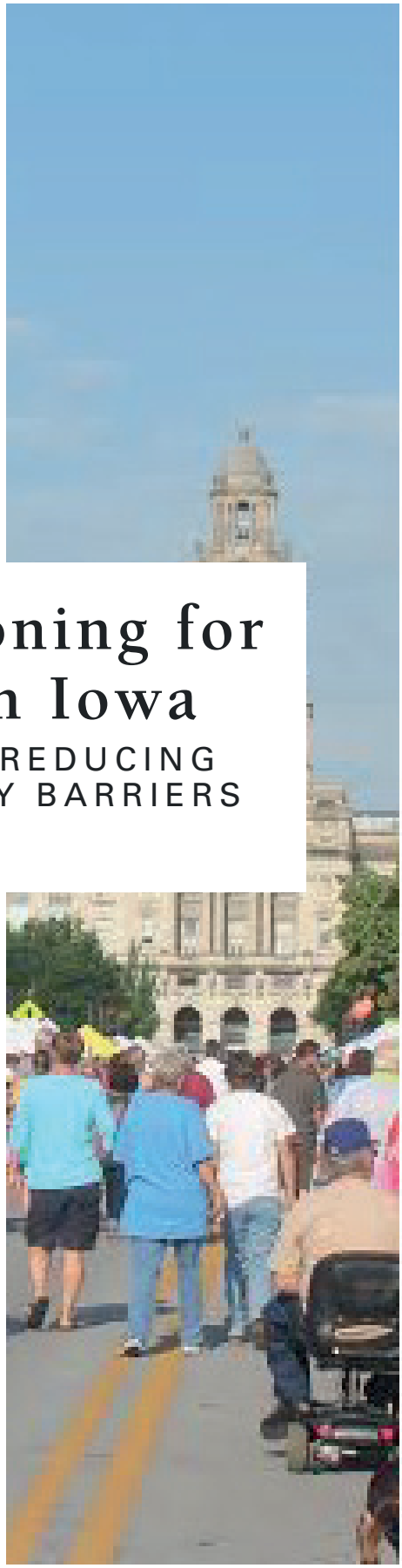






Municipal Zoning for Local Food in Iowa

A GUIDEBOOK FOR REDUCING LOCAL REGULATORY BARRIERS TO LOCAL FOODS







IOWA STATE UNIVERSITY
Extension and Outreach

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AUTHORS

Andrea Vaage

Graduate Extension Assistant
Community and Regional Planning
Graduate Program Sustainable Agriculture

Jenna Gilliam

Graduate Extension Assistant
Community and Regional Planning

Gary Taylor, *J.D., AICP*

Professor and Extension Specialist
Community and Regional Planning

PRINCIPAL INVESTIGATOR

Gary Taylor, *J.D., AICP*

Professor and Extension Specialist
Community and Regional Planning

Iowa State University
286 College of Design
Ames, IA, 50011

gtaylor@iastate.edu
515-290-0214

INTRODUCTION

BACKGROUND: URBAN AGRICULTURE AND MUNICIPAL ZONING

The popularity of local foods has increased significantly in the last few decades, pushed along in recent years by a heightened interest of consumers in buying local and sustainably grown foods. Data from the 2022 Census of Agriculture show producers sold $17.5 billion in food, including both unprocessed and processed (value-added) food, through direct marketing channels. That was a 25-percent increase (after adjusting for inflation) since the 2017 Census of Agriculture and an annual real growth rate of 4.6 percent. The increase from 2017 was driven by a surge in food sold directly to retail outlets, institutions (like schools), and intermediate markets (like food hubs). From 2017 to 2022, sales through these three direct-sales channels increased 33.2 percent (adjusted for inflation) to $14.2 billion, and the number of operations selling through them more than doubled to 60,332. (USDA Economic Research Service, 2024).

Municipalities are increasingly recognizing the multiple benefits of urban agriculture. As the urban agriculture movement has advanced, many have recognized the role that local government policies and regulations play in either stifling or facilitating the production, processing, and distribution of local foods. Land use regulations can intentionally or unintentionally impede the activities necessary for a local foods system to develop and thrive. For example, zoning ordinances can restrict homeowners and renters from raising chickens or bees, making agriculturally productive use of open spaces and vacant plots, planting gardens in the front yards of their homes, or selling produce through means other than traditional retail establishments. Zoning has effectively excluded agricultural activities from many municipalities and, except for the backyard vegetable garden, has divorced agricultural production from residential neighborhoods.

The reasons for these regulations vary. Many restrictive zoning provisions simply have been in place, unchanged, since zoning was first created to separate and isolate incompatible land uses. Bans on raising farm animals within city limits, for example, date back to the health and sanitation concerns associated with “piggeries” in urban areas. In other jurisdictions, urban agricultural practices fall as the unintentional victims of neighborhood uniformity and aesthetic demands. Occasionally the zoning problem is a conscious policy choice to exclude agricultural activities from municipalities; however, these choices often are based on misunderstandings of the nature of the activities (“You mean the neighbors don’t need a rooster to get eggs from their hens?”) or the *perceived* (versus *real*) impacts on nearby landowners.

If zoning trends across the country are an accurate reflection of the politics of urban agriculture, the politics favor *more* urban agriculture, not *less*. Municipalities around the country, in fact, are rapidly adopting zoning regulations that promote urban agriculture practices. Because zoning regulations are designed to balance the competing interests in uses of land, they can be written in ways that facilitate urban agriculture while minimizing health, safety, and nuisance concerns.

ABOUT THIS GUIDEBOOK

This guidebook focuses on the intersection of local foods and municipal zoning. It is written to provide Iowa city officials with information and sample code language for reducing the barriers to, and/or encouraging some of the most common production and sales activities associated with urban agriculture. In that context, it is divided into the following general categories:

- "Animal" Agriculture
    - Aquaculture
    - Bees
    - Chickens
    - Goats
- Crop Agriculture
    - Community Gardens
    - Urban Farms
    - Farming on Vacant Lots
    - Front-yard Gardening
    - Season Extenders
- Compost
- Urban Agriculture Districts
- Direct-to-Consumer Sales
    - CSA Drop-sites
    - Farm Stands
    - Farmers' Markets
- Food Trucks and Pushcarts

To prepare this guidebook the authors researched, evaluated, and categorized urban agriculture-related zoning code language from over 100 municipalities across the United States. The authors also researched practice-oriented scientific publications from a variety of sources, such as the United States Department of Agriculture, the Environmental Protection Agency, and Cooperative Extension publications from several

university Extension services. This was done to ensure that the sample code restrictions included in the guidebook address real, potential impacts of the agricultural activity in question, and are not arbitrary or based on unsubstantiated concerns. The zoning code provisions chosen for inclusion in the guidebook, therefore, represent the breadth of regulatory approaches taken by cities, and are also informed by agricultural science and production “best practices.”

Each chapter provides a general description of the activity, and information on standards and best practices associated with the activity, the public health, safety and welfare concerns commonly associated with the activity, and example code language from municipalities that vary both in size and location. The examples were selected to reflect the variety of regulatory approaches found across the nation.

It is imperative that users of this guidebook consult legal counsel before adopting any code provisions found herein, to ensure that the actions being considered are applicable and appropriate for your particular situation. *This guidebook is not intended as a substitute for legal advice*.

