Good Agricultural Practices Food Safety Plan for the Geography Green Roof Garden
Written by Abby Lauterbach, Fall 2022
Geography-Geology Building @ 210 Field St, Athens, GA 30609

The information in this document is a true representation of the food safety conditions and practices followed at this location.

DATE: November 1, 2022

1. General Information about this farm

a. Management Responsibility

Our Food Safety Policy:

As a charitable and educational garden, food safety is THE top priority of the Geography Green Roof Garden. Our food is delivered to the clients of the Campus Kitchen at UGA who are families and individuals, including the elderly and the very young, facing food and nutrition insecurity in Athens.

People who are facing food insecurity in general are more likely to experience autoimmune disease and have poor access to healthcare services. Because of this, the caution we take is extremely vital to our mission.

If we are growing food that is to be distributed for *free*, but we allow pathogens to possibly spread through it, we might as well not distribute it at all.

Due to our location, we are free from some of the pest pressure of deer, rabbits, and rats. We also do not use animal amendments. So, our only fecal contamination potential avenues are *birds* and *humans.*

The person responsible for the food safety program at this location is the Urban Agriculture Intern at the UGA Office of Sustainability.

Currently: Abby Lauterbach, arl93944@uga.edu

Agricultural activities conducted at this site:

1) Vegetable Production: we devote 8 raised beds and some extra space to vegetable production
2) Fruit Production: we devote bed 2C to small fruit production - blueberries, blackberries, raspberries
3) Herb Production: most herbs on the roof are “leftovers” interspersed with veggies, flowers, and fruits. Culinary and medicinal.
4) Cut Flower Production: as of 2022, we produce zinnias for beautification, pollinator support, and social incentive for volunteers and visitors. Not sold or distributed in any official capacity.

Crops grown at this site:	
Crop	**Area**
Cool Season Sample ● Broccoli ● Collard greens ● Turnip Greens ● Carrots ● Beets ● Mixed Greens ● Kale	 1 bed (32 sq. ft) 1 bed (32 sq. ft) 1 bed (32 sq. ft) ½ bed (16 sq. ft) ½ bed (16 sq. ft) <½ bed A few plants
Warm Season Sample ● Tomatoes ● Zinnias	 2 beds (64 sq ft) Zone 3 - border beds
Herb Sample ● Rosemary ● Chamomile ● Calendula	 2 bushes total ½ bed 4 plants total

b. The Food Safety Plan

This plan identifies all products and materials used to grow those products - this plan describes physical, chemical, and biological hazards that could occur.

This plan includes procedures for how we keep our products safe. This plan is reviewed once yearly in November.

c. Documentation and Record Keeping

We keep written records of food safety efforts during harvest and also wildlife monitoring efforts.

d. Volunteer Education and Training

Before entering the green roof to harvest, volunteers need to view a produce safety video. The current intern has participated in the 8-hour Produce Safety Alliance Grower Training. Future interns are recommended to (a) reach out to Billy Mitchell, Food Safety Expert (mr.mitchell.billy@gmail.com) for individual advice or (b) take the PSA training offered by the UGA Food Science Extension. At the very least, a future intern should be familiar and experienced with raw produce safety principles.

