Kiewit Residence Hall Compost Pilot

Student Name(s) and Emails (if y	you are a group o	of students,	list all names	here and	select one	project
lead to fill out the remaining po	rtions of the Cov	ver Sheet):				

Nick McCreary

NetID: NMMxxx

Student Mailing Address (current, local, CU): Creighton Hall 110

<u>Student Permanent Mailing Address (home and/or parents'):</u> 2500 California Plaza, Omaha Nebraska 68108

Student Phone: (xxx) xxx-xxx

<u>Year at CU (circle one):</u> FIRST SECOND THIRD FOURTH GRADUATE/PROFESSIONAL

Major(s) and Minor(s): Sustainability

<u>Title of Proposed Project:</u> Kiewit Residence Hall Compost Pilot

Brief Description of Proposed Project (3-4 Sentence Max):

Up to 20 rooms in Kiewit Hall will be given the opportunity to receive a 1.3 gal compost tote for personal compost waste. The Office of Sustainability Programs will collect the waste from behind Kiewit and provide students will all necessary supplies. The CSSAF grant money will cover the cost of bins and supplies for one year.

Faculty/Staff Advisor Full Name and Creighton Email Address:

Becky Crowell beckycrowell@creighton.edu

Please include this form as the first page of your proposal, the entirety of which should be emailed to <u>sustainability@creighton.edu</u> as a single PDF.

Abstract

The Office of Sustainability Programs (OSP) at Creighton University currently composts in Brandeis Dining Hall and other campus locations. It can be difficult for students in residence halls to compost personal waste because there are no compost bins inside the Residence Halls. The Kiewit Composting Pilot will explore the option of providing interested students with a 1.3 gal compost tote to collect and dispose of personal compostable waste in Kiewit Hall.

The requested CSSAF funding will cover up to 20 compost totes and supplies for one year. Students in Kiewit Hall will have the opportunity to opt into the composting program (first come, first served) by responding to communication from their Resident Director, Lisl Wiedemann. The OSP will monitor the locked compost tote placed behind Kiewit Hall, recording volume and contamination at least every other day. If the pilot is successful, it can be expanded to other Residence Halls.

Proposal

The Office of Sustainability Programs (OSP) at Creighton University launched a post-consumer composting pilot in August 2020. The program was a response to the increase in single-use compostable to-go containers. Compost bins were placed around heavy outdoor dining areas and monitored by OSP student staff. Hillside Solutions hauls the compostable waste from campus to their composting facility near the airport. Housing and Auxiliary Services splits the payment for Hillside's services with OSP.

After the fall 2020 semester, OSP attempted to expand the composting program into residence halls. However, the time required to check every waste room was too much for the student staff of OSP to handle. The new idea for individual room compost totes was developed as a solution.

Kiewit was selected as a pilot site because the Resident Director in Kiewit, Lisl Wiedemann, is a passionate supporter of sustainability programming. Students in Kiewit will be allowed to opt into the composting pilot by communicating with Lisl. Interested students will need to sign an addendum to their roommate agreement to be eligible for the program – all roommates must understand and agree to the pilot program. See an example of the Addendum in Appendix B.

Rooms that successfully apply to the program will be given a 1.3 gal personal compost tote and enough compostable bags to last one academic year. See Appendix A for more information about these products. Students will receive their totes and years' worth of bags after a required 30-minute composting presentation. During the presentation, OSP staff will teach students how to compost in a residence hall and clean their bins.

A 64 gal locked compost tote will be placed on the south side of Kiewit Hall; see Appendix A. Participating students will have access to the locked 64 gal tote 24/7. The tote will be locked with a numbered padlock. Students in the program will be given the code to unlock the bin. OSP student workers will check the bin at least every other day, replacing it when it is full or producing a foul odor. OSP students will monitor for contamination and communicate with the Director of Sustainability and Residence Life if there is continued or high contamination levels.