ACKNOWLEDGEMENTS

Much of the content of this guidebook is derived from an earlier publication, *Municipal Zoning for Local Foods in Iowa: A Guidebook for Reducing Local Regulatory Barriers to Local Foods*, originally published in 2014. It was funded by the Leopold Center for Sustainable Agriculture at Iowa State University and researched and co-authored by then-graduate student Andrea Vaage. Because this guidebook carries substantial contributions through from the earlier work, both names remain on the present document. This guidebook also carries significant contributions, both in research and authorship, from graduate student Jenna Gilliam. Needless to say, this work would not have been possible without the dedicated efforts of Vaage and Gilliam, and funding from the Leopold Center, USDA, and the AgMRC program with Iowa State University.

AQUACULTURE, AQUAPONICS, AND HYDROPONICS

INTRODUCTION

ABOUT AQUAPONICS, AQUACULTURE, AND HYDROPONICS

Hydroponics is a system for growing plants without soil. The plant is grown in a container of water, or with more intricate forms of hydroponics, grown in a non-soil medium like gravel, sand, vermiculite, or even Styrofoam. Water and nutrients are thus delivered directly to plant root systems. Hydroponics offer several advantages: soil-borne pests and diseases are not present, and more plants can be grown in less space. As an indoor system (an advantageous approach in areas with harsh winter climate) plants can be grown year-round, and optimal growing conditions (light, temperature, fertilizer) can be created. Many people have found that hydroponic growing systems provide more options and greater flexibility than they can expect from traditional soil-based systems.

SYSTEM DESIGN

Hydroponic systems can be created using a variety of materials and set-up designs. Plants can either be suspended in a water system or supported with aggregate materials like clay, gravel, or sand.

Water systems include the nutrient film technique, aeroponics, and the aeration method. The nutrient film technique is best for home systems. Plants are suspended in plastic tubes through which a nutrient solution flows. The tubes are slightly angled so that gravity moves the solution down the system to a holding tank. Aeroponics uses a spray to mist the plant roots. The plants are placed along a sloped A-frame typically constructed of Styrofoam. The aeration method uses an aquarium air pump to send oxygen to the roots of plants. The plants are suspended above a nutrient solution in a mesh tray with an inert material such as gravel to support the plants.

Aggregate systems use inert materials to support the plants and retain nutrients. The inert materials are typically clay pebbles, Perlite and/or Vermiculite, or simple sand and gravel. The plants and aggregate material are typically placed in a plant container, and water is either flooded into the system for a short amount of time or continuously trickle fed to the roots (Sorenson & Relf, 2009).



Figure 1-1. Iowa State University Aquaponic System; Ames, IA. Photo courtesy of Allen Pattillo, Fisheries and Aquaculture Extension Specialist

Aquaculture is commonly understood to refer to “fish farming” – raising fish species in a controlled environment. Aquaculture can be carried on in an outdoor environment in ponds, lakes, rivers, or the ocean. For urban agriculture purposes, commercial aquaculture is generally conducted indoors in large greenhouse-like buildings or warehouses. Non-commercial aquaculture for home consumption is carried on in accessory buildings or even in the home.

Aquaponics is the hybrid between traditional forms of aquaculture and hydroponics. The two combine to form a closed-loop system that creates a relationship between plants and fish. The water used in the system is recycled through a process of filtration and recirculation. Effluent from the fish tanks is used to fertilize hydroponic beds. The plants in the hydroponic system take up the nutrients from the fertilizer and filter the water, thus providing a clean source of water that is then recirculated into the fish tanks (Diver, 2006). The potential products created from this system are fish, fish fertilizer, and edible plants such as leafy greens and herbs.

Aquaponic systems require six main elements: a fish-rearing tank, a settleable and suspended solids removal component, a biofilter, a hydroponic component, and a sump. Most of the fecal matter is removed in the form of settleable and suspended solids. The water then moves through a biofilter composed of materials like gravel and sand to remove additional ammonia and nitrate. The water then moves into the hydroponic component and the plants take up additional nutrients. In some systems, the biofilter and hydroponic component are combined, which further enhances system efficiency. Finally, the water is moved to a sump, where it is then pumped back into the fish-rearing tank (Rakocy, 1989).

All three systems (hydroponics, aquaculture, and aquaponics) can be developed at a variety of scales, from large-scale commercial farming to small-scale non-commercial greenhouses or other accessory structures. They can even be scaled down for in-home growing, generally using compact tanks or tubs.

MANAGEMENT CONCERNS

Aquaculture

Tilapia is most commonly used in aquaculture systems, though other freshwater fish like cod are also used. The benefits of choosing Tilapia for these systems include their high reproductive and growth rates, and their ability to thrive in crowded and low water quality conditions. Tilapia are not native to the United States, and some states require proof that these fish will not escape into the natural environment (Morris, 1991).

Many fish require higher temperatures to survive, which can be a problem in areas with harsh winter climate. Tilapia, for example, require temperatures over 80° F to thrive and may perish below 50° F (Morris, 1991). Some form of heating system is therefore required to raise Tilapia effectively in these areas.

Aquaponics

The management approach for aquaponics is like that of aquaculture, but aquaponics gains some efficiency with the integrated plant and fish systems that work to cycle nutrients and keep the entire system in balance. Aquaponics thus generally require less monitoring. Aquaponics is an efficient small- scale system because it uses about 1% of the water used by traditional aquaculture (Rakocy, 1989). Fewer inputs are also required for growing plants, since the fish effluent provides fertilizer.

The nitrogen cycle plays a large role in maintaining a healthy aquaponic system. The ammonia in fish excrement is a rich source of nitrogen. In a typical aquatic ecosystem, the ammonia is diluted in large bodies of water; however, in closed aquaponic systems ammonia levels must be managed (Backyard Aquaponics, 2012). The plants in the system require nitrogen to grow, but too high a concentration of nitrogen can inhibit fish

growth and damage tissues. During the process of biofiltration, ammonia is oxidized to nitrite and then to nitrate, which is least toxic and best for plant nutrient uptake.

No pesticides can be used in an aquaponic system because fish will not tolerate these chemicals.

LAND-USE CONCERNS

Most hydroponic, aquaculture and aquaponic systems only cause concerns if poorly maintained. If water in tanks or raceways lies stagnant for too long it may attract mosquitoes and other insects. Systems for fish propagation (aquaculture and aquaponics) have the potential for creating odors if not properly maintained, but except for large commercial systems the likelihood of the odors becoming offensive to anyone off property is small.

EXISTING REGULATIONS SURVEY

Many people do not associate large-scale commercial hydroponic, aquaculture, and aquaponic systems with the urban environment; however, municipalities such as Evanston, Illinois, Chicago, Minneapolis, Milwaukee, Boston and many others have provisions in their local zoning codes that permit these commercial activities, most often in industrial, manufacturing, and certain commercial districts.

It is more common to find the three systems regulated under a broader “urban agriculture” or “urban farming” ordinance (discussed elsewhere in this guidebook) than it is to find them singled out in their own provision(s) in the code. Many of the codes surveyed regulate commercial hydroponics, aquaculture, and aquaponics by making the same restrictions applicable to all three.

Non-commercial, home aquaponic or aquaculture systems are usually carried on within accessory structures, and so are regulated as accessory uses on residential lots with specified limitations.



Figure 1-2. Iowa State University Aquaponic System; Ames, IA.
Photo courtesy of Allen Pattillo, Fisheries and Aquaculture Extension Specialist

CODE LANGUAGE

DEFINITIONS (GENERAL)

Somerville, Massachusetts *(2020 population 81,045)*

Hydroponics - A method of growing plants using a mineral-nutrient solution, without soil. (Somerville, MA 2.1.1).