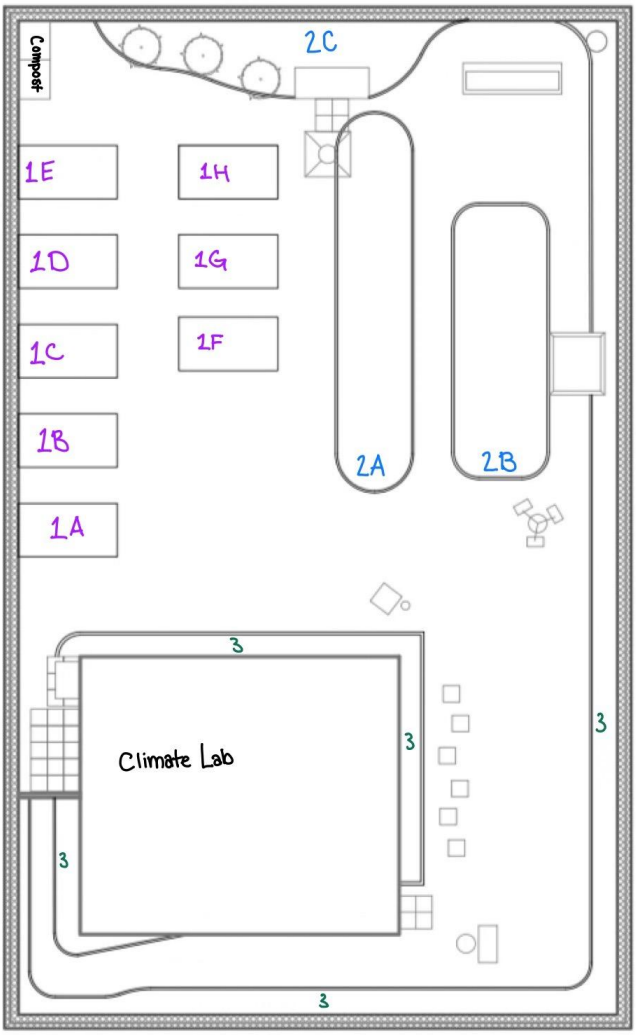
e. Sampling and Testing

Irrigation on the roof comes from the Geography Building water pipes, so it is Athens municipal water and is treated and tested by the ACC Government. This is the irrigation water, wash water, and drinking water.

Here is the link to the quarterly water test results.

We also test the compost for temperature to see that it reaches the standard temperature for use. Compost should be between 131-170 degrees F for 15 consecutive days. Consult with the UGArden Compost Intern.

2. Field Production



a. Field History and Assessment

Potential hazards due to previous land use are extremely low. The green roof has never been anything but a garden/lawn/production space. It was artificially created obviously and has no lasting microbes from farmed animal use or use of any animal manures.

Potential hazards due to flooding are extremely low. It is a roof.

Risk of neighboring land is low. UGA landscaping on the ground nearby does spray inorganic chemicals not designed for food quality or safety. There is zero livestock risk on neighboring land.

Animals roaming on the rooftop garden include birds and squirrels. We prevent bird nesting.

b. Worker Hygiene/Toilet Facilities

The Geography-Geology building has bathrooms on every floor which I ask all volunteers to utilize before touching any produce. In order to register to volunteer on the roof, individuals must view a USDA-produced video on the importance of handwashing (https://www.youtube.com/watch?v=7zWHkZI-7lg).

We have a first aid kit with bandages and alcohol sterilization wipes.

c. Agricultural Chemicals/Plant Protection Products

All of our agricultural chemicals comply with label directions and state and federal regulations. We store pesticides, herbicides and fertilizers in closed and properly labeled containers to prevent contamination of adjacent crops and/or water-ways. We document application dates, site, restricted entry hours, product, formulation, active ingredients, rates, size of area treated, quantity, type of pest, weather conditions, method of application, and name of applicator in our record sheet found in the Urban Agriculture Google Drive Folder.

To specify, our agricultural chemicals are stored at the UGArden.

d. Agricultural Water Risk Assessment

All agricultural water used on the roof is municipal. There is extremely low risk to using municipal water.

e. Animal Control Risk Assessment

Domestic and wild animals are kept out of the garden when possible. Managing the roof is a part time, internship position and there is not always opportunity to scare away birds/squirrels.

Deer, rabbit, or any livestock and domestic animal threat is extremely low due to location.

Before harvest, we check for damage or contamination by wild animals. If animal droppings are observed on/around produce, a 2 ft. radius is determined to be a contamination site, and all produce in the contamination site is composted.

f. Soil Amendments Risk Assessment

We use treated soil amendments only on the roof. We use on-site or UGArden sourced compost which is comprised of kitchen waste, weed waste, and leaves.

3. **Harvest**
    a. **Pre-harvest Risk Assessment**

        1. Wash hands and put on gloves
        2. Examine plants from root to leaf for signs of pest infestation or animal poop
        3. If poop (most likely bird poop) is found on a crop, that whole crop and the surrounding 1 foot radius of crops must be composted.

    b. **Water and Ice**

        No ice.

        Washing water is municipal Athens Clarke-County water, tested by the city quarterly. Water tests are linked in section 1E.

    c. **Containers and Bins Policy**

        All containers and bins are washed before and after use. After use, they are washed with dawn soap and scrubbed - this usually takes place at UGArden. We use sanidate (from the UGArden) to sanitize each container before use.

        Spray container with sanidate and wait ten (10) minutes before use.

        Green roof harvest bins are gray collapsible bins, clean produce bins at UGArden are black.

    d. **Field Handling**

        Gloves are not required, but handwashing is required and enforced.
        Phones are not allowed during harvest unless a designated person is taking photos.

    e. **Postharvest Handling and Storage**

        Harvest is transported from the roof to the UGArden in the vehicle of the Urban Agriculture intern or in the UGArden truck. Before transport, the vehicle surfaces should be sprayed with sanidate.

        Harvest must take place in the early morning.