Any Creighton University Residential Life or Office of Sustainability Programs staff can terminate a rooms' composting program for any reason, including poor bin maintenance, contamination issues, or roommate issues. If an individual program is terminated, the bin must be immediately returned to the Office of Sustainability Programs. All participants must return the 1.3 gal compost tote at the end of the academic year. A \$25 replacement fee will be assessed through Residential Life for any lost or damaged compost tote.

All participants must attend a 30-minute OSP led composting training to receive their 1.3 gal bin. The same training will be offered at the beginning of the second semester as a refresher. Stickers will be made for each bin. The stickers will include a list of what is and is not compostable. The OSP will provide a laminated instruction sheet to each participant at the 30-minute training. Additional composting information can be found on the Sustainable Creighton webpage (https://www.creighton.edu/sustainability/operations/waste/)

Project Sustainability

Composting food waste and paper products prevents these products from going into the landfill. Waste in a landfill decomposes in an anaerobic environment, producing methane. Composted waste

decomposes in an aerobic environment, producing carbon dioxide. Carbon dioxide has a significantly lower global warming potential than methane. Additionally, composing produces healthy soil in 3-5 months, compared to the hundreds to thousands of years, it takes the waste to decompose in a landfill.

Creighton donates over 2000 pounds of composted soil a month to local community gardens in foodinsecure neighborhoods. Composted soil is rich in nutrients and bacteria growth necessary for healthy high-volume food production. There is no artificial process capable of producing soil as beneficial as compost. Additionally, composting can save Creighton University money by reducing the amount of solid waste heading to the landfill.

Metrics

The two metrics that OSP will track for this pilot are weight and contamination. The compost bin will only be accessible to Kiewit residences in the pilot program. Therefore, OSP can accurately estimate how much compost weight is being diverted through this program. OSP student staff will record estimated volumes of compost waste every time they check the tote. Using the conversion of 1 gal of mainly food compost = 1.96 lbs. or compostable waste, OSP will accurately estimate the total weight of diversion.

Additionally, OSP student staff will count the amount of contamination present. Contamination includes any non-food or non-paper item. OSP will share contamination data with Residence Life for training purposes.

Best Practices

Many college campuses have similar programs. Two of the best examples are The University of Iowa and Loyola Chicago University. At the University of Iowa, students must complete the following steps to enroll in the program; more information can be found here (https://sustainability.uiowa.edu/campus-initiatives/recycling-and-waste-reduction/composting/compost-residence-halls):

- 1. Determine which residence hall compost drop-off site is nearest you and decide if you are willing to take your compost bucket to the drop-off site at least once-per-week.
- 2. If you choose to proceed with composting, complete the Residence Hall Compost Enrollment Form.
- 3. Complete a Compost Program Roommate Agreement with your roommates and RA.
- 4. Pick up your compost starter kit from the Office of Sustainability and the Environment. We are located in 3 Jessup Hall and are open during regular business hours (M-F, 9am-4pm). If you need to schedule a pickup outside of these days/hours, contact us at sustainability@uiowa.edu
- 5. You place compostable materials in your bucket. To minimize odors and pests, consider keeping your bucket in the refrigerator.
- 6. You empty your bucket at least once-per-week at one of the residence hall compost drop-off sites. Wipe your bucket clean as needed to prevent odors and pests.
- 7. You will be able to pick up a new compostable bag for your compost bucket at the front desk of Burge, Catlett, or Hillcrest each time you empty your bin. Please only use the bags provided at the front desk.
- 8. Repeat Steps 5 through 7. If you run into issues, consult our FAQ page for answers.
- Return your compost bin at the end of the school year, or upon your decision to terminate your participation in the program. Before returning your bin, empty all contents, wipe it clean. Return it to the compost collection table at your designated MicroChill collection event at the

end of the school year (or bring it to the Office of Sustainability if you are terminating your participation mid-semester).

At Loyola of Chicago, the process is similar; here is an excerpt from their webpage (https://www.luc.edu/sustainability/campus/recycling/composting/):

Sign up for the Compost Bucket Program! For interested faculty, staff, and for students living onor near-Lake Shore Campus, please complete an agreement form and send to sustainability@luc.edu. You will receive a one-gallon compost bucket and a weekly drop-off schedule. Then you can begin composting and join others across the University who are taking action and creating change.