Aquaculture - the active cultivation (maintenance or production) of marine and freshwater aquatic organisms (plants and animals) under controlled conditions. (EPA, 2013).

Evanston, Illinois *(2020 population 78,110)*

Aquaponics - The symbiotic propagation of plants and fish in an indoor or outdoor re-circulating environment that results in the harvest of said plants or fish. (Evanston, IL §6-18-2-2).

Fort Worth, Texas *(2020 population, 918,915)*

Aquaponics - the combination of aquaculture (farming of aquatic species) and hydroponics (plants) to grow food crops or ornamental crops and aquatic species together in a recirculation system without discharge or exchange of water.(Forth Worth, TX §9.101)

DEFINITIONS (COMMERCIAL)

Boston, Massachusetts *(2020 population 675,647)*

Aquaculture - the cultivation of aquatic animals in a recirculating environment to produce whole fish that are distributed to retailers, restaurants and consumers. (Boston, MA §89-11).

Aquaponics - the cultivation of fish and plants together in a constructed, re-circulating system utilizing natural bacterial cycles to convert fish wastes to plant nutrients, for distribution to retailers, restaurants and consumers. (Boston, MA §89-11).

GENERAL RESTRICTIONS (COMMERCIAL OPERATIONS)

Boston, Massachusetts *(2020 population 675,647)*

1. Aquaculture and Aquaponics.

(a) Aquaculture and Aquaponics Facilities as a Primary Use

i. Aquaculture and Aquaponics facilities as a primary use are Allowed in Industrial Districts and Subdistricts, as well as in the following Commercial Districts and Subdistricts:

WC -Waterfront Commercial

ii. Aquaculture and Aquaponics facilities as a primary use are Conditional in Institutional, Large-scale Commercial (Exception: WC), and Small-scale Commercial Districts and Subdistricts.

iii. Aquaculture and Aquaponics facilities as a primary use are Forbidden in Residential Districts and Subdistricts.

(b) Aquaculture and Aquaponics Facilities Up To 750 Square Feet.

i. Aquaculture and Aquaponics facilities up to 750 square feet are Allowed in all Districts and Subdistricts with the following exceptions:

A) Freight Containers of any size are Conditional in Small-scale Commercial Districts and Subdistricts.

B) Freight Containers of any size are Forbidden in Residential Districts and Subdistricts.

(c) Aquaculture and Aquaponics Facilities Greater Than 750 Square Feet.

i. Freight Containers of any size are Forbidden in Residential Districts and Subdistricts.

ii. Aquaculture and Aquaponics facilities greater than 750 square feet are Conditional in Small scale Commercial and Residential Districts and Subdistricts with the following exception:

a) Freight Containers of any size are Forbidden in Residential Districts and Subdistricts (Boston, MA §89-11).



Figure 1-3. Iowa State University Aquaponic System; Ames, IA. Photo courtesy of Allen Pattillo, Fisheries and Aquaculture Extension Specialist

Minneapolis, Minnesota *(2020 population 429,954)*

Aquaponics, aquaculture or hydroponics. Aquaponics, aquaculture or hydroponics shall be allowed accessory to an urban farm or accessory to indoor market gardens located in a commercial mixed-use or downtown zoning district, subject to the following:

a. *The operator shall maintain any required licensure through the Department of Natural Resources and the Department of Agriculture.*

b. *The tanks shall not be connected to the sewer system. (Minneapolis, MN §537.110).*

***Fort Worth, Texas** (2020 population, 918,915)*

a. In all residential districts as a primary use and "ER" Neighborhood Commercial as a primary use….aquaponics shall be allowed within a structure with no outside storage of equipment or materials.

b. In "E", "F" and "G" commercial districts and "CF" community facilities district:

Aquaponics shall be allowed within a structure, with no outside storage of equipment or materials.

c. In "I", "J" and "K" industrial districts. Aquaponics shall be permitted within or outside a structure. (Ft. Worth, TX § 5.146)

BEES

INTRODUCTION

ABOUT HONEYBEES

The honeybee, *Apis mellifera,* can be a valuable addition to the urban landscape. Honeybees pollinate 80 percent of U.S.-grown crops—products valued at more than $14 billion. (Virginia Farm Bureau, n.d.). Actively managed colonies can be important pollinators in urban areas where native pollinator populations are small. They can help to pollinate municipal plantings, urban gardens, and other urban green areas. Bees also provide opportunities for keepers to produce products such as honey, and wax which can be turned into other products.

A group of bees is called a colony and consists of 20,000-90,000 bees (DK12, 2026). A colony consists of three types of bees: a queen, workers, and drones. Each type of bee has a specific function within the colony.

The queen is responsible for sexual reproduction and for producing pheromones that guide the hive. The queen lays both fertilized and unfertilized eggs. Unfertilized eggs contain drone bees. The pheromones that a queen produces help to regulate and direct the colony, and her specific pheromones can influence the size and temperament of the entire colony.

The workers are females that build comb, guard the hive, and collect pollen. These bees are responsible for all the work involved in building and maintaining the hive. The worker bees also defend the hive, as females are the only bees with the capability to sting.

Drones are male bees responsible for fertilizing the queen bee. They play no other major role. They live a short lifespan-they either die upon mating or are forced out of the hive to die in the winter to conserve nectar (Collison and Frazier, 2004).



Figure 2-1. Bees from Central College Organic Garden; Pella, Iowa. Photo courtesy of Paul Weihe

BEHAVIOR

Bees do not hibernate during the winter, but rather they will beat their wings to generate heat and fend off the cold. If the colony survives the winter, using this strategy called “overwintering”, they begin to be active in early spring, usually when the temperature stabilizes around sixty degrees Fahrenheit (Moore and Kosut, 2013).

As the temperature warms up, so does the activity of the hive. Honeybees must have access to the nectar and pollen found in flowering plants. In urban areas, this means that bees will find most of their pollen in flowering trees or plantings. To produce one pound of honey, a hive will have to visit about two million flowers (Moore and Kosut, 2013). Since there may not be enough pollen and nectar for the bees to subsist in the wild, many keepers also provide a feeder filled with sugar syrup.

LIVING ENVIRONMENT

For the aspiring apiarist, it is recommended that a beginner beekeeper start with two hives and expand in later seasons. Each hive can produce 50-110 pounds of surplus honey for the producer and requires at least an additional 60 pounds for the hive itself to overwinter (Cornell University College of Agriculture and Life Sciences, n.d.). Providing bees with enough honey is crucial for the viability of the hive, especially during long and cold winters. In a managed setting, it is best to have a hive with removable frames, not only for ease of care, but also because three to ten times more honey can be produced in these types of hives (Tew, 2004).

The typical hive design with removable frames is called a Langstroth hive. Bees are typically kept in ten frame hives of varying depths. These hives have several parts that serve different purposes. The frames are the foundations on which the comb is built. The brood chamber, or hive body, is where the young bees are raised. The hive body holds frames that contain mostly brood, or the developing honeybees. The excess honey is produced in supers. Supers come in different depths, they can be as large as the hive body or the keeper may choose to use several shallow supers for ease of handling (Tew, 2004). To keep the queen from laying her eggs anywhere but in the hive body, a piece of equipment called a queen excluder is placed between the hive body and the supers. This device contains holes that are small enough that only worker bees can fit through.

