seek to adapt to a changing climate and increasing pressure on water resources.

"When we have so much organic matter, which is effectively being wasted ... why not convert it into compost that can be used to restore ecosystems? ... I think the opportunity around compost is an open book at the moment ... we need to trial and experiment."

– Peter Dixon, Landcare NSW

### Showcase of success: Tiny Forests, Wollongong



Felicity Skoberne, Curator, Wollongong Botanic Garden.  
Photo: EPA

Felicity Skoberne leads City of Wollongong's Tiny Forest program, which has demonstrated great success in reforesting previously barren areas.

The idea of tiny forests was originally developed in the 1970s by Japanese botanist Professor Akira Miyawaki to demonstrate the value of canopy tree planting in small, urban spaces.

The first tiny forest was established onsite at Wollongong Botanic Garden. Since then, two more urban sites have been added to the program. Using locally sourced native plants, representative of the types that might naturally grow in those areas, the team has successfully managed to establish thriving native gardens. Locally sourced FOGO compost was used to improve the soil, ready to receive the plants.

The idea behind tiny forests is to plant densely, with a ratio of three plants per square metre, to create competition. This leads to rapid growth, 10 times the normal rate, and a

forest that reaches the sky quickly, creating canopy cover in areas where there aren't any trees.

"We've been trialling different ratios and different incorporations of FOGO to get the best yields. It's one of those things that's literally a waste product, that becomes a great helper for urban greening and getting these little forests going."

– Felicity Skoberne, Curator, Wollongong Botanic Garden

## What to look for when buying compost

Quality is vital. Make sure any compost you buy complies with Australian Standard AS4454 (Composts, soil conditioners and mulches) and [NSW Resource Recovery Exemptions](#). This ensures your compost is good quality and free from contaminants.

Compost can be custom made to suit requirements. Be sure to consult with a supplier.

## About the program

The Cool Compost program showcases the benefits of compost across a range of industries and uses including sporting fields, mine and roadside rehabilitation, urban amenity, agriculture, and horticulture.



## More information

To watch the video and listen to the podcast, visit [circularag.com.au/compost](http://circularag.com.au/compost)

To find out more about City of Wollongong's Tiny Forests program visit [wollongong.nsw.gov.au/environment/trees-and-plants/urban-greening/tiny-forests](http://wollongong.nsw.gov.au/environment/trees-and-plants/urban-greening/tiny-forests)

The Australia Organics Recycling Association is the peak industry body for compost processors [aora.org.au](http://aora.org.au)

Phosphorous Needs of Some Australian Plants, research by Kevin Handreck, Senior Research Chemist, CSIRO [enpsa.org.au/APOL8/dec97-4.html](http://enpsa.org.au/APOL8/dec97-4.html)