Rethinking Trash: Understanding the Value of Food Waste

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Composting has become part of the daily life for UCLA residents, but this practice hasn't fully extended to the University Apartments.

The University Apartments house a large portion of UCLA's community, and there is a high potential for waste diversion. By implementing an effective composting program, we can instill sustainability habits that residents can carry on for the rest of their lives.

In the past two years, other SAR teams have worked to implement and improve composting systems in four University Apartments, two on Hilgard and two on Landfair. They recognized that the University Apartments had a high potential for waste diversion, and the implementation of compost systems would help UCLA reach its Zero Waste by 2020 goal. We are now working to improve the Landfair systems through research and education, and to expand composting to the rest of the University Apartments.



Figure 1: The team at the waste audit on March 10th, 2019. We performed a waste audit at Landfair Vista, sorting through the landfill, recycling, and compost waste to find the proportion of waste that was sorted incorrectly. The sum of recycling and compostables is considered the total waste diversion from landfill. At Landfair Vista the landfill dumpster consisted of very similar amounts of compost and landfill waste, with a smaller

percentage of recyclables improperly disposed. Unfortunately, there was *three times* more compost thrown down the landfill chute than properly disposed of in the compost bin itself. In total, this building had 35.2 kilograms of potential divertable waste. In other words, 53% of residents' trash is going in the wrong bin. A large barrier to proper composting habits for the residents is convenience- there is a trash chute on every floor while any other waste must be walked down to the trash room, a practice that does not necessarily encourage proper sorting.

According to a 2016 study, increasing convenience of compost bins in an apartment building by putting the bins on each floor increased composting by 70%. (DiGiacomo, 2016).

As for the Glenrock apartments, our next target for rolling out a composting program, the numbers did not look much different. Compost and landfill waste made up similar proportions of the landfill dumpster, meaning that the residents with composting available to them in Landfair are not performing any better than those without. While talking with Laura Lopez, the custodial supervisor for the University Apartments, she voiced issues about residents not using provided caddies to throw away compost, and even throwing their trash "on the ground." This lack of bagging the compost correctly caused a pest and odor issue and created more work for the custodial team. Instead of rushing to get the structural elements of the compost systems in place, we decided to take a step back and focus on education to increase participation and correct composting practices.

Our first step in educational outreach was through the Earth Day Fair, which provided us the opportunity to run a sliding scale survey to better gauge UCLA student's understanding and interactions with composting. As shown in Figure 2, we found that most people are convinced they have an individual impact on the health of the environment by composting more frequently.

	IVERSITY	WAS		A.
		DIVER	SION	
WHAT	PERCENTAG	E OF YOUR TRASH DO		OSTABLE?
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Ofeet				1 MILE
WHICH	COMPOSTIN	LOWING BEST DESURI A BEFORE COMING TO	BES YOUR EXPOSU UCLA?	IRE TO
WHICH	A LITTLE	à BEFORE Coming to Moderate	UCLA?	IRE TO
+	COMPOSTIN	à before coming to moderate	UCLA?	PASSIONATE PASSIONATE encouraged others to compost
NONE	A LITTLE heard of it	à BEFORE Coming to Moderate	UCLA? SIGNIFICANT Competed regulady	PASSIONATE encouraged others to compost

Figure 2: The sliding scale survey that was presented at Earth Day Fair on April 22, 2019.

We are now faced with the question- how do we motivate people to act on this conviction that composting can better the environment?

Even the best composting program is useless if the residents do not actively participate and sort their waste. A key part of our project is creating an education plan for the University Apartments to utilize to maximize resident participation. Currently, composting education for the undergraduate apartments is handled by the Apartment Resident Assistants (ARAs). We are working to create a packet of information that the ARAs can use when leading events and interacting with their residents. The packet will include information explaining how to compost,

answers to common questions, and explanations on why composting is important. We are also

working to structure a system that will regularly update the ARAs on the effectiveness of their buildings waste diversion efforts and progress towards UCLA's overall sustainability goals. This will allow ARAs to keep their residents updated and encouraged to participate.

Under the UC-wide Zero Waste by 2020 goal, UCLA is currently working to send zero waste to landfill by next year, and a large portion of this waste is produced by the university owned apartments. Through the education of residents on sustainability and waste diversion, we can instill habits and foster mindfulness that UCLA students will carry with them through their lives. When throwing things away, there is no "away." Every item casually thrown in the trash becomes destined for the landfill, further contributing to increasing greenhouse gas emissions. However, when we are mindful of our waste, proper sorting can significantly decrease our carbon footprint, and return food waste to the soil to feed us again.

Works Cited

https://www.tandfonline.com/doi/full/10.1080/09640568.2017.1305332

Alessandra DiGiacomo, David W.-L. Wu, Peter Lenkic, Bud Fraser, Jiaying Zhao & Alan Kingstone (2018) Convenience improves composting and recycling rates in high-density residential buildings, Journal of Environmental Planning and Management, 61:2, 309-331, DOI: <u>10.1080/09640568.2017.1305332</u>

Email

Dear Sir or Madame,

We are contacting you regarding our research project at the University of California, Los Angeles (UCLA). Our project involves improving waste diversion in the undergraduate University Apartments by implementing an efficient compost system for each building. We are in the process of educating the residents to improve their waste disposal practices in order to improve the efficacy of the compost systems already in place in two Undergraduate apartments. We have conducted waste audits and obtained compelling data that show the need for better education in regards to composting. We want our work to be shared with the public to increase the mindfulness around the waste they produce and support UCLA's ultimate goal of achieving zero waste by 2020. We've attached a copy of our press release, that we recommend you publish in support of our efforts.

Thank you for your consideration. The SAR UA Waste Diversion Team



Fabris, Erin

to ZACHARY, carolineschreck@gmail.com, Elizabeth, Emma, Maia 🔻 Hi Zach,

Sounds good!

I read over the press release and it looks good to me. Good luck finishing everything up and I'll see all of you at the presentations next week.

11:56 AM (4 hours ago)

Oh and have a good 3-day weekend!

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