Additional elements to the hive provide protection from the elements and potential intruders. The hive should be placed on a stand, which could be bought or constructed using blocks or other available materials. The bottom of the hive is protected by a bottom board, which may include an entrance reducer. This device reduces the opening of the hive to prevent large pests from entering. On the top of the hive, an inner cover helps to insulate, and the outer cover gives added protection.

Another popular hive design is the top-bar hive. These hives have a single story with wooden bars placed on the top of the frame for the bees to build comb. These hives are easier to manage and less expensive, but don't offer as much production potential (Chandler, 2009). Some keepers prefer top-bar hives because they better mimic how bees create hives in the wild. Harvesting the honey is as simple as removing a bar and cutting off the comb, which can then be mashed and strained to extract honey.

LAND-USE CONCERNS

The primary concern about beekeeping in urban areas is the potential for stings. Fear of the angry, stinging honeybee seems pervasive, yet is mostly unfounded. Honeybees only sting when threatened or very agitated and are notable for their usually very docile character. Unlike most stinging insects, the honeybee's stinger detaches from its body when it stings, which causes the honeybee's death.

Another concern is the potential for honeybees to swarm to a new location. Swarming results from environmental conditions that are inhospitable to the bees. Both stinging and swarming are easily preventable with proper caretaking. In fact, it is uncommon to see bees create a colony within a home and well-managed bees do not swarm (Bee Extension Specialist Iowa State Extension). The best way to keep bees in the city or on small lots is to provide the insects with a spot that is shady and protected from the wind.

Bees should also have a nearby water source, preferably on-site, and access to pollinating plants.

EXISTING REGULATIONS SURVEY

Most codes surveyed allow beekeeping as an accessory use on residential lots with certain conditions. Regulations commonly address the lot size and/or the maximum number of beehives allowed on a property. However, certain cities may have eliminated restrictions on the maximum number of hives permitted, as some argue that hives should be allowed to split if they become too large to prevent swarming

Setback requirements are usually set to keep hives away from neighboring properties, streets, and walkways. Some municipalities require that additional setbacks apply when a colony is located near a school, park, or public playground. Flyway barriers and a readily available water source are also frequently required.

Some best practices suggested by the New Jersey Department of Agriculture involve establishing a flyway barrier that forces bees to fly up, fencing the hives in to prevent children and animals from disturbing the hive, and keeping hives at least ten feet from the property line and twenty-five feet from public walkways and roads (NJ Dept of Ag.).

Cities have explicitly prohibited Africanized bees, which includes what is commonly known as “killer bees”.

CODE LANGUAGE

DEFINITIONS

Fort Collins, Colorado *(2020 population 169,810),* ***Evanston, Illinois*** *(2020 population 78,110)*

Apiary - a place where bee colonies are kept.

Bee - any stage of the common domestic honeybee, Apis mellifera species.

Colony - a hive and its equipment and appurtenances, including bees, comb, honey, pollen and brood.

Hive - a structure intended for the housing of a bee colony. (Fort Collins, CO §4-226-§4-237; Evanston, IL §9-4-19).

GENERAL RESTRICTIONS

Seattle, Washington *(2020 population 737,015)*

Beekeeping. Beekeeping is permitted outright [in all zones] as an accessory use, when registered with the State Department of Agriculture [with conditions set forth below]. (Seattle, WA §23.42.052).

Madison, Wisconsin *(2020 population 269,840)*

Keeping of Honeybees. No more than six (6) hives may be located on a zoning lot, except in the Employment and Special Use Districts in which a principal use on the lot is for the keeping of honeybees. (partially reworded from Madison, WI §28.151).

Ann Arbor, Michigan *(2020 population 123,851)*

Bees. No person shall keep or possess an apiary containing more than 2 stands or hives of bees within the City of Ann Arbor, unless engaged in apiary education or research.

A violation of this section shall be a civil infraction, punishable by a fine of not more than $500.00. (Ann Arbor, MI §9:39).

Rome, New York *(2020 population 32,127)*

Apiary. Apiary facilities are not considered an accessory use on lots that are in use for agriculture as a principal use, but rather part of the agricultural use. (Rome, NY §80-13.2).

Bartlett, Illinois *(2020 population 41,105)*

[Additional development standards for specific uses in residential districts]

Agriculture – Beekeeping. Bees and bee hives shall be permitted on residential zoning lots... (Bartlett, IL §10-4A-2).

Elgin, Illinois *(2020 population 114,797)*

Hives shall not be permitted on a lot with a multifamily dwelling. (Elgin, IL §7.10).

Pittsburgh, Pennsylvania *(2020 population 302,971)*

Agriculture (Limited) With Beekeeping means the growing of crops and raising honeybees for domestic and commercial uses.

Agriculture (Limited) With Beekeeping is a Non-Residential Use permitted by-right with specific standards in the following base zoning districts: all Residential Zoning Districts, the Neighborhood Office, Neighborhood Industrial, Highway Commercial, General Industrial, and Urban Industrial Mixed-Use Zoning Districts; the following special

purpose districts: Park, Hillside, and Riverfront Mixed Residential, Riverfront Mixed Use, Riverfront, General Industrial, and Riverfront Industrial Mixed Use Zoning Districts. (Pittsburgh, PA §911.02).

Centennial, Colorado *(2020 population 108,418)*

Requirements for Accessory Buildings or Structures for Beekeeping.

Permitted Lots. Hive boxes are only permitted on residentially and agriculturally zoned lots with single-family detached dwelling units. (Centennial, CO §12-3-603).

Salem, Massachusetts *(2020 population 44,480)*

[Honeybees are considered Urban Agriculture]

Urban Agriculture is allowed as an Accessory Use in all zoning districts, provided that no Urban Agriculture activity shall be conducted, nor Farm Structure erected, except in compliance herewith and with any other applicable laws, rules regulations including without limitation the building code and any requirements of the Salem Board of Health. (Salem, MA §3.2.7).

Boise, Idaho *(2020 population 235,684)*

Beekeeping is allowed by right as an accessory use in open land districts and single-family residential districts [but subject to additional regulations]. Beekeeping is a permitted accessory use to an Urban Farm in all districts. (Boise, ID §11-06-01).

LICENSING

Note: Several municipalities' codes reference licensing schemes, either first requiring beekeepers to obtain state-required licenses or registrations before establishing colonies within municipality limits or establishing their own municipality-managed licensing scheme. Municipalities are urged to inquire with their appropriate state agency to find out if there are state-level licensing requirements or registration schemes for beekeeping. The code sections set forth below are those that establish municipality-managed beekeeping licensing.

Madison, Wisconsin *(2020 population 269,840)*

The owner, operator or tenant shall obtain a license [under city code]. The applicant for the license shall notify all residents of the property, and the owner or operator of the property if the applicant is not the owner or operator. Notification is not required for renewal of a license. (Madison, WI §28.151).

Bartlett, Illinois *(2020 population 41,105)*

An initial building permit shall be required for all hives and an inspection/approval is required prior to obtaining a beekeeping license.

A beekeeping license issued by the Village with a one-time fee of twenty-five dollars ($25.00) shall be required prior to obtaining the bees. A renewal license shall be required each year thereafter, with no additional fee or building inspection required.

Proof of registration with the Illinois Department of Agriculture will be required with the annual license.

A maximum of twenty-five (25) residential zoning lots will be licensed to have bees in the Village at one time. (Bartlett, IL §10-4A-2).

