## **Chapter:**

# **Urban Farming**



**Keep Growing Detroit** distributes transplants and seeds to over 2,200 urban farms, gardens, schoolyard gardens and community gardens in Detroit, Hamtramck and Highland Park. Edible Flint, Growing Hope in Ypsilanti and the Greater Lansing Food Bank offer similar resources in their communities.

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**SECTIONS** 

Section 1: Planning for Urban Farms

Section 2: Urban Farmland

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## INTRODUCTION

Urban Agriculture is generally defined as the production of food in places with dense populations and higher rates of impervious surface surrounding the production area. This broad sector of food production ranges from traditional farming practices of growing crops in soil in an open field to more intensive often indoor production models such as aquaponics or vertical farming under lights. Although many grow fruits and vegetables and raise animals in cities, fewer practice it as a livelihood, business, or for subsistence. This chapter is intended for those trying to practice urban agriculture at a scale capable of making a living or growing enough to significantly offset food purchasing costs.

This resource guide has the following sections to help you get started with urban farming.

- Planning for Urban Farms
- Urban Farmland

When embarking on an urban agriculture journey, one must first identify what she wants to grow. This will inform where and how she wants to establish her farm operation. These decisions will likely be influenced by access to capital and resources. For the sake of simplicity, we will assume the grower wants to cultivate land to grow a vegetable crop. Once land in or near a city is identified, the farmer should either buy the land or establish a legal agreement for how the land will be used. Furthermore, understanding zoning policies is critical to ensure that agriculture is in fact permitted on the land. If it is not, efforts (possibly extensive) must be made to change the zoning or get *conditional use* of the land.



Youth can plan and plant gardens! This garden was created by participants in Growing Hope's Youth Apprenticeship Program.

Examining the site's history is also critical as knowing how the site has been managed over decades can inform what the soil is like and whether the risk of contamination is high or low. Once land is selected and the farmer can legally use it, the land should be registered with the Farm Service Agency to get a farm number and tract. This will directly connect the farm and farmer to the USDA and additional government programs, funding, and resources.

#### Primary considerations

- Weed management
- Pest Management
- Markets
- Storage
- Distribution
- Labor

## **How To Get Started**

The best way to get your start in urban agriculture is to **connect with urban farms** in your community! Detroit is a national leader in urban farming and gives you dozens of options of farms where you can work, volunteer, visit or take a class. In a city like Lansing, Kalamazoo or Grand Rapids, you'll have several urban farms to visit. In some of the smaller cities in Michigan, you may be breaking new ground! If there aren't urban farms in your community you might want to connect with local farms outside the city limits or network with urban farmers in another city.

Once you've built some farm skills and have seen some models of urban farms, you'll want to start planning for your own farm, seeking land and getting ready to plant! This guide offers three sections to help you make the decisions and follow the steps to get growing on your own farm.

- Planning for Urban Farms
- Urban Farmland
- Growing!

A few online resources that are a good starting point might be MSU Extension's Urban Farming website, beginning farmer website and Map of Michigan Beginning Farmer Resources. If you're teaching beginning farmers, you might want to begin with the Michigan Beginning Farmer curricula on Urban Ag & Policy, D-Town Farm Leading with Values or Land Access for Urban Farms,



Inspired by a lack of fresh food options in the Battle Creek neighborhood where he grew up, Devon Wilson founded Sunlight Gardens after volunteering at a local urban farm and taking the MSU Organic Farmer Training Program

#### Soil:

The farm's soil or areas where production will occur should be sampled and submitted for testing to understand soil attributes and check for levels of contamination. Understanding a soil's texture, pH, organic matter and other attributes will inform how to best manage soil for optimal production. Once results are analyzed, consider how the present soils will affect your desired cultivation goals. If the soil test results indicate significant measures are needed to amend soil:

- Consider the costs and time needed to amend for your desired plants
- Are there other plants that could grow in the soil as is?
- What resources do you have to manage soil? Tractor, compost, fertilizer, other amendments? What nutrients are in excess or lacking?

