

COMPOSTING SURVEY REPORT 2017

A survey was administered to obtain feedback on the County Home Composting Program and Earth Machine Compost bin distributions conducted in September-October 2017.

Survey Disseminated: 9/14/2017

Results Compiled: 10/16/17

Surveys Sent: 932 valid emails

Surveys Received: 318

Overall Response Rate: 34.1%

Narrative Summary of Results:

This is a survey of all participants with valid emails from the inception of the program. The response rate was high for an external survey which usually averages 10-15%. Overall, the survey respondents were very pleased with the County Home Composting Program and the Earth Machine composting bin with 93.65% of respondents are happy with the functions of the bin an increase of about 3% over 2016. Result highlights were as follows: 86.2% of respondents noted County education is good or excellent, 87.2% think we should invest tax dollars in more bins a decrease of 3% for both from 2016, and 85.7% rated the Earth Machine system as good or excellent a 4% increase.

Diversion figures averaged 22.66 gallons per month, a slight increase from 2016. The Recycling Office continues to use a short 10 minute composting video as well as updated website and other online information for the home composting program.

The survey results show that the Home Composting program is the County's most economical waste diversion program. At an average of 22.66 gallons of material diverted per month, the program demonstrates the following diversion rate: 271.95 gallons per composter per year @ 7.5 pounds per gallon = 2039.63 pounds per composter. Life of composter is 10 years, so a total average of 20,396.25 pounds, or approximately 10.20 tons, will be diverted over the life of each composter. At a cost of \$47.45 each, the **cost for the program is \$4.65 per ton.** The Home Composting Program is a well-received educational series, which complements the goals of the County Recycling Office. The program reinforces waste diversion strategy, and promotes awareness toward waste generation and diversion.

One concern is that there was an increase in the number of people that replied to the survey who have stopped using their composter. A 12.54% increase to 25.79% of recipients who no longer use their bin. With most stating they've moved and no longer use the bin.

Note: Survey participants that answered no to Question 1 bypassed Question 2. If they went on to say they never started using the Earth Machine Home Composter (Question 3) they were sent to the end of the survey. For all other answers on Question 3 they continued the survey on Question 10.

For participants that answered yes to Question 1, they bypassed Questions 3-5.

Question 1: Are you still using your Earth Machine?		
Response	Percent	Users
Yes	74.21%	236
No	25.79%	82
Total		317

Question 2: Please estimate how long you've had it the bin.		
Answer Options	Response Percent	Response Count
10 years or older	6.39%	15
6 to 9 years	12.77%	30
2 to 5 years	37.88%	89
1 year or less	42.98%	101
Total Respondents		235

Question 3: If you're no longer using your Earth Machine why?		
Answer Options	Response Percent	Response Count
problems with pests	19.67%	12
moved away and left at old address	31.15%	19
Too hard to turn or use	3.28%	2
never started	16.39%	10
Too small for compost they produce	3.28%	2
landlord or family disapproved	1.64%	1
lost interest	8.2%	5
Other - Personal reasons	4.92%	3
missing parts/broken	11.48%	7
Total Respondents		61

Note: Replacement parts and bins are available at the Kaua‘i Resource Center on Fridays.

It is recommended to users that if the Earth Machine Compost bin is not large enough for their needs, that they build their own compost pile out of pallets or other material which allows for easier turning and use in their garden or farm.

We encourage residents to give their composter to neighbors or discuss with the new owners or tenants how to use the composter and its benefits. Many who moved listed that they gave their composter to friends.

Question 4: I would like to discuss my issue with the Earth Machine Home Composter.		
	%	Responses
No	91.94%	57
Yes (include contact information)	8.06%	5

Question 5 asked survey participants that would like their name removed from the contact list to input their email addresses. This question was not asked of participants that stated they still use their compost bins.

Question 6: How many gallons of material do you collect in a month?						
	Food Scraps	Yard/Lawn	Paper/Browns	Total	Users	Average
2016	2130.6	2102	641.75	4874.35	227	21.47
2017	1549	2268	443.5	4260.5	189	22.66

Question 7: How many months does it take to completely decompose?			
	Total months	Number of users	Average per user
2016	1304.5	211	6.18 months
2017	1080.75	177	6.11 months

Note: It is recommended that increasing turning and proper ratio/moisture increases decomposition rate. With proper maintenance and cutting of materials compost production can take as little as 6 weeks. The average composting rate with no maintenance and no cutting is approximately 6 months.