Evanston, Illinois *(2020 population 78,110)*

Annual Licensing. Beekeepers must apply for a City beekeeping license upon bringing any colony into the City. For bee colonies existing within the City prior to the effective date of this Section, beekeepers must have two (2) weeks from the date this Section goes into effect to apply for a City beekeeping license. Applications must be submitted to the City Manager or his/her designee. At the time of application for a City beekeeping license, the applicant must:

1. Submit proof of registration of the colonies with the state of Illinois Department of Agriculture; and
2. Be in compliance with the other requirements of this Section; and
3. Pay a twenty-five dollar ($25.00) nonrefundable application fee.

The City beekeeping license shall be renewed each year…. (Evanston, IL §9-4-19).

Elgin, Illinois *(2020 population 114,797)*

State Registration Requirement. All bee colonies shall be registered annually with the state department of agriculture...by the beekeeper as required... Beekeepers shall maintain bee colonies and allow for inspections of bee colonies... All bee colonies shall be kept in inspectable type hives with removable combs, which shall be kept in sound and usable condition. Beekeepers shall be required to post beekeepers registration number in a prominent place within each apiary under beekeepers control.

Permit Required. No person shall keep bees within the city without first obtaining a permit, therefore issued by the city. An inspection and approval by the city are required prior to a beekeeper acquiring bees.

Permit Process. An applicant for a permit for honey beekeeping must submit the following to the community development director:

> Completed applications on forms provided by the city.
>
> A current plat of survey accurately depicting the potential location of the hives, flyway barrier/fencing, and water source on applicant's property.
>
> The required permit fee for a honey beekeeping permit in the amount established in the fee schedule ordinance. The fee for a honey beekeeping permit shall be the same fee as for a shed building permit.

A permit for honey beekeeping shall not be granted unless the applicant can show proof that hive and apiary accessories comply with all provisions of this chapter.

A permit for honey beekeeping shall not be transferable or run with the land and shall terminate and become invalid upon the permit holder no longer occupying the property for which the license and permit were issued....

Removal of Hives. Hives and apiary accessories shall be removed upon a permit holder no longer keeping honeybees, upon a permit holder no longer occupying the property for which a honey beekeeping permit was issued or upon a honeybee keeping permit having been revoked.... (Elgin, IL §7.10).

Salem, Massachusetts *(2020 population 44,480)*

A maximum of four (4) hives may be kept on a lot with additional hives pending approval from the Salem Board of Health. Additional Board of Health regulations may further limit the number and/or manner of keeping honeybees on lot. If an emergency split or rescue of a swarm results in more than four hives on a lot, the Board of Health must be notified within two business days. (Salem, MA §3.2.7).

Portland, Oregon *(2020 population 652,503)*

Existing Specified Animal Facility Permit Holders.

Bees. If the number of permitted hives as of [the date the animal facility permit requirement ceased] exceeds the number allowed by [the zoning code], the number of hives may be maintained if the provisions of [the zoning code] and the conditions of approval of the permit issued by [the County the municipality is located in] are met. (Portland, OR §13.20.020).

LOT SIZE / COLONY DENSITIES / SETBACKS / ENCLOSURES

Seattle, Washington *(2020 population 737,015)*

Beekeeping. Beekeeping is permitted outright as an accessory use, when registered with the State Department of Agriculture, provided that:

No more than four hives, each with only one swarm, are allowed on lots of less than 10,000 square feet.

Hives shall not be located within 25 feet of any lot line except when situated 8 feet or more above the grade immediately adjacent to the grade of the lot on which the hives are located or when situated less than 8 feet above the adjacent existing lot grade and behind a solid fence or hedge six (6) feet high parallel to any lot line within 25 feet of a hive and extending at least 20 feet beyond the hive in both directions. (Seattle, WA §23.42.052).

Madison, Wisconsin *(2020 population 269,840)*

Keeping Honeybees.

Except as provided in sub. (i) below, no more than six (6) hives may be located on a zoning lot.

No hive shall exceed twenty (20) cubic feet in volume.

No hive shall be located closer than three (3) feet from any property line.

No hive shall be located closer than ten (10) feet from a public sidewalk or twenty-five (25) feet from a principal building on an adjoining lot.

In the Employment and Special Use Districts, no more than six (6) hives may be located on a lot unless a principal use on the lot is for the keeping of honeybees. (Madison, WI §28.151).

Rome, New York *(2020 population 32,127)*

Apiary.

Apiaries are permitted only in the rear yard and must be located ten feet from any lot line and the principal building.

Where any colony is located within 25 feet of a lot line, as measured from the nearest point of the hive to the lot line, the beekeeper must establish and maintain a flyway barrier at least six feet in height consisting of a hedge, fence, solid wall, or combination that is parallel to the lot line and extends ten feet beyond the colony in each direction so that bees are forced to fly at an elevation

of at least six feet above ground level over adjacent lots in the vicinity of the apiary. (Rome, NY §80-13.2).

Bartlett, Illinois *(2020 population 41,105)*

[Additional development standards for specific uses in residential districts]

Agriculture – Beekeeping.

Bees and bee hives shall be permitted on residential zoning lots containing a minimum of ten thousand (10,000) square feet.

A maximum of two (2) hives/colonies shall be permitted on properties zoned and occupied for single family residential uses.

The hive(s) shall be located only in the rear yard and a minimum of fifteen feet (15') from all lot lines.

Each hive shall not exceed five feet (5') in height, nor shall the land area designated for the hives exceed thirty (30) square feet in total.

All areas where beehives are kept shall be clean and well maintained with no accumulation of bee combs, wax, etc., around the site. (Bartlett, IL §10-4A-2).

Evanston, Illinois *(2020 population 78,110)*

Colony Densities.

1. There must be no more than eight (8) apiary sites in each ward in Evanston.
2. For each two (2) colonies, there may be maintained one (1) nucleus colony in a hive structure not exceeding one (1) standard nine and five-eighths inch (9⅝") depth ten (10) frame hive body with no supers attached as required from time to time for management of swarms. Each such nucleus colony must be disposed of or combined with an authorized colony within thirty (30) days after the date it is acquired.

Maintenance. Each beekeeper must ensure that no bee comb or other materials that might encourage robbing are left upon the grounds of the apiary site. Upon their removal from the hive, all such materials must promptly be disposed of in a sealed container or placed within a building or other bee-proof enclosure. (Evanston, IL §9-4-19).

Elgin, Illinois *(2020 population 114,797)*

Limit to number of hives permitted. The maximum number of hives that may be located on a property is limited as follows:

Two (2) hives for all lots less than one-quarter (¼) of an acre.

Four (4) hives for all lots greater than one-quarter (¼) acre.

Eight (8) hives for all lots zoned in the community facility zoning district and greater than one (1) acre.

Location restrictions. Hives shall not be permitted on a lot with a multifamily dwelling. Hives shall be located on a rooftop, or in a rear yard, maintained at least twenty-five (25) feet from any occupied residential structure other than that of the owner, setback at least ten (10) feet from all property lines of an adjacent property. (Elgin, IL §7.10).

Tuscaloosa, Alabama *(2020 population 227,036)*

Bees and bee hives; keeping near schools, parks or residences.

Maintaining or keeping honey bees or honey bee hives in the City is unlawful unless the following conditions are met:

Honey bees or honey bee hives shall not be kept within one hundred fifty (150) feet of the boundary line of any property upon which is any school ground, public park or public playground in the city.

