Part 3: Urban Agriculture Tours

NSF Farm Hub Project
Authors: Amber Rollings¹ and Julia Angstmann²

¹Department of Applied Earth Sciences, Indiana University–Purdue University Indianapolis

²Center for Urban Ecology, Butler University

Timing within Module:

This activity is an introduction and should be completed prior to the research project.

Goal:

To understand the sustainable, local food system of Indianapolis, its many social missions, and the key differences from the industrial global food system.

Learning Objectives:

- 1. To learn key environmental and social differences between the industrial global food system and sustainable, local food systems.
- 2. To learn about local agriculture projects in Indianapolis and their missions.

Materials:

Section 1: None

Section 2: Social Action Reflection (provided)

Preparation:

This lesson contains a minimum of two sections to be completed in the following order:

- 1. CUE Farm Tour (50 minutes) in-class
- 2. Optional: Additional Farm Tours (60–130 minutes) in-class
- 3. Social Action Reflection (15 minutes) homework or in-class

At the beginning of the semester, instructors will need to schedule a tour with the CUE Farm by completing the form at: https://www.butler.edu/cuefarm/tours. If the CUE Farm will be the only farm visited, the end of the tour will cover some examples of other agriculture project in the city. If other farms or gardens will be visited, the faculty member should contact Julia Angstmann (jangstma@butler.edu) at the beginning of the semester to schedule those tours. Each tour leader will be asked to cover the mission of their space and how it contributes to the local food system.

Alternative: Faculty can assign the students to conduct online research of an urban agriculture project from the list provided under #11 in the CUE Farm tour script. Students can then report their findings to the class.

Length:

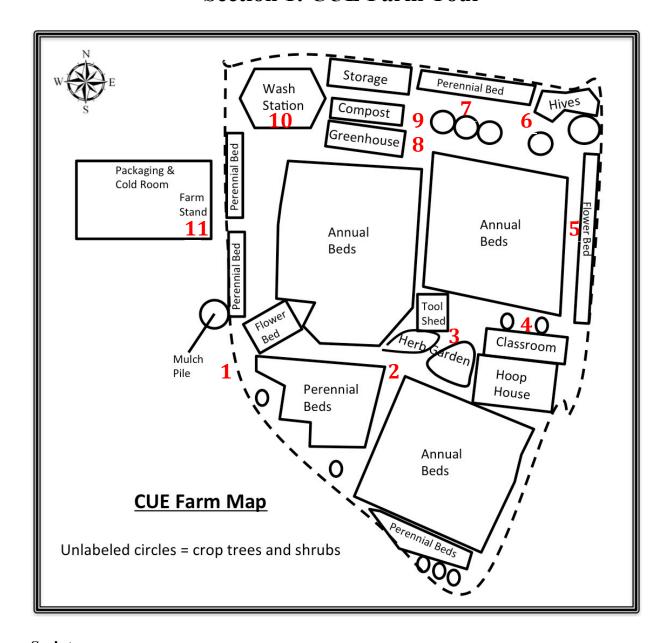
A total of 50–180 minutes in-class is needed, depending on the number of farms visited.







Section 1: CUE Farm Tour



Script

- 1. Start at west gate by parking lot
 - Welcome, introduction, and CUE Farm mission
 - Use turf grass and prairie to talk about heavily managed monoculture systems (compare to conventional agriculture) and natural systems.
 - Cover differences between the three types of habitat in terms of: inputs, nutrient cycling, resiliency to drought/pests, machinery used, carbon footprint/miles, biodiversity
 - o Discuss how farm is heavily managed, but mimics natural system.
- 2. Enter gate and walk to center, turn right

- Talk about division of farm into 4 sections: 3 annual bed sections and one perennial bed section.
 - o Difference between annual and perennial plants and different requirements of each (tilling, replanting, cover crops, waste).
 - o Show strawberries, raspberries, and asparagus as perennial examples
 - o Show cover crops and/or tilled soil. Contrast with conventional farming methods.
- 3. Walk back to center of farm and stop at herb garden if front of hoop house
 - List herbs (sage, mint, three types of basil, parsley, cilantro, dill, chives, etc.)
 - Talk about how a hoop house is used.