Soil contamination is another potential issue. If soil is contaminated, how is it contaminated? Generally, it is best to test for lead, arsenic, and petrochemicals based on the history of the site and many urban landscapes. Contamination levels will also influence what can or should be grown or if growing should occur at all. In general if soil is contaminated, avoid cultivating root vegetables or crops that are known to uptake certain contaminants. Also, creating safety measures to contain and minimize exposure to dust from soil disturbance. Adding mulch, weed fabric, leaf litter, woodchips, etc. can neutralize the risk of soil contaminants getting into the air and onto plants.

Bone meal and other calcium based soil amendments have demonstrated a reduction and the bioavailability of lead. Phytoremediation or soil removal are other options that require consideration for where soil or plant material is disposed of. Some farms have displaced contaminated soil and plants to a perimeter berm not used for cultivation. The berms can then serve as a barrier or water retention method, but moving and replacing soil can be cost prohibitive.

I have tested with the organizations listed below:

https://soilhealthlab.cals.cornell.edu/testing-services/ https://ag.umass.edu/services/soil-plant-nutrient-testing-laboratory https://algreatlakes.com/pages/soil-analysis



Learning by doing! Hands-on farming is the best way to grow your farming skills.

# Planning for your Urban Farm

The steps in planning for urban farms are:

- **Gaining skills** by gardening, working for a farm, taking a class or visiting farms
- Deciding on a type of farm such as a farm business, schoolyard garden, homestead, non-profit community farm or other venture
- Writing a Farm Plan
  - Values & Goals
  - Farm Plan Outline draft
  - Soil Management Plan
  - Site Plan
  - Crop & Production Plan
  - Marketing Plan
  - Labor Plan
  - Startup Budget & Resource List
  - Financial Plan/Sustainability Plan
  - Farm Plan!!!

Remember that the farm plan is a living document! It will change over time and through trial and error as you grow your farm.



Examples of Farm Plans written in the MSU Organic Farmer Training Program



The Annual **Flint Food Garden Tour** is one way that people can see urban farms, community gardens and other growing spaces in the city. The bike tour in 2025 was a chance to see innovative raised beds at Edible Flint.

## **COMMON QUESTIONS**



# How do I grow my skills for starting an urban farm?

**Gardening** in your yard, in containers or at a community garden for a few seasons before starting your urban farm can help you plan for your farm & gain much-needed growing experience. Look for local organizations that might help by offering seeds, transplants, lead testing or other support!

**Working on a farm** is a fantastic way to build skills. Find farms to work on by visiting the MSU Sustainable Farm Jobs & Opportunities website, by talking to farmers at a farmers market or by emailing or calling farms you find online.

**Taking a class** can be excellent as well. For example, in Detroit, you might start by taking Urban Roots at Keep Growing Detroit, then take a fruit class at Detroit Partnership for Food Learning & Innovation, followed by taking the MSU Organic Farmer Training Program at Keep Growing Detroit.

**Visiting farms** can help SO MUCH by giving you examples of how build raised beds, design a space to wash produce, access water or grow your crops. It can also start to build your network of farmers you know. Detroit, Lansing, Flint and other cities in Michigan often have an annual garden tour where you can drive, bike, walk or ride a bus to different farms and gardens.



#### What kind of farm should I start?



**Brenda Mae Sharpe of The Foster Patch** manages a homestead in her yard, as well as a community garden across the street and a farm business behind her home.

Each farm is unique! You'll want your farm to align with your values and goals, the land you're growing on and your communities needs

Urban farms can take many forms! You might start:

- Farm Businesses focus on growing and selling farm goods and services
- Community Farms are non-profits
- educational gardens or community gardens
- Homesteads grow mainly for home use
- Other: Combine farm types from above or create your own vision!