Honey bee hives shall be kept within ten (10) feet of the rear yard property line and facing away from the rear yard property line.

Honey bee hives shall not exceed one hive per one-half acre.

Honey bee hives shall be situated on the property so as to direct the flight pattern of the bees up and out from the hive. (Tuscaloosa, AL §4-11).

Dayton, Ohio *(2020 population 137,644)*

Bee Keeping. The keeping of bees, and associated beehives, shall be governed by the following regulations:

In Residential Districts, the following regulations shall apply:

Number. No beehive shall be kept on a zoning lot less than 3,000 square feet in area. A maximum of two hives are permitted on zoning lots between 3,000 and 7,000 square feet in area. Additional hives may be added at the rate of one (1) hive for every additional 3,000 square feet of lot area.

Location and Setbacks. No beehive shall be kept closer than ten (10) feet from any lot line and ten (10) feet from a dwelling or the permitted placement of a dwelling on another lot. No beehive shall be kept in a required front setback or corner side setback. No hive shall be placed within thirty (30) feet of any public sidewalk or roadway. The

front of any beehive shall face away from the property line of the residential lot closest to the beehive.

Rooftop hives shall be setback six (6) feet from the edge of a roof. Hives located within twenty (20) feet of a door or window of an abutting lot must face away from such doors or windows or a flyway barrier as outlined in 150.420.1(A)(3) shall be applied.

Maintenance. Colonies shall be maintained in movable frame hives with adequate space maintained in the hives to prevent overcrowding and swarming.

In Non-Residential Districts. In zoning districts other than residential districts, all regulations applicable in Residential Districts shall apply except that the number of beehives shall be limited to one (1) for each 1,000 square feet of lot area when not adjacent to a residential lot or zoning district. (Dayton, OH §150.420.1).

Pittsburgh, Pennsylvania *(2020 population 302,971)*

[Agriculture (Limited) With Beekeeping]

For property with a minimum of two thousand (2,000) square feet in size, the property owner is permitted to keep two (2) beehives. For every additional two thousand (2,000) square feet of property, the owner is permitted two (2) additional beehives;

All structures necessary for and related to the housing of honeybees shall be subject to any required setbacks of the underlying zoning district, but shall in all cases be a minimum of ten (10) feet from any property line;

Roof-mounted beehives shall be located on primary and accessory structures no lower than ten (10) feet from grade and shall not be within the required setback. (Pittsburgh, PA §911.04.A.2).

Fort Collins, Colorado *(2020 population 169,810)*

It shall be unlawful to keep more than the following number of colonies on any tract within the City, based upon the size or configuration of the tract on which the apiary is situated:

One-quarter (¼) acre or less tract size - two (2) colonies;

More than one-quarter (¼) acre but less than one-half (½) acre tract size - four (4) colonies;

More than one-half (½) acre but less than one (1) acre tract size - six (6) colonies;

One (1) acre or larger tract size - eight (8) colonies; and

Regardless of tract size, where all hives are situated at least two hundred (200) feet in any direction from all property lines of the tract on which the apiary is situated, there shall be no limit to the number of colonies.

For each two (2) colonies authorized under colony densities...above...there may be maintained upon the same tract one (1) nucleus colony in a hive structure not exceeding one (1) standard nine-and-five-eighths-inch depth, ten-frame hive body with no supers attached as required from time to time for management of swarms. Each such nucleus colony shall be disposed of or combined with an authorized colony within sixty (60) days after the date it is acquired. (Fort Collins, CO §4-226-§4-237).

Centennial, Colorado *(2020 population 108,418)*
Requirements for Accessory Buildings or Structures for Beekeeping.

Hive Box Height and Area. Hive boxes and any ground-mounted appurtenances are permitted to be a combined height of up to six (6) feet above ground level and up to ten (10) cubic feet.

Setbacks.

Front: Behind the principal building.

Street Side. Equal to the street side setback required for the principal building.

Interior Side: Ten (10) feet.

Rear: Ten (10) feet.

Hive Boxes. All bee colonies shall be kept in hive boxes with movable combs or frames.

Hive Box Maximums. Maximum hive boxes permitted per residential and agricultural zone lot:

Lots less than one-quarter acre in size: Two (2) hive boxes.

Lots between one-quarter acre and less than one-half acre in size: Four (4) hive boxes.

Lots between one-half acre and less than one-acre in size: Six (6) hive boxes.

Lots between one-acre and less than two-acres in size: Eight (8) hive boxes.

Lots two acres and greater in size: Twelve (12) hive boxes.

Exception: For lots where all hive boxes are situated at least two hundred fifty (250) feet in any direction from all property lines of the lot, there is no limit as to

the maximum hive boxes permitted per residential lot. (Centennial, CO §12-3-603).

Salem, Massachusetts *(2020 population 44,480)*

Honeybees.

A maximum of four (4) hives may be kept on a lot with additional hives pending approval from the Salem Board of Health. Additional Board of Health regulations may further limit the number and/or manner of keeping of honeybees on lot. If an emergency split or rescue of a swarm results in more than four hives on a lot, the Board of Health must be notified within two business days.

Dimensional Regulations. No hive shall exceed five (6) feet in height and twenty-five (25) cubic feet in size on any lot or roof.

Setback Requirements.

Where there is a solid wall, fence or similar barrier between the subject property and abutting property, no setback from the property line is required. Where there is no wall, fence or similar barrier between subject property and abutting property, hives shall be set back five (5) feet from the property line.

No hive shall be located closer than ten (10) feet from the lot line dividing the lot from a sidewalk or street.

Hive Placement and Flyways.

For any ground level hive that is within twenty (20) feet of the doors and/or windows of the principal building on an abutting lot, either of the following conditions must exist:

The hive opening must face away from doors and/or windows of the principal building on an abutting lot; or

A flyway of at least six (6) feet in height comprising of a solid fence, dense hedge or similar barrier must be established in front of the opening of the hive such that the honeybees fly upward and away from neighboring properties. The flyway shall be located within three (3) feet of the entrance to the hive and shall extend at least two (2) feet in width on either side of the hive opening. (Salem, MA §3.2.7).

Boise, Idaho *(2020 population 235,684)*

Beekeeping standards shall be as follows:

> *Density Of Hives & Colonies.* There is no minimum parcel size for beekeeping. However, the maximum density is 3 colonies per 1/4 acre. Higher densities may be permitted by conditional use permit.
>
> *Nucleus Colonies.* For every two colonies authorized above, one additional nucleus colony is allowed.
>
> *Hives.* Colonies shall be kept in hives with removable frames.
>
> *Setbacks And Placement.* Hives shall be located at least 20 feet from front property lines and three feet from other property lines. The back of the hive shall be oriented to adjoining properties.
>
> *Maintenance.* Hives not being actively maintained shall be removed. Colonies must be maintained so as to not interfere with the quiet enjoyment of surrounding properties.
>
> *Compliance With State Statutes.* Beekeeping shall comply with all applicable State laws. (Boise, ID §11-06-07).

Portland, Oregon *(2020 population 652,503)*

Maximum Number of Hives. Up to four (4) hives may be kept on any lot. Up to six (6) hives may be kept on lots 10,000 square feet and greater. During the months of April through August an additional three (3) hives may be kept to accommodate the formation of additional hives through the splitting of existing hives or collection of swarms. There is no maximum number of hives on lots that allow agricultural uses [in the zoning code], or that have an approved conditional use.