4. Walk to classroom space

- Designed and built by Ball State students repurposing most materials. Shipping container, repurposed wood, chairs made of one 4x4 sheet of plywood, rain barrel.
- 5. Walk on east side of farm along fence toward NE corner.
 - Along way point out native flowers and talk about beneficial insects (pollinators, predators, and parasitic).
 - Contrast with how conventional agriculture deals with pests
 - Point out black tubing and talk about drip irrigation and water conservation.

6. In NE Corner

- Show bee hives
- Talk about colony collapse disorder
- Explain why bees are beneficial
- Talk about why the farm has native flowers
- 7. Walk between small orchard and sea berry shrubs to compost bins (by second shipping container).
 - Talk about concept of permaculture or restoration agriculture.
 - Cover inclusion of animals in these systems.

8. At Mobile Greenhouse

- Designed and built by Ball State students. Provides similar benefits to hoop house, but in a more controlled environment.
- Farms often located in marginal lands (flood plains, vacant lots).
 - o Need for mobility, potential of soil contamination and how it is addressed.

9. At Compost Bins

- Describe types of composting (high temp, low temp, vermi) and balance of green and brown elements
- Examples of what can and cannot be composted
- Talk about what composting is and why it is used in sustainable agriculture
- Contrast with conventional agriculture methods of fertilization

10. Wash Station

- Preparing produce for market
 - o Compare to what happens in industrialized agriculture
- Sales (farm-to-table = shorter supply chain)
 - o Local (food miles, transparency)
 - o Cost
 - Markets

11. Walk under porch on blue building

- Indiana produces \$11.2B per year in agricultural products (~\$7B in corn and soybeans) yet imports 90% of its food.
 - o Most corn/soybean for feed, ethanol
- Define food desert
 - o Indianapolis is #1 city for food deserts in U.S.
- 3 hidden costs of industrial agriculture: environmental, health, true costs of food
 - o Subsidies of commodity crops fool us into thinking food is cheap.
- Talk about social missions of urban, sustainable agriculture.
- Talk about difference between community garden and urban farm.
- If not touring other urban agriculture projects: 1) examples of farms can be described during the tour or 2) farms can be assigned for research and reporting (*alternative*):
 - SHaRP Community Garden—Address local nutritional needs in the Greater Indianapolis Area by providing fresh produce to neighborhood food banks and educating the community about sustainable gardening practices and the slow food movement.
 - Fall Creek Gardens— Empower home and urban food growers by practicing and teaching organic and sustainable methods, promoting community gardens, and providing access to resources.
 - **Public Greens** –A farm market inspired cafeteria and micro farm. All profits and crops go to feeding kids via The Patachou Foundation.
 - *Indy Urban Acres*—An 8-acre organic farm that donates 100% of the fresh fruits and vegetables harvested to local food pantries though a partnership with Gleaners Food Bank.
 - *Growing Places Indy* empower people to cultivate personal, family and community wellness through urban agriculture, food access and mind-body education.
 - Street Beets Streetside Market & Mother Love's Garden

 Help bring healthy food to food deserts
 - *Kheprw Institute*—Work to create a more just, equitable world by nurturing youth and young adults to be leaders, critical thinkers, and doers who see people in and community as the most valuable assets.
 - Provide land to urban farmer
 - Community Controlled Food Initiative (CCFI): Uses collective buying power to get wholesale prices from local farmers.

Section 2: Social Action Reflection

1.	What surprised or concerned you the most about the global/industrial food system and why
2.	What aspects of local sustainable agriculture do you think are most valuable or important in today's world? Why?
3.	What steps will you consider taking to encourage a more environmentally or socially just food system?
4.	How will you share your practice with others and enlist them to participate?