

SIMONE DILKARA

Compost Manager



Bugs in the beds

Simone loves her bugs. She carefully nurtures them and then sets them free to merrily munch our waste

I'm from this area originally. My mum was school teacher at Bungendore for many years. I grew up with farms and I loved the dirt, the horses and the gardens so it's always been a passion of mine.

Eventually I ended up with a job in project management looking specifically at how to get nutrients out of the waste stream and back on the farm. So for me working here at Landtasia it's a dream job, I love the challenges we've overcome.

To take household 'waste' and turn it into a useful agricultural product is just so incredibly rewarding — I love it. There's so much to learn about farming — every stage we get to raises another series of questions.

When the truck from Braidwood, Captains Flat or Bungendore arrives, it tips out garden organics and food-

waste onto the hard-stand area. We also receive commercial food-waste from the Canberra/Queanbeyan area as well.

Underneath, deep down there are impermeable layers so that there is no connection between the composting process and the ground water.

Then we pick out the rubbish, bottles, plastic bags and anything else unsuitable for composting before spraying the pile with water and our microbe mixture.

After the moisture level is right we push it into a pile and cover it with a weighted tarpaulin so that nothing can blow away. It sits there and ferments for six weeks during which time we check its temperature each week. This gives us an easy way of checking what's going on in the pile.

Within 24 hrs the temperature climbs

to over 65°C and stay around there until it reaches the fermentation stage where it will stabilise at around 55-60°C. It's quite a hot process.

It's not a zero oxygen process we use, it's a fermentation process mostly, but it's never completely aerobic or anaerobic. The inoculants we add are used so that once the pile has had its first flush of biological activity, the easy sugars are gobbled up by the bugs, the oxygen level starts dropping which leads to a fermentation process rather than a rotting process.

After six weeks we pull off the tarp and break the material apart using a hay-grabber on the tractor — we've found it to be the perfect implement for the job. We move the material that was on the outside in to the middle — mixing it all up.

We pile it up and cover it again for another six weeks. After that we bring in the screener and separate the larger bits for further fermenting. The fine material is piled and covered again and we monitor it until the temperature drops to around 30°C.

Then we run tests for CO² respiration and ammonia and these tests tell us when the compost has become mature enough to send samples off for independent testing. It's tested for heavy metals and the like and put through a series of artificial seasons to check that nothing germinates.

It takes about six months from go to whoa — from the truck arriving and dropping the garbage, to the certified compost ready for the farm.

At any one time on site we have a finished pile, a pile of oversized material, one finishing its second stage of fermentation and a couple of younger piles, one up to six weeks to two months old and one that's just had new material added to it. We build large piles to achieve the critical mass needed to keep heat and moisture in the piles.

We now have vegetable growers buying our compost and the positive feedback we receive from them makes the whole job worthwhile.

TOP: SIMONE WITH THE FINISHED PRODUCT, RIGHT: WITH CO-WORKER DAVE.