Maintenance. All hives must be kept in sound and usable condition with adequate space and management techniques to prevent overcrowding and swarming.

Setbacks.

> Hives must be located at least 3 feet from all property lines.
>
> Hives must be located at least 15 feet from public walkways and streets and any public outdoor spaces used for, but not limited to, seating, playgrounds and recreational fields.
>
> On lots with more than one residential unit, hives must be located at least 15 feet from the walls of all residential units and any outdoor spaces used for, but not limited to, seating, playgrounds and recreational fields. (Portland, OR §13.30).

Austin, Texas *(2020 population 961,855)*

Apiary Maintenance.

> A person shall keep a colony in a Langstroth-type hive with removable frames that is maintained in sound and usable condition...
>
> A person shall store or dispose of bee comb or other material removed from a hive in a sealed container, building, or other bee-proof enclosure.

Hive Location. A person may not locate a hive within 10 feet of the property line of a tract, as measured from the nearest point of the hive to the property line

Colony Density.

Except as provided ... [above], a person may not keep more than:

> two colonies on a tract one-quarter acre or smaller;
>
> four colonies on a tract larger than one-quarter acre but smaller than one-half acre;
>
> six colonies on a tract one-half acre or more but smaller than one acre;
>
> eight colonies on a tract one acre or more.

A person may keep an unlimited number of colonies on a tract:

> on which all hives are located at least 200 feet from each property line of the tract; or
>
> adjacent to undeveloped property for at least 200 feet from any hive. (Austin, TX §3.6).

FENCING / FLYAWAY BARRIER



Figure 2-2. Fencing as a Flyaway Barrier. Photo courtesy of Colorado Department of Agriculture

Madison, Wisconsin *(2020 population 269,840)*

A flyway barrier at least six (6) feet in height shall shield any part of a property line that is within twenty-five (25) feet of a hive. The flyway barrier shall consist of a wall, fence, dense vegetation or a combination thereof, and it shall be positioned to transect both legs of a triangle extending from an apex at the hive to each end point of the part of the property line to be shielded. (Madison, WI §28.151).

Bartlett, Illinois *(2020 population 41,105)*

A flyway barrier at least five feet (5') in height, consisting of either a solid fence with a secure gate, or dense vegetation/landscaping shall be required for the perimeter of the rear yard in which the hive is located. Those lots exceeding twenty thousand (20,000) square feet in area shall only be required to screen the hive(s) with either dense landscaping or solid fencing at least five feet (5') in height to create a flyway barrier for the bees and to minimize the impact to adjoining properties. (Bartlett, IL §10-4A-2).

Evanston, Illinois *(2020 population 78,110)*

Fencing, Gates, And Signage. All hives must be enclosed by fencing with a secure gate and prominent signage warning of the presence of a hive. (Evanston, IL §9-4-19).

Elgin, Illinois *(2020 population 114,797)*

Fencing/screening requirements. For hives within twenty (20) feet of a property line, a flyway barrier or screen shall be provided. A flyway barrier can be a solid fence or dense

vegetation/landscaping that is a minimum of six (6) feet in height. The flyaway barrier can be close to the hive or at the lot line. All fencing shall be installed in conformance with regulations of this Code. (Elgin, IL §7.10).

Dayton, Ohio *(2020 population 137,644)*

In Residential Districts, the following regulations shall apply:

> *Fence and Shrubs.* A solid fence or dense living hedge at least six (6) feet in height shall be placed along the side or rear property line for any hive within ten (10) feet of the lot line. The solid fence or dense living hedge shall extend at least twenty (20) feet on either side of the hive. A "flyway barrier" consisting of solid fence or dense living hedge shall be required along the property line if the front of the beehive is located within twenty-five (25) feet from any lot lines. No flyway barrier shall be required for a beehive that is located on a porch or balcony at least ten (10) feet above grade, except if such porch or balcony is located less than ten (10) feet from a property line. (Dayton, OH §150.420.1).

Pittsburgh, Pennsylvania *(2020 population 302,971)*

Agriculture (Limited) With Beekeeping:

> A "flyway barrier" of at least six (6) feet in height shall be provided at all places on the property line that are within twenty (20) feet of the hive(s). The "flyway barrier" shall consist of a solid fence or wall, dense vegetation, or combination thereof. No flyway is required for hives that are located on porches or balconies at least ten (10) feet above grade, except where such porch or balcony is located less than five (5) feet from a property line. (Pittsburgh, PA §911.04.A.2).

Salem, Massachusetts *(2020 population 44,480)*

Hive Placement and Flyways. For any ground level hive that is within twenty (20) feet of the doors and/or windows of the principal building on an abutting lot, either of the following conditions must exist:

> The hive opening must face away from doors and/or windows of the principal building on an abutting lot; or
>
> A flyway of at least six (6) feet in height comprising of a solid fence, dense hedge or similar barrier must be established in front of the opening of the hive such that the honeybees fly upward and away from neighboring properties. The flyway shall be located within three (3) feet of the entrance to the hive and shall extend at least two (2) feet in width on either side of the hive opening. (Salem, MA §3.2.7).

Boise, Idaho *(2020 population 235,684)*

Flyway Barriers. For colonies located within 25 feet of a property boundary, a flyway barrier at least six feet in height consisting of a solid wall, fence or dense hedge parallel to the property line and extending ten feet beyond the apiary in each direction is required. (Boise, ID §11-06-07).

Portland, Oregon *(2020 population 652,503)*

Flyaway barrier. Hives must meet one of the following standards that direct bees to fly at an elevation of at least 6 feet above ground level as they leave the property where their hives are located.

> A flyaway barrier at least 6 feet in height consisting of a solid wall, fence, dense vegetation or combination thereof established and maintained parallel to the lot line and extends 10 feet beyond the hives in each direction; or
>
> The hives are located at least 10 feet above ground level; or
>
> Neighboring structures or vegetation create a flyaway barrier that direct bees to fly at an elevation of at least 6 feet above ground level as they leave the property where their hives are located. (Portland, OR §13.30).

Austin, Texas *(2020 population 961,855)*

Construction of Flyway Barrier.

> Except as provided [below]... a person who keeps a colony within 25 feet of the property line of a tract, as measured from the nearest point of a hive to the property line, shall establish and maintain a flyway barrier parallel to the property line.
>
> A person is not required to construct a flyway barrier if the apiary tract is adjoined by undeveloped property for a distance of at least 25 feet from the property line of the tract tat is closest to location of the colony.
>
> A flyway barrier created under this section must:
>
> > consist of a solid wall, fence, dense vegetation, or combination of these materials at least six feet high; and
> >
> > extend at least 10 feet beyond the hives on each end of the colony. (Austin, TX §3.6).

WATER SUPPLY



Figure 2-3. At-home bee watering station. Photo courtesy of KTAL news.

Madison, Wisconsin *(2020 population 269,840)*

A constant supply of water shall be provided for all hives. (Madison, WI §28.151).

Rome, New York *(2020 population 32,127)*

Each beekeeper must provide a convenient source of water available to the bees at all times. (Rome, NY §80-13.2).

Bartlett, Illinois *(2020 population 41,105)*

A source of water shall be available at all times on the property during the beehive's active months (March - November). (Bartlett, IL §10-4A-2).