All participants must attend a short training to participate. If you miss the training scheduled each semester, contact us and see if we can arrange a training during one of the drop-off times. Fall training events information can be found here: Compost Bucket Workshop Flyer - Fall 2020.

The Facilities Management Department and partners work together to promote change through action. There are individuals and departments that take action by composting their food waste and used paper towels generated while on campus.

Budget

CSSAF funding will cover all expenses necessary for the first year of the program. OSP will fund the labor required to monitor and track the program. If the program were to continue, new bags would need to be purchased each year. Additionally, new bins would need to be purchased if the program were to expand.

	Creighton	Student Sustaina	2	und				
Budget Request								
	Kiewi	tt Hall Personal C	Compost Pilot					
Budget Item	Quantity	Green Fund Request	Outside Contribution	Total	Explain how you arrived at this cost estimate and your sources of information			
1.3 Gal Stainless Steel Compost Bins	20	\$449.00		\$449	Amazon, https://www.amazon.com/Epica- Stainless-Compost-Gallon- Charcoal/dp/B00AMNCYNQ			
100 Count 2.6 Gal Compostable Trash Bag	6	\$58.95		\$59	Amazon, https://www.amazon.com/UNNI- Compostable-Kitchen-Certified- Francisco/dp/B013XGQXVW/ref=pd_bxgy_i mg_1/141-7153480- 4829417?pd_rd_w=nz3wC&pf_rd_p=c64372 fa-c41c-422e-990d- 9e034f73989b&pf_rd_r=QC5E1GP2V92KD75 SPDZ7&pd_rd_r=974005b5-36a1-46ea-807e- 3c20892115d0&pd_rd_wg=BG44a&pd_rd_i =B013XGQXVW&psc=1			
				\$0				
				\$0				
				\$0				
				\$0				
				\$0				
				\$0				
				\$0				
TOTAL		\$507.95	\$0	\$508				
Budget request from CSSAF	\$507.95							
% Request from CSSAF	100%							

Schedule

Students in Kiewit Hall were told about the program during Welcome Week. Additional correspondence will be sent to students in Kiewit Hall on Thursday September 2nd. Participant trainings will take place on Monday September 13th at 5pm and Tuesday September 14th at 7pm. Students will begin composting immediately after training. The 64 gal compost totes will be checked at least every other day. All supplies will be purchased by Friday, September 3rd; all funding should be used by that date. The pilot program will conclude with the spring 21 semester.

Appendix A



Roll over image to zoom in

Figure 1: Compostable Bags for Compost Totes

EPICA Stainless Steel Compost Bin 1.3 Gallon-Includes Charcoal Filter



h Best Seller

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Color: silver	
Material	Stainless Steel
Color	Silver
Brand	EPICA
Capacity	1.3 Gallons
Shape	Cylindrical
Item Weight	0.01 Ounces

About this item

AS FEATURED IN BON APPETIT AND FORBES | THE PERFECTLY SIZED

COMPOST BIN: Say hello to Epica's premiere 1-gallon compost bin. The world

UNNI ASTM D6400 100% Compostable Trash Bags, 2.6 Gallon, 9.84 Liter, 600 Count, Extra Thick 0.71 Mils, Food Scrap Small Kitchen Trash Bags, US BPI and Europe OK Compost Home Certified, San Francisco

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 ℜ 2 Price: \$58.95 (\$0.10 / Count) √prime & FREE Returns

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Size: 100 Count (Pack of 6)





Figure 3: 64 Gal Tote Example



Figure 4: 64 Gal Tote Location

Appendix B – Roommate Agreement

Thank you for your interest in the Kiewit Hall Composting Pilot Program. The Creighton Office of Sustainability Programs and Residential Life are pleased to coordinate this program to support you in living a more sustainable lifestyle while living on-campus.

Please review this agreement and sign below to confirm that you understand your participation and responsibilities to assist in the success of the program.