## Who can help me write a Farm Plan?



**Janie Beuthin** took an online class, the Floret Flower Farming Workshop, to make a plan for **Twig End Farm** in her backyard 1 sidelot in Flint

There are a few helpful tools for writing a farm plan.

- <u>AgPlan</u> is a free online tool for writing a farm business plan
- Take the <u>MSU Organic Farmer Training</u> <u>Program</u>
- Take a **business planning class** like <u>Grand</u>
  <u>Rapids Opportunities for Women</u> classes
- Work with the MSU Product Center or use the Selling Food in Michigan guide if you planning for value-added goods like salsa, skin creams or a food truck
- Find a mentor through <u>SCORE</u> or <u>TOPP</u>
- Take an online course
- Use AI to "Write a business plan for an urban farm that sells \_\_\_\_\_ in \_\_\_\_ City" and then tweak it to your preferences.



## What are the parts of a farm plan?

Start with a Farm Plan Outline and then think through each section. You might choose to include:

- Values & Goals! It is extremely important to start here! Take time to consider the values you
  want to center on your farm and create a timeline of short-term and longer-term goals for
  the farm. Give yourself plenty of time and flexibility on the goals! And try to collaborate with
  any business partners, community stakeholders or family members to get their input as well.
- Soil Management Plan includes info on your lead test results and a plan for starting new growing beds, amending the soil and the steps for tillage or no-till bed prep
- Site Plan is a map showing your growing spaces, hoophouse(s), tools shed, water access, and other features of your farm
- **Crop & Production Plan** shows your seed order, crop varieties, planting dates, and where you'll plant each of your crops
- Marketing Plan shows your plan for selling or donating crops. List the farmers' markets you'll
  attend, hours for your onsite Farm Stand or U-Pick, restaurants you'll sell to or pantries you'll
  donate to
  - This might be a Community Engagement Plan for a community farm or a Self-Sufficiency plan for a homestead
- **Labor Plan** show who will work at what tasks, their experience, job descriptions and pay. Including information on farm safety and farmer work/life balance can help the farm thrive.
- Resource List shows what tools, skills, soils, community resources and allies you have.
- Startup Budget lists all the income and expenses for one to three years
- Financial Plan adds Cash Flow, Balance Sheet and Enterprise Budgets to your startup budget
- **SWOT analysis** shows your strengths, weaknesses, opportunities and threats
- Your complete Farm Plan brings together all the sections you've written!



An example of a site plan created by Angela Lugo-Thomas for a farm in Highland Park



## **RESOURCES & PARTNERS**

# **Soil Testing**

https://soilhealthlab.cals.cornell.edu/testing-services/ https://ag.umass.edu/services/soil-plant-nutrient-testing-laboratory https://algreatlakes.com/pages/soil-analysis

## **Farm Planning Templates**

- AgPlan from the University of Minnesota
- SARE <u>Building a Sustainable Business</u> book
- MSU Center for Regional Food Systems Loan Readiness Toolbox for Food and Farm Businesses <u>Business Plan Template</u>
- Organic Farmer Training Program <u>Farm Plan Template</u>
- SCORE Business Plan Template for a Startup Business
- Small Business Development Center <u>Traditional business plan</u> <u>format</u> or <u>Lean startup format</u>
- Canva- search "business plan" in the <u>Templates</u> section to choose from many customizable templates
- Artificial Intelligence Use AI by prompting it to "Write a business plan for a farm in (place) that grows (product mix). Be certain to read and then prompt with new features or edit!



Drew Farm grows on land at a Detroit Public School that was once a football field.

## **URBAN FARMLAND**

As you begin to look for farmland, think through what kind of land you need for the farm you want. Michigan has excellent examples of what an urban farm can be. Check out how farm goals and farmland weave together:

#### Classes, Workshops & Peer-to-Peer Learning Communities

- Edible Flint Land is near downtown Flint, museums & public library with space for community gardens, shared growing, orchard & events.
- DP-FLI (MSU Detroit Partnership for Food Learning & Innovation) Land includes a heated classroom, fruit plantings, permaculture.
- MSU Organic Farmer Training Program collaborates with Detroit,
   Grand Rapids & East Lansing farms. OFTP doesn't have its own farmsite
   & benefits greatly from teaching at multiple independent farms.

