



Closing the Local Loop

Project Evaluation Report

Hilton Harvest Community Garden



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Hilton Harvest Community Garden

The Hilton Harvest Community Garden is located in the heart of Hilton (Rennie Crescent, Hilton, Western Australia). We started it in 2009 and since then, Hilton Harvest has evolved into a thriving community garden. The garden includes plots (allotment and community spaces), orchard, chooks, bush tucker, asparagus patch, composting systems and an olive grove.

Our vision and objectives are:

VISION:

Hilton Harvest Community Garden is a hub for gardening, community building and education anchored in sustainability.

OBJECTIVES:

- Nurture people's interest in gardening by demonstrating organic gardening practices
- Provide a public green space that encourages social interaction in the community to strengthen social inclusion
- Bring people together through participatory activities in the garden to share information on everyday sustainable living

We currently have 150 members, 21 ploholders (including a school group, a disability group and two community groups) and 1,100 Facebook followers. We hold several special events through the year such as senior's week, children's week and NAIDOC celebrations, gardening workshops, movie nights and one big Earth Hour celebration. We also have a weekly program – Monday and Saturday gardening volunteers, Wednesday Buds n Blooms intergenerational gardening, Thursday Chook Club plus a work for the dole program twice a week.

Closing the Local Loop - Summary

This project aimed to establish a system to recover organic waste from our local café, The Local Café, and turn it into compost by setting up a community composting bank comprising of several gedy compost bins. Our first goal was to reduce the amount of waste going to landfill from the café and increase our compost production at Hilton Harvest. A measure of this goal was to divert enough waste to allow The Local Café to adjust their waste service and save some money.

We have achieved the first goal. To date we **have to date diverted 5,200 litres of organic waste** from the The Local from landfill and we now have enough compost to serve our garden plus excess that members can take and use in their home gardens. The commercial waste service to the Local remains the same as before we started, however it is still possible that this could change. We have been up and running since May and have had to tweek the system a few times to make sure we could manage all the waste – at times our volunteers and the compost system were being overwhelmed with the volume of waste. Now, in November we have a fantastic system and although it is not exactly the system we had envisioned at the start, it is working perfectly. It took

longer than expected to master the system so we feel that we are still in the 'trial' period and it would be pre-emptive for the manager of The Local to adjust his waste service just yet. I would like to see it continue for another few months over summer before any changes are made.

Our second goal was to provide a community composting bank that is accessible to the community to use if they do not have a compost system at home. We also wanted to provide education to the community about how to compost at home and planned a composting workshop to enable this. Currently we are receiving about 60L of waste from the community a week or **around 1,560 litres to date**, and it is increasing weekly. We also ran two events focused on back yard composting, one was held during Science Week on 26 May and incorporated a composting workshop and an educational experience with Angela Rossin using iscopes to see compost critters. The second was a compost workshop held as a part of our Gardening for Beginners series on 12 July. Both events were well attended and well received.

So in summary, we collected 6,760 litres of compost in six months. This converts to nearly 3 tonnes (2.87 tonnes)* or **half a tonne of organic waste composted a month!**

Establishing the bank

We purchased 7 compost bins to start with, intending to add more if needed. They were set up and ready to go (without signage) in mid May 2017.



Figure 1 Compost bins ready to go!

We limited the number of bins because we wanted to put the bins in the shade and in an area that was easily accessible and visible to the public. We were sure to dig the compost bins in to the ground and we covered the base with mouse mesh to eliminate any risk of rodents or cockroaches.



Figure 2 Setting up the compost bins with mouse mesh

We intend to add some trellises with passionfruit growing up them to add extra shade – however this was beyond the scope of the grant and the work will be undertaken by our Work for the Dole crew in the coming months. As the project progressed we realised we did not need the full 15 bins and settled with 9 (we already had two in the garden that was underutilised so we added it to the bank) so we were significantly underspent in this budget line.

The system was going to be used by the public so we needed very clear signage. In the end we were overspent on this budget item but we think it was worth the extra costs to make the system work. The sign was designed by a local graphic designer. As the project progressed we realised that we needed clear signage on the bin lids themselves to allow people to know what bins to use. We attempted to use marker pens, but this faded so we opted for professional, heavy duty stickers. This worked well and we now swap the bin lids as necessary.



Figure 3 Community Compost Bank sign



Figure 4 Instructional stickers on the compost bins

Café

We visited the café several times during the set up phase to make sure the staff and management were onboard and understood what was needed to make the system work. We also workshopped what kinds of bins were required. We opted for two under the bench bins – one in the kitchen area and one in their service area. They converted their existing bins to recycling only bins. We provided instructions for their walls and also instructions on the bins themselves.