Question 8: Are you pleased with the features and functions of the Earth Machine?		
Response	Response Percent	Response Count
Yes	93.65%	177
No	6.35%	12
Total		189

Question 9: How would you rate the Earth Machine Composting System?		
Response	Response Percent	Response Count
Excellent	31.75%	60
Good	53.97%	102
Fair	13.76%	26
Poor	0.53%	1
Total		189

Question 10: Do you have any additional features or different system recommendations?		
Answer Options	Response Percent	Response Count
Turning Bin or Easier mixing	24.73%	23
None/No/NA	22.58%	21
Second bin for capacity or for 2 bin system	4.3%	4
Tool for turning- aerator	4.3%	4
Lid- Easier to Open	7.53%	7
Bins falling apart or not snapping together	2.15%	2
Pest control/repel/issue	6.45%	6
Lid- Bigger opening	3.23%	3
Better Aeration	1.08%	1
Larger bin	4.3%	4
Worm farm or supply worms	3.23%	3
Smaller Bin	1.08%	1
Different color bins	2.15%	2
Smooth out plastic finish, there are sharp edges	1.08%	1
Ring to collect rain water on bin	1.08%	1
Components are defective	6.45%	6
Solar powered motor to turn bin	1.08%	1

Question 10 (Continued): Do you have any additional features or different system recommendations?		
Answer Options	Response Percent	Response Count
Hose spray nozzle holder	2.15%	2
Starter enzymes	1.08%	1
Total Respondents		93

Note: Our research has found that turning bins are more complicated to put together with lower capacities and cost significantly more than the Earth Machine Compost bin. However, we have purchased several indoor composting bins (Bokashi) to test the utility of such a system for those without the ability to use an Earth Machine Home Composter. These bins have for the most part been successful, but the cost to import Bokashi is prohibitively high.

Question 11: If any parts have broken on your bin, please let us know which part.		
Answer Options	Yes	No
	20.81%	79.19%
Answer Options	Response Percent	Response Count
Door/Hatch/rails for hatch for compost removal	30.43%	14
Middle connection attaching top and bottom	23.91%	11
Vents- Rats chewing through	4.35%	2
Sun damage- whole bin	2.17%	1
Anchors/Screws/Stakes	15.22%	7
Whole unit wore out after 5 years	4.35%	2
Whole unit is warped	2.17%	1
None	4.35%	2
Whole unit failed (no specifics)	2.17%	1
Unit cracked	4.35%	2
Lid	6.52%	3
Total Respondents		46

Question 12: Have you experienced any problems with the following?		
Answer Options	Response Percent	Response Count
Slow Decomposition	32.35%	55
Insects - Cockroaches	48.82%	83
Insects - Fruit flies	35.88%	61
Insects - Ants	24.12%	41
Animals - Mice/Rats	25.29%	43
Insects - Centipedes	22.35%	38
Insects - Spiders	13.53%	23
Animals - Chickens/Birds	11.76%	20
Insects - Houseflies	9.41%	16
No problems*	9.41%	16
Odors	5.88%	10
Animals - Pigs	4.71%	8

Question 12 (Continued): Have you experienced any problems with the following?

Answer Options	Response Percent	Response Count
Insects- Snails	2.25%	4
Animals - Cats	2.94%	5
Reptile- Geckos	2.94%	5
Lid or other component	0.59%	1
Animals - Dogs	1.18%	2
Hard to turn	0.59%	1
I use bacteria to accelerate decomposition	0.59%	1
Insects- Other	3.53%	6
Retrieving compost is hard	0.59%	1
Total Respondents *170		440

Note: The compost video and education makes it clear that the Earth Machine is a vegan and that composting meat, fish, and dairy will cause odor and pest issues as well as increasing turning and proper ratio should solve most issues that may arise.

Question 13: Would you recommend that the County invest tax dollars to purchase more bins for public distribution?

Response	Response Percent	Response Count
Yes	87.01%	201
No	12.99%	30
Total		231

Question 14: How would you rate the education and services received from the County Recycling office?

Response	Response Percent	Response Count
Excellent	40.52%	94
Good	45.69%	106
Fair	11.64%	27
Poor	2.16%	5
Total		232

Question 12: Do you have any other comments?