#### **Collaborative Marketing & Grower Resources**

- Keep Growing Detroit -adjacent to Eastern Market, where KGD runs a collaborative market stall, called Grown in Detroit. The farmsite is set up for hosting events, gardening classes and growing transplants for 2,200+ farms & gardens in Detroit, Highland Park and Hamtramck.
- Detroit Black Community Food Sovereignty Network & D-Town Farm grows on 7 acres. Challenges like lack of electricity and water are solved with solar panels, a pond and a windmill. This economic selfdetermination and community interdependence is integral to their national leadership in confronting racism in the food and farm system. Their second site is the Detroit People's Food Cooperative!

# **Primary Considerations**

- Land access through Land Bank or landowner partner organizations
- Water Access
- Neighbor support
- City regulations
- Support for urban farmers
- Breaking down barriers for farmers of color, women, farmworkers, lower-income people and others

# **Process for Getting Started**



Keep Growing Detroit's land access guide

Example land access process when working with the Detroit Land Bank:

- 1. Choosing a site.
- 2. Talk to the community.
- 3. Identifying ownership.
- 4. Applying.
- 5. Closing.
- 6. Reporting.
- 7. Garden permit.

Urban land access differs greatly from city to city! There is a **clear path to access land shown in these <u>City Guides for Detroit, Highland Park,</u> <u>Hamtramck, Lansing and Flint</u>. City lots in Grand Rapids, Traverse City and Ann Arbor are rare and extremely expensive and there is no process to access vacant lots. Many other Michigan cities lie somewhere in between.** 

Reach out to ask about the local land access process if you have urban farmers or a non-profit working with urban gardeners and farmers in your community. If your city or town doesn't have any urban farmers or community gardens, **create your own City Guide**. You can reach out to community leaders and share your idea! If the first few people you contact are not helpful, keep trying until you find an ally in the governments, schools, not-profits, neighborhood organizations, businesses or among neighors.



Can you grow on a parking lot? Yes! Urban Canopy Farm in Chicago answers questions from Michigan growers.

## **COMMON QUESTIONS**



## How can I find vacant lots in my city?

#### Check with the local Land Bank:

- <u>Detroit Land Bank Authority Activating Vacant Land</u>
- <u>Highland Park Land Purchase Procedures and Land Purchase</u> **Application**
- Ingham County Land Bank
- Genesee County Land Bank
- Calhoun County Land Bank
- Michigan Association of Land Banks

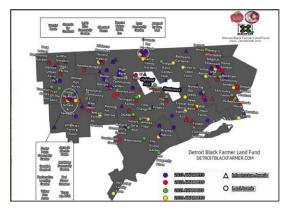
In other regions, you can search for similar terms online:

- "zoning map for the city of \_\_\_\_\_"
  "zoning ordinance for \_\_\_\_\_ city/township"
  "change of use form for farms in \_\_\_\_\_ city"

- "land bank for \_\_\_\_\_ city/township/county"
- "vacant land purchase application for \_\_\_\_\_ city"



## What are the steps to access vacant lots?



Detroit Black Farmer Land Fund has helped farmers all over the city complete the steps to access land.

A good place to start is to look for an urban ag non-profit or BIPOC farmer land fund in your region to support you as you seek land.

After that, here is an example land access process for working with the Detroit Land Bank:

- 1. Choosing a site.
- 2. Talk to the community.
- 3. Identifying ownership.
- 4. Applying.
- 5. Closing.
- 6. Reporting.
- 7. Garden permit.