Figure 5 Cafe organics bin with signage



Figure 6 Under the bench organics bin at The Local

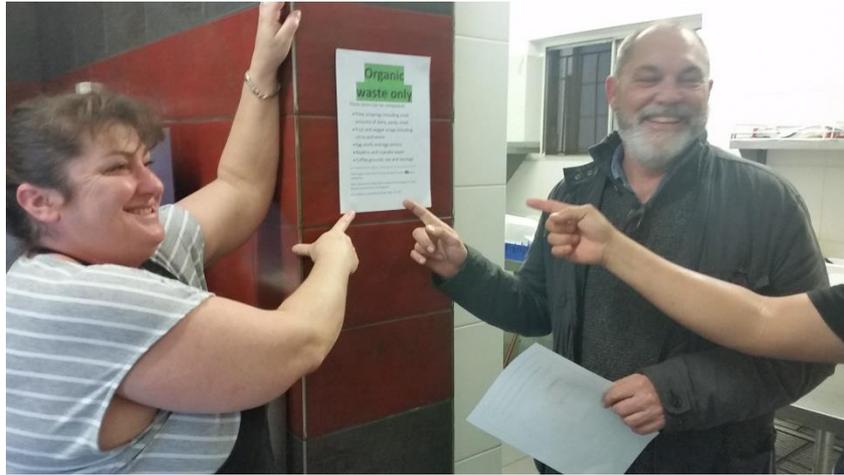


Figure 7 MC (Staff) and Brett (Owner/Manager) at The Local showing the instructions for organic waste collection

Outside the café we had the wheelie bin marked especially so people understood it was not a general waste bin but was organic only. We stuck with the Australian Standards and opted for a lime green bin for this. We realised that it would be easier for volunteers collecting the waste to purchase two bins so we could swap them out and not have to return with an empty bin after we had emptied and cleaned it. It also meant the café would not ever be without a green bin.



Figure 8 MC and Brett with their new organics bin outside The Local

and getting set to compost the waste at Hilton Harvest

Each Monday and Saturday volunteers from Hilton Harvest collect the green 240 litre wheelie bin from the Local Café which is a few houses down from Hilton Harvest. We collect nearly half a wheelie bin twice a week, so this would roughly be 200 litres a week. We started the system on the

week of 15 May and have not missed a week so far, so we have collected for 26 weeks. This means that we have collected and composted 5,200 litres of waste from The Local to date.

The café owner and manager, Brett Claughton is very impressed with the system saying 'We love to see our waste being used at the garden instead of just going to landfill. The system is easy to use and as long as I let new staff know what's going on it all works really well. Communication between us and the garden has been great and we keep chatting about ways to make the system better as we go'. The contamination is extremely low with only a few pieces of plastic in the organics bin.



Figure 9 Contamination from the first week. Contamination has remained very low.

Lessons Learnt

When we designed the system, our aim was to compost all the waste in the bins, however this was not possible. We were receiving too much waste to cope with in the bins, even with regular turning and mixing in a variety of carbonaceous material, the bins were still turning anaerobic and smelling really bad! The material from the café was very high in nitrogen (this was likely to be caused by the coffee grounds) and the bins were getting extremely hot. We tried to remedy this by removing as much coffee as we could, adding even more carbon including sawdust which is almost pure carbon, and asking the café to reduce their waste for our bin. But alas, the smell persisted. Managing the bins was taking up all our volunteer time each Monday and the fun wore off after a couple of months!



Figure 10 Organic waste in the compost bins and turning the compost with a compost rake



Figure 11 Volunteers turning the compost with a compost mate.

After lots of research, taking advice and workshopping we realised that we were essentially ending up with hot compost in a system that was designed for cold compost. There was a lack of air and time in the system so we trialed another solution which was to compost the café waste in the bays that we had made with funds from our first grant from the Waste Authority in 2012. We have been using the bays for about two months and have found the system works really well. Volunteers were already working on the hot compost bays and have been able to include the café waste. It gets turned weekly, gets hot, and makes beautiful compost. We have also been adding straw from the local petting zoo (Farmer Damien who goes to the Growers Green Farmers Market), local lawn mowing company, a gutter vac company plus general garden debris. We test the temperature of the bays regularly. To date we have not had any problems with rodents or cockroaches or any other unwanted visitors.



Figure 12 Farmer Damien delivering straw for us to compost



Figure 13 Building the compost batch with straw and cafe waste

As we progress we provide feedback to The Local and after we have run the system for a few more months, Brett may look at reassessing his commercial waste services.

We are making enough compost to satisfy our current needs in the garden and even enough for garden members and volunteers to take some home for their own gardens.

Community

We have had a great uptake of people using the compost bins for their household kitchen scraps. It is a lot more difficult to measure because we don't put the material in the bins ourselves so the volume is really only a guess (we also contribute our own scraps from our weekly events). From what we can see we are receiving around 60 litres of waste a week and this is steadily increasing. So over 26 weeks that's 1,560 litres to date.