Responses
Thankful for County in providing the composter
Nice people
I think it is GREAT to help to minimize our output ,small island, we need to go ZERO waste:)

Not just composting is important (saves the septic system from overload but recycling needs to be stepped up by each and every person. i see people at the transfer just tossing EVERYTHING in the hole. Lazy yes! but uneducated in the dire need to recycle. Visit Huntington Beach "Rainbow disposal" for a great model.

Offering classes, sessions, or even videos would be helpful for first timers like me. There's a lot of expert advice that could help people make better use of the compost bins and increase the effectiveness of composting at home, but we don't have access to that advice at this time. Unless I'm wrong and there are resources available, in which case, I'm not sure how to find those resources.

I'd like the program available for schools.

composting reduces landfill waste

Works very well. Thank you.

thank you; good survey

Keep doing it. Composting is a wonderful way to reduce waste and to recycle nutrients on site instead of shipping in fertilizers from across the ocean. I found the whole experience from hearing about the program to receiving the composter and education material to be easy and fast.

Loved it. I lived in Portland Oregon which has an excellent composting program, including roadside composting, and I found county of kauai's education system to be better. I like that the composter is free. I have two, one is used for grass

An important and appreciated service

it is a great idea, I think the bins are not well constructed , so people may just not continue with the program when they break. but if they worked as they are meant to and a clearer program were established , it is a very good idea

Don't let it die

For a family of 3 we barely have one bag of trash per week. Everything else we recycle. Thanks!

We need another one,please

Glad the program is in place. Mahalo!

I think it's a great thing. THE more ppl who are composting, the better. I think though that a better composting machine would make it easier for more ppl

needs to be more education re: composting process; my current landlord won't allow the bins.

Thank You!

I would like to have other composting options available through the county, even if at a cost (subsidized perhaps). I really like composting, but believe that a rotating bin composter would better suite my needs. I have purchased such a composter from Home Depot, but believe having more options available through the country would increase peoples' willingness to compost.

Just a Thank You!

Have green waste collected. Bagging it to haul to Hanapepe in my car is a drag.

please continue

I am impressed with the whole composting program. I only wish we can get our bottle/plastic/can recycling program curbside. I hate seeing everyone's recyclables going to our islands landfill. Very satisfied with the green waste department. great job!

Thank you for offering service & educating public

Should distribute in grouPs of 3 for flipping ease

Have more available.

Awesome that these are offered! I love having it in my yard!

wish there was a larger size. I have big leaves.
I don't think as many people know about it, I would like to see the word spread.
I live alone, and need 2 bins to compost all my yard green waste and household waste.
Mahalo Nui
Very thankful to receive one and loving it
No, just 'MAHALO!' once again for this great, earth-friendly tool! Wish we did more regarding curbside recycling...something to work on in the future :-)
Gave my bin to my neighbor
composting program is great! Now the county needs to work on Recycling collection. People throw so much recycling mater. And there is nowhere on the island where there is public recycling bins (beside HI5) I mean the small ones. All you see is trash cans :(
pick up time could be expanded
I think those interested in composting will make their own area and the funds may be used for other recycling efforts
In regards to Question 11, I do not see a lot of recycling done by community members. It's not ingrained in the culture and I do not see it done at schools and businesses.
offer larger ones for upgrade fee
help us get rid of feral pigs.
The concept is good and for the average homeowner, this is probably fine. But our goal was to create compost to continually add to our garden and this wasn't a good solution for us.
hope to re-start use, in the future
I'm happy this program is available.
Thank you!
Mahalo
It's great! Hopefully more can be invested in this program and more people will be educated to compost their greenwaste
Too bad that automatic pickup for recyclables was discontinued. Too many people being lazy and putting all sorts of recyclable stuff in rubbish bins.
Thank you! This is the BEST for composting! love how easy and hoe the opening fits a shovel easily!
Friendly staff, great program. Thank you for the free bin.
Most people don t know about it, maybe mention on property tax bill . Would like to get those blue worms somewhere
The only limitation I've had with the bin is that my wife and I don't produce enough organic waste to balance the amount of brown material from the yard. It's an excellent program that larger families and our island would benefit from. I suggest more outreach programs at the school's to encourage composting at home.
while not using any compost, it keeps lots out of dump & rats away from house (because bin is away). We would not want to not use it.
composting makes a big difference in the amount of waste that goes into my trash bin
I think it is a great program. Would suggest , if not already provided, a list of farms, etc where excess compost material can be delivered.
I appreciate the program - it's a good start to encouraging home composting

-If not already done, materials should be available in languages other than English.

