



## CAMPUS SUSTAINABILITY GRANT PROGRAM – FINAL REPORT

### *Project Description*

The keyhole garden exhibit is primarily an educational opportunity for students to learn, UGArden to grow, and the university to support creative, diverse means of creating and composting foods. It allows for university students to think on multiple spatial scales about sustainability. The keyhole garden facilitates patterns of creative, systems-based thinking within sustainable agriculture. It combines the ideas of personal food systems, composting, and organic agriculture into one efficient structure.

The initial grant proposal indicated there would be three keyhole gardens. However, we came upon more recycled materials and decided to expand the project to four keyholes. Over the course of the spring semester of 2014, horticulture students as well as volunteers from other disciplines helped to gather the materials for the gardens and prepare the space for building. A volunteer group helped to collect fieldstone from surrounding woods for the fieldstone keyhole. Other groups helped to measure out the keyholes and break ground. Many groups helped to build up the walls of the fieldstone, concrete, granite, and bottle wall keyholes. Students were excited to finally be able to put plants in the keyholes in late April after an extended building phase due to the inclement weather of this spring season.

The educational aims of the keyhole garden exhibit from the UGA Strategic 2020 Plan were surely reached, if not exceeded. Community members, volunteers, and students were all keen to learn what a keyhole garden is and how to build one. Beyond specifically keyhole garden volunteer events, UGArden general volunteers, UGArden produce stand customers, and persons attending events like Earth Week's SXSM Sustainable Spring Concert were all very interested in the project's purpose and how they might be able to build a keyhole at home. Other 2020 Plan goals such as aversion of waste and supporting local food systems were achieved through the large volume of recycled materials and compost used along with the use of keyhole garden plants to support the ACCA Mobile Market, the UGArden produce stand, and Campus Kitchens.

The building phase of the keyhole garden exhibit is complete but the Education and Outreach Phase continues. Sarah Bess Jones, the project coordinator, is continuing to create an email list for professors and community members who would be interested in using the keyhole gardens as a class fieldtrip or educational tool. Sarah Bess is continuing to communicate with UGArden about having at least a portion of a specific intern's time being allocated towards keyhole garden maintenance. Planting continues in the keyhole gardens and produce will continue to be used. Professor Berle will be building a drip irrigation system to better manage the minimal watering the keyholes need.

### *Project Expenses*

	Type	Amount
Personnel	n/a	
Equipment	Drip Irrigation Hoses	\$42.50 \$167.50
General Expenses	Vegetable Seeds/Transplants Organic Fertilizer Mortar Mix for Concrete	\$42.50 \$67.50 \$250
	TOTAL	\$570

### *Academic Impact*

HORT 2000, Professor David Berle- Volunteer students used Volunteer Spot to find hours to fill their course requirements  
HORT 3300, Professor David Berle-Volunteer students used Volunteer Spot to find hours to fill their course requirements  
ANTH 4400 Dr. Julie Velasquez-Runk- The class of Spring 2015 will be visiting the keyhole garden exhibit as a field trip to discuss sustainability grants on campus.

### *Engagement*

Campus Sustainability Grants Program (2013-2014)  
REV 08.26.13



- a) Beneficiaries include UGArden, Campus Kitchens, ACCA Mobile Market, and the volunteers/community members involved in the UGArden operation that will be exposed to the keyhole garden exhibit.
- b) A partnership between the Office of Sustainability and UGArden was continued and strengthened through this project and the events of Earth Week 2014.
- c) The UGArden Keyhole Garden Diversity Exhibit was featured on the UGArden Facebook page as well as on Volunteer Spot, a website used by horticulture classes to find workdays on the garden. The official UGArden website features a section about the exhibit on the "Research + Projects" tab. Several articles were written about the Campus Sustainability Grants in the Red and Black and on the blog "UGA Goes Green". Links to these articles are listed below. The keyholes were featured at the Semester in Review and at the Anthropology Graduation Ceremony presentation. The SXSM Event during Earth Week 2014 was held directly next to the keyhole exhibit and was a key event in educating interested community members and students about the project.

[http://www.redandblack.com/uganews/science\\_health/sustainability-grants-help-fund-student-projects/article\\_1d71e708-830f-11e3-8eae-001a4bcf6878.html](http://www.redandblack.com/uganews/science_health/sustainability-grants-help-fund-student-projects/article_1d71e708-830f-11e3-8eae-001a4bcf6878.html)

<http://ugagoesgreen.wordpress.com/2014/03/06/ugarden-going-against-the-grain/>

Materials Recycled	201.97 ft <sup>3</sup> in recycled concrete pieces, granite pieces, and fieldstone pieces.  1,200 recycled bottles used from local bars and breweries
Water Conserved	The materials required to measure water usage were deemed to costly. However, perceived keyhole water usage is lower than linear plots. Watering ever other day rather than daily has proved effective and the keyhole retain rainwater much better than linear plots.
Waste Averted	70.64 ft <sup>3</sup> of waste averted from landfill into composting rings
Social Benefits	74 volunteers involved over the length of the project 3 university classes engaged
Food Creation Potential (total plant yield)	12 lbs of cucumber 12 lbs of eggplant 5 lbs of kale 4 lbs of swiss chard 2.5 lbs of peppers

*Project-specific Metrics*



*Photo / Video Documentation*



Professor Berle and volunteers with the first completed keyhole made from fieldstone





Volunteers planting swiss chard and kale in the fieldstone keyhole





The recycled granite keyhole



The fieldstone keyhole



Sarah Bess Jones finishing up the second phase of building the bottle and concrete keyhole  
Campus Sustainability Grants Program (2013-2014)  
REV 08.26.13



Putting in the layer of wet concrete to anchor the bottles (and having a bit of fun while doing it!)





The first of many boxes of bottles collected from downtown at 3 am!



Phase one of the building of the concrete/bottle keyhole



A look inside the composting ring of the fieldstone keyhole with food waste inside  
Campus Sustainability Grants Program (2013-2014)  
REV 08.26.13



The finished concrete/bottle keyhole!





The completed UGarden Keyhole Garden Diversity Exhibit: starting from the front left is the bottle/concrete keyhole, the recycled granite keyhole, the recycled concrete keyhole (back right, closest to the barn), and the fieldstone keyhole (seen with huge kale and swiss chard plants!)