## How can I connect with neighbors positively?



- **1. Talk** to neighbors before starting the farm.
- Put up signs to welcome people onto the farm, to explain if visitors can harvest crops and how to get involved.
- **3. Welcome the community** for events, volunteering, youth programs, etc.
- Sell or give away produce on-site or host a farmers market, food pantry of free lunch program to bring **food** into the community.
- **5. Listen!** Ask for suggestions and try to follow advice of neighbors as often as possible.
- **6. Be creative!** What would be appreciated in your neighborhood?



# How can I get water?



Jon Kent of Sanctuary Farm in Detroit created the Detroit Water Consortium to get farmers the water they need.

It can be expensive to get water in the city... here are options to consider:

- Water catchment add gutters to a hoophouse, a building with a metal roof or build a structure to catch rainwater.
- Use water from a neighboring home or business. A low cost hose meter can help you to pay your share of the water bill without the expense of a full water meter.
- Connect to city water with full water & sewer connection or with a "Wabash Box" to just connect to city water
- Ask the fire department about filling water totes from a fire hydrant

**Food Safety** - if using rainwater catchment or any water stored in a tote or container, you should use drip or put water on the soil (not edible plant parts)

**Sewer charge discounts** - Many cities offer a discount to gardeners so they aren't paying sewer fees for water that is absorbed into aardens



## What regulations do I need to know about?

## Zoning

- <u>City of Detroit: Check Land Zoning and Zoning District</u>
   Classifications
- Search for "zoning map for the city of \_\_\_\_\_" and "zoning ordinance for \_\_\_\_\_ city/township"

**Change of Use Forms** - You might need to fill out a form to garden or farm in cities, which are usually zoned 'residential' or 'commercial', rather than 'agricultural'

- "change of use form for farms in \_\_\_\_\_city"
- <u>Detroit Change of Use Process</u>

**Mowing Enforcement** - the city might have a fine for crops taller than unmowed grass. Try to find your local rules before you have a ticket.



MSU Detroit Partnership for Food Learning and Innovation

## **RESOURCES & PARTNERS**

## **Urban Land Access**

## local Land Banks (Michigan Land Bank Association

<u>Detroit Land Bank Authority - Activating Vacant Land</u>

<u>Highland Park Land Purchase Procedures</u> and <u>Land Purchase Application</u>

**Ingham County Land Bank** 

Genesee County Land Bank

Calhoun County Land Bank

Michigan Association of Land Banks

### **City Guides**

<u>City Guides for Detroit, Highland Park, Lansing and Flint or to create your own city guide</u>

#### **Urban Land Access Curriculum**

https://www.beginningfarmercurriculum.org/land-access

## **Zoning and Regulations**

- City of Detroit: Check Land Zoning and Zoning District Classifications
- Search for "zoning map for the city of \_\_\_\_\_" and "zoning ordinance for \_\_\_\_\_ city/township"

#### Change of Use Forms -

- Search for "change of use form for farms in \_\_\_\_\_city"
- Detroit Change of Use Process

#### **BIPOC Farmer Land Funds**

Detroit Black Farmer Land Fund <a href="https://www.detroitblackfarmer.com/">https://www.detroitblackfarmer.com/</a>
Washtenaw County Black Farmers Fund <a href="https://www.wcblackfarmers.fund/">https://www.wcblackfarmers.fund/</a>
West Michigan Farmers of Color Land Fund <a href="https://www.wmlandfund.org/">https://www.wmlandfund.org/</a>

## **Urban Farms & Advocacy Organizations**

#### Detroit

- Keep Growing Detroit
- Detroit Black Farmer Land Fund
- Detroit Black Community Food Sovereignty Coalition

#### **Grand Rapids**

New City Urban Farm

#### Lansing

Sunlight Gardens

#### Flint

Edible Flint

#### **Battle Creek**

Sunlight Gardens

#### Kalamazoo

Zoo City Food and Farm Network

There are too many great farms to list them all....