-Also, allowing people to make appointments for house call delivery (rather than pick-up at Ahukini) would probably expand participation.

-If you could also find a way for County offices to compost, you'd likely collect a lot. For example, a Janitor picking-up all waste from all offices at the end of each day.

Some other recycling suggestions:

-Recycling could be improved within County offices. I think it would be helpful for someone with Recycling to physically go to all Departments and provide training on what can be recycled and provide education on how important it is. (Similar education should be provided to all homeowners, and in all languages.)

-It would be very helpful to have paper recycling on-site at the post offices. So much junk mail goes in the trash can there (at least at Lihue Post Office on Rice Street).

-Please continue working toward curbside recycling.

it's a great idea!

More advertisement. Pick up on weekends on different parts of island.

Just use it to reduce trash volume. Do not use the compost.

This a great service that should be promoted more by the county. We did not even know about until we got interested in gardening. You should advertise it more so that everyone will compost.

I love that the county has this program, but it seems that, and I might be wrong, a lot of residents don't know about it. Maybe posting the County of Kauai Facebook page and other means of getting the word out, would be beneficial.

Sure would love to now see a better program set up for all recycling, as we know that most locals have a tendency to only recycle what they can get money for (HI5) and discard everything else....

mahalo nui. great addition to our household. We use it everyday.

dog chewed sliding cover a bit but cover still functional.

There needs to be more community outreach about the Composting Program. Most people don't know that it exists or that the composting bin is free.

It's work to create the small amounts of compost, but worth it IMO. The efforts of composting offset the need to clean my garbage containers as they stay much cleaner & don't harbor maggots. Recycling and reducing the waste stream coming out of our homes area civic responsibility.

No. I think it's great! I hope everyone does it!!! It's easy, cuts down on waste in garbage can and many more reasons! I've been using it for a few weeks and am still excited about it!

Advise people to place bin on cement and wrap with something rat-proof, like that 1/4" wire mesh.

contract for a different bin. the 2 part one breaks as it is hard to snap together. a one piece tower with lid is BETTER. Wider top access also for turning. it's a bit narrow for a pitchfork.

i am very happy the County offers this program

Yes. I wish that we had a green waste that accepted compost as well. That was collected by the council. I wish I could have a compost bin.

A different method/device is needed. Maybe worms, too.
Composting in Kekaha is difficult. Too dry.
Love it, grateful that you are offering this program to make our island more ecofriendly.
Fantastic program, deserves more advertising
Great program!
helpful staff. i learned a lot. used to use piles
The first one I got broke after awhile so I just got a second one. I have never gotten any compost. The waste just goes into the ground but at least it's not going to the landfill.
Keep it going! Thank you!
You should issue two at a time. I need two new units. Thanks! 808 635-8885
Attracted rats and fruit flies. We covered openings with wire mesh but the rats chewed through the plastic.
excellent program, should be advertised more for public awareness
no just thank you
Aloha
if it tumbled it might decompose faster - not sure
Love it. Mahalo
It's a great program. As a Realtor I love seeing the bins in people's yards
Helpful, knowledgeable staff, especially that bald haole guy.
We are very happy with our composting system. It works quickly and we're glad to keep waste out of our septic system and landfill.
The problems noted on the page before are not really problems at all but they are or have been in my bin. Some critters are only seen on rare occasions.
I love this program! What an amazing resource. Please continue offering this program.
I love it and think each household should have one, just like they have trash cans.
Considering our limited landfill space, this is one mechanism for reducing organic waste entering the waste stream. There are others including building a composting facility at the landfill site or anaerobic digestion of organic waste to generate power.
It works. new user and pleased with its function as a composting bin
Great program These recycling bins should be distributed island-wide as a component of the routine trash service.
nice benefit but money could probably be spent elsewhere, thank you!

Note: At the time of bin distribution, we supplement the video with tips on the best way to assemble the composting bin, and suggestions for what to compost.

Educational outreach to schools has also increased to teach faculty proper techniques for composting using the Earth Machine Home Composter as a starter unit for their schools, classes, and homes.