A PARTICIPANT is someone who agrees to take responsibility for managing the compost bucket. This includes (1) collecting compostable materials in the bucket, (2) ensuring the compost is not contaminated with non-compostable materials, (3) taking the compost to a drop-off site at least once per week, (4) maintaining the compost bucket to prevent pests and odors, and (4) returning the compost bucket at the end of the year (or upon the termination of the program). There may be multiple PARTICIPANTS per room, in which case all PARTICIPANTS would share the responsibilities mentioned above.

A ROOMMATE is someone who lives in the room with the PARTICIPANT(S), but does not want to take on the responsibilities of a PARTICIPANT.

The following items must be agreed upon by both the PARTICIPANT(S) and the ROOMMATE(S):

1. The PARTICIPANT(S) and ROOMMATE(S) are to agree on whether ROOMMATE will utilize the compost bucket. The ROOMMATE(S) may use the compost bucket only if the PARTICIPANT(S) decides to manage the ROOMMATE(S) compost as their own. The PARTICIPANT(S) AND ROOMMATE(S) agree to (CIRCLE ONE):

- a. Allow ROOMMATE(S) to use the compost bin
- b. Not allow ROOMMATE(S) to use the compost bin

2. The PARTICIPANT(S) and ROOMMATE(S) are to agree on whether the compost bucket shall be stored in the room refrigerator. It is recommended that the compost bucket be refrigerated to minimize pests and odors, but this must be agreed upon by the PARTICIPANT(S) and ROOMMATE(S). The PARTICIPANT(S) AND ROOMMATE(S) agree to (CIRCLE ONE)

a. Store the compost bin in the refrigerator.

b. Not store the compost bin in the refrigerator.

3. The PARTICIPANT(S) and ROOMMATE(S) are to adhere to the strict guidelines of placing only the acceptable compostable items outlined on the Sustainable Creighton Webpage (https://www.creighton.edu/sustainability/operations/waste/).

4. The PARTICIPANT(S) agree to attend a 30-minute compost training once per semester. The training will be coordinated through the Resident Director.

5. The PARTICIPANT(S) is solely responsible for delivering compostable items in the 1.3 gal collection bucket to 64 gal green Hillside Solutions Compost bin behind Kiewit Hall.

6. If PARTICIPANT(S) is unable to deliver items during the designated scheduled times it is the sole responsibility of the PARTICIPANT(S) to manage the compost bucket in order to minimize pests and odors. PARTICIPANT(S) may choose to dispose of the items in the landfill bin.

7. The PARTICIPANT(S) is solely responsible for ensuring the compost bucket is empty and clean during any extended absence (e.g., winter break, spring break).

8. The compost buckets are the sole property of Creighton University. The PARTICIPANT(S) must return the bucket, in clean and working condition, upon service completion/termination. The PARTICIPANT(S) are solely financially responsible for replacing lost or damaged compost bins.

9. The PARTICIPANT(S) may terminate their agreement at any time. The PARTICIPANT(S) needs to provide written notice of termination to the Office of Sustainability Programs and the Resident Director to clearly define the end date.

10. The ROOMMATE(S) may submit a complaint about the compost bucket at any time. All complaints are to be submitted to the Resident Director.

All PARTICIPANT(S) must print their name(s) and sign below indicating they have read and agreed to all guidelines above.

PARTICIPANT 1

Name:

Signature:

PARTICIPANT 2

Name:

Signature

PARTICIPANT 3

Name:

Signature:

PARTICIPANT 4

Name:

Signature:

All ROOMATE(S) must print their name(s) and sign below indicating they have read and agreed to all guidelines mentioned above.

ROOMMATE 1

Will you be using the compost bin: YES NO

Name:

Signature:

ROOMMATE 2

Will you be using the compost bin: YES NO

Name:

Signature:

ROOMMATE 3

Will you be using the compost bin: YES NO

Name:

Signature:

ROOMMATE 4

Will you be using the compost bin: YES NO

Name:

Signature: