



Sustainable Urban Agriculture

Loyola's Urban Ag program

Bailey Uttich



Hello! I'm Bailey Uttich.

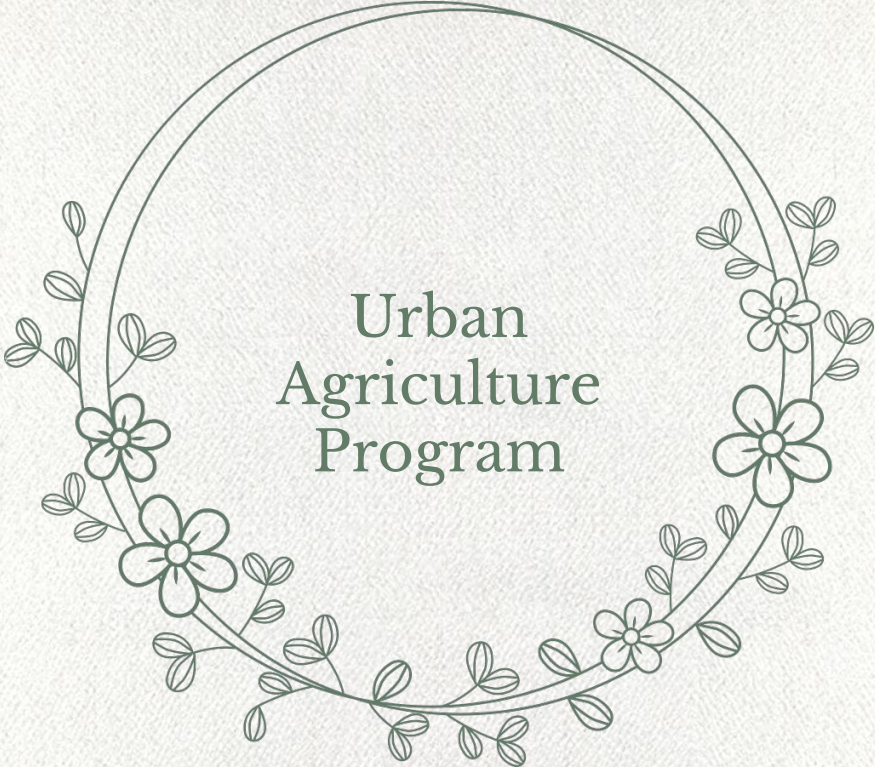
Personal introduction:

- From Dallas, Texas
- Environmental studies major with minors in Spanish language and studio art

My experience in Urban Ag:

- Fall of 2022: intern
- Spring 2023-Fall 2023: hydroponics system manager





Urban
Agriculture
Program



Internship rotations



Farmer's market

- Glenwood Farmers Market
- Sold produce, bouquets, and house plants



Winthrop Garden

- Harvested eggplants, tomatoes, green beans, kale
- Seeded cover crops



Hydroponics

- Soil-less agriculture
- Harvested lettuce and greens mix
- Experimented with adding different nutrients



Aquaponics

- Harvested lettuce
- Cleaning koi pond and upstairs aquaponics systems



Mushrooms

- Learned growing process of mushrooms
- Grew different oyster mushroom varieties



My intern project (outreach/distribution)

- Food Recovery Network (FRN)
- A Just Harvest

Shifting towards donations

- Senior enrichment
- Access to urban green spaces

Senior citizen immersion program

- Gave a presentation about composting

Sacred Heart

- Sharing different system techniques with SES clubs

Expanding student workshops



Why is sustainable agriculture important?



Biodiversity loss

- Habitat fragmentation due to agricultural intensification
- Monoculture vs. native perennial polyculture
- Need to support agroecology movement



Water shortages

- Agriculture accounts for 70% of global freshwater withdrawals
- 40% of that freshwater is lost
- Drip irrigation versus flooding



Chemical pollution

- Monoculture promotes need for pesticides and fertilizers
- Detrimental for soil, water, wildlife, and human health
- Toxic algal blooms





My work in hydroponics

From being an intern to leading interns

- Amazing community of people
- Experience in agricultural education
- Flexibility to try new things in hydroponics

Questions?



Resources

- Balsom, Paul. "Water Usage in the Agricultural Industry." *High Tide Technologies*, Sept., 28, 2020, <https://htt.io/water-usage-in-the-agricultural-industry/#:~:text=How%20Much%20Water%20Doe s%20The,and%20overall%20poor%20water%20management>.
- Perfecto, Ivette, et al. *Nature's Matrix: Linking Agriculture, Biodiversity Conservation and Food Sovereignty*. Routledge, 2019.
- "Water for Sustainable Food and Agriculture: A report produced for the G20 Presidency of Germany." *Food and Agriculture Organization of the United Nations*, 2017, <chrome-extension://efaidnbnmnnibpcajpcglclefindmkaj/https://www.fao.org/3/i7959e/i7959e.pdf>.