Figure 14 Community using the Composting Bank

With all the café waste going to the bays, we have capacity with our 9 bins to easily provide this service to the community.

We have registered our site on Share waste and have had several inquiries through that, one person got really quite excited about it all. Another user said 'We love the Compost bank and bring our food scraps 1-2 times a week. We're so lucky to live in a such a great suburb with a community garden that let's us compost our food scraps. Composting is really important to us and we're pleased to be able to reduce landfill waste with the help of the garden!' and another noted 'I personality put about a kilo of veggie scraps in each week. The colour lid system is super easy to use and it makes me feel so much better it's not going to landfill! The panel is also great with info that really easy to read.'

With good signage and information on our website and facebook, we have had very low contamination and are making great compost.



Figure 15 Kids composting after a session of Chook Club

Education

We ended up having two compost focused events at the garden. One was for Science Week on 26 May. We ran the event during our regular Buds n Blooms session and had around 20 families come along, three school groups plus members of the public. Angela Rossin set up several iscope stands so we could all see the interesting compost critters at work. During the event Amy Warne (Hilton Harvest member) gave three 'mini' composting workshops scheduled at different times during the event. All catering was provided by Hilton Harvest community and all waste was composted on site. At our events, people know to bring food in reusable containers so we had no gladwrap worries.



Figure 16 Checking out the compost critters with Angela



Figure 17 Mini workshop for Science Week

The second event was held as part of our Gardening for Beginners workshop on 5 July. Amy and Nate Anderson (Hilton Harvest member and hot compost expert) ran a 1.5h workshop on composting for 31 participants.

Outcomes

We feel the project has been totally successful. It is set up now to continue and maybe even get bigger in the future. There is capacity in the system for it to grow ie, if people bring more waste we can cope with that in the bins because the cafe waste is processed in the bays. Because the task of composting is fairly repetitive (now we have mastered the system), other volunteers know how to do it so if one of the key compost people go on leave or have to take a break from the garden others know how to take over.

Our advice to another group starting out a similar project would be to start small. The 'community' side of the project was very easy to set up, any community garden, school, community centre could do it. It was the volume of the café waste that was more challenging. I would also add that you need to be sure you have the volunteer capacity to take on a service like this. Once you start taking waste – especially from a business – there is an expectation that you will be as reliable as a commercial business. Once the waste starts, you can't turn it off!

Acknowledgements

Support from the waste authority has been acknowledged in the following ways:

- Waste Authority logo and text on the main compost sign
- Stickers on the two end compost bins
- Acknowledgement in event promotion on Facebook
- Newspaper article
- On our website (see link <http://hiltonharvest.weebly.com/community-composting-bank.html>)
- Our 2017 Chairpersons report for our AGM

One man's trash is Harvest's treasure

COMMUNITY garden Hilton Harvest has come up with a new way to try and reduce the amount of rubbish going to landfill—it's taking its neighbours' compost.

Recently the harvesters got a grant from the WA Waste Authority to set up nine composting bins.

Harvest member Amy Warne says they've already got The Local cafe taking part, with owner Brett Claughton hauling a 240-litre bin up the road after a busy weekend's trade.

Ms Warne says she's been really impressed by participants who've done a great job making sure there's no plastic nasties in the mix.

Carbon capture

She says currently there's only enough compost to service the 18 plot-holders and the communal gardens at the site, but they are hoping in the future to step up production so they can sell it.

"There's plenty of waste to go around," she says.

Ms Warne says making the compost is a crucial way to capture carbon in the soils, helping combat global warming.

"And it's really important for the soil; globally soils used to be 20 per cent organic material, but that's now down to 3 or 4 per cent, and in Australia it's just 1 per cent."



• Khesan Starr and Lanessa Hart add some compost to Hilton Harvest's bins, helped by Sula Wray, Sasha Wray, Quincey Peck, Adam Peck and Morgan Wray.

Figure 18 Herald Newspaper article on 15 July

Variations

We had made some variations to how we spent the budget. As advised above we underspent on actual compost bins and overspent on signage. We also added compost mates and mouse mesh to the budget.

Future projects

At the moment we are just looking to have more community people use the compost bins. We will be looking at raising awareness of the community composting bank.

Hilton Harvest Community Garden is hugely grateful for the opportunity to provide this service to the community with the support from the WA Waste Authority. Without this support projects like this are so much more difficult to get off the ground. Thank you.

* Conversion from Litres to Tonnes made using the South Australian Zero Waste SA conversion spreadsheet at http://www.zerowaste.sa.gov.au/upload/industry/toolkits-templates-and-guides/waste-management-toolkit/150811_Waste%20and%20Recycling%20Reporting%20Template%20-%20EXAMPLE.xlsx