Evanston, Illinois *(2020 population 78,110)*

Water. Each beekeeper must ensure that a convenient source of water is available at all times to the bees so that the bees will not congregate at swimming pools, bibcocks, pet water bowls, birdbaths or other water sources where they may cause human, bird, or domestic pet contact. The water must be maintained so as not to become stagnant. (Evanston, IL §9-4-19).

Elgin, Illinois *(2020 population 114,797)*

Water source requirements. Beekeepers shall ensure that a convenient and adequate source of fresh water is maintained within ten (10) feet of the hive at all times to prevent

bees from straying from the property in search of water. Examples of sources of water beekeepers can provide include:

> A tub of water with wood floats to prevent the bees from drowning;
>
> A faucet in the apiary that is left to drip steadily; or
>
> Entrance feeders (quart jars with holes in the lids) filled with water and placed on the colony. If using tubs of water, beekeepers shall change the water periodically to avoid stagnation and mosquito breeding. (Elgin, IL §7.10).

Dayton, Ohio *(2020 population 137,644)*

In Residential Districts, the following regulations shall apply:

Water Supply. An adequate supply of fresh water shall be maintained in a location on the lot which is readily available to all bee colonies on the zoning lot throughout the day to prevent bees from congregating at other sources of water on nearby properties. (Dayton, OH §150.420.1).

Boise, Idaho *(2020 population 235,684)*

Beekeeping standards shall be as follows:

> *Water Source.* A constant supply of fresh water is required. It shall be readily accessible to the bees and to allow them to access water by landing on a hard surface. A water supply is not required during winter and other inactive months. (Boise, ID §11-06-07).

Portland, Oregon *(2020 population 652,503)*

Water. There must be a convenient source of water available to the bees at all times during the months of March through October. (Portland, OR §13.30).

Austin, Texas *(2020 population 961,855)*

*Apiary Maintenance...*A person shall provide a source of water to a colony to prevent the bees from congregating at a water source used by a human, bird, or domestic pet... (Austin, TX §3.6).

QUEENS



Figure 2-4. A queen bee marked blue surrounded by worker bees. Photo courtesy of David Borish Visuals.

Rome, New York *(2020 population 32,127)*

In any instance in which a colony exhibits unusual aggressive characteristics by stinging or attempting to sting without due provocation or exhibits an unusual disposition toward swarming, the beekeeper must promptly requeen the colony. (Rome, NY §80-13.2).

Evanston, Illinois *(2020 population 78,110)*

Queens. In any instance in which a colony exhibits unusually aggressive characteristics by stinging or attempting to sting without due provocation, or exhibits an unusual disposition towards swarming, it must be the duty of the beekeeper to requeen the colony. Queens must be selected from stock bred for gentleness and non-swarming characteristics. (Evanston, IL §9-4-19).

Boise, Idaho *(2020 population 235,684)*

Queens. Where a colony exhibits unusually aggressive characteristics the colony shall be destroyed or re-queened. (Boise, ID §11-06-07).

Austin, Texas *(2020 population 961,855)*

Beekeeping – General Provisions.

Control of Aggressive Colony.

> A person shall immediately replace the queen in a colony that exhibits aggressive characteristics, including stinging or attempting to sting without provocation, or a disposition towards swarming. A person required to replace a queen under this subsection shall select the replacement from bee stock bred for gentleness and non-swarming characteristics.

As required for swarm management, a person may maintain a nucleus colony for each two colonies allowed under this chapter. A person may house a nucleus colony in a structure not exceeding a standard 9⅝-inch depth ten-frame hive body with no supers attached. A person shall dispose of or combine a nucleus colony with an authorized colony not later than the 30th day after the date the nucleus colony is acquired. (Austin, TX §3.6).

AFRICANIZED BEE RESTRICTION



Figure 2-5. An Africanized bee by the European Honeybee. Photo courtesy of Kathy Keatley Garvey.

Dayton, Ohio *(2020 population 137,644)*

In Residential Districts, the following regulations shall apply:

Prohibitions. No Africanized bees may be kept in the City of Dayton. (Dayton, OH §150.420.1).

Centennial, Colorado *(2020 population 108,418)*

Nuisances – Beekeeping...

It is a nuisance and unlawful for any person to possess, harbor, keep, maintain or permit Africanized bees and hybrids within the City.

As used within this Subsection, bee means any stage of the common domestic honey bee, Apis mellifera species. Bee does not include Africanized bees and hybrids. As used

within this Subsection colony means a hive and its equipment and appurtenances, including bees, comb, honey, pollen, and brood. (Centennial, CO §7-2-70).

Boise, Idaho *(2020 population 235,684)*

Noxious Insects Prohibited. The keeping of wasps, hornets, Africanized bees (Apis mellifera scutellata) and other noxious insects is prohibited. (Boise, ID §11-06-07).

SIGNAGE



Figure 2-6. A sign on the gate of the Naneum Bee Farm; Ellensburg Washington. Photo courtesy of Brian Myrick.

Bartlett, Illinois *(2020 population 41,105)*

Prominent signage warning of the presence of bees shall be required on the property (i.e., gate). (Bartlett, IL §10-4A-2).

Evanston, Illinois *(2020 population 78,110)*

Fencing, Gates, And Signage. All hives must be enclosed by fencing with a secure gate and prominent signage warning of the presence of a hive. (Evanston, IL §9-4-19).

Elgin, Illinois *(2020 population 114,797)*

State Registration Requirement... Beekeepers shall be required to post beekeepers' registration number in a prominent place within each apiary under beekeepers control.

Honeybee Keeping – Miscellaneous regulations.

A small sign to announce "Bees on Premises" shall be posted by beekeepers at walkway or gate area entrances to the rear of the premises to warn visitors to the property of the presence of bees on site. The sign shall not exceed two (2) square feet. Signs are not required for rooftop hives. (Elgin, IL §7.10).

Boise, Idaho *(2020 population 235,684)*

Contact Information. Contact information for a responsible party shall be posted at apiaries on vacant property. (Boise, ID §11-06-07).

Austin, Texas *(2020 population 961,855)*

Hive Identification and Ownership. Except as provided ... [above], a person shall:

> brand, paint, or otherwise clearly mark the apiary owner's name or telephone number on at least two hives placed at opposite ends of an apiary; or
>
> post a conspicuous sign displaying the apiary owner's name and telephone number at the entrance to the apiary tract.

A person is not required to place owner identification on or near a colony located on a tract on which the owner resides. (Austin, TX §3.6).

MISCELLANEOUS

Rome, New York *(2020 population 32,127)*

All bee colonies must be kept in a removable frame hive, which must be kept in sound and usable condition.

Apiaries do not require a building permit. (Rome, NY §80-13.2).

Elgin, Illinois *(2020 population 114,797)*

Honeybee Keeping – Miscellaneous regulations.

Honey beekeeping by any person in the city not in compliance with this chapter is prohibited.

Any bee colony not residing in a hive structure intended for beekeeping, or any colony residing in a standard or homemade hive, which, by virtue of its condition, has obviously been abandoned, neglected, or mismanaged by the beekeeper, is unlawful.

All bees, colonies, or items of bee equipment, where bee diseases, bee parasites or exotic strains of bees exist; or hives that cannot be readily inspected, or colonies that are not registered with the state or have not been issued a permit by the city, are

declared to be nuisances and shall be unlawful for any person to allow such nuisance to exist. (Elgin, IL §7.10).

Centennial, Colorado *(2020 population 108,418)*

Nuisances – Beekeeping.

It is a nuisance and unlawful to possess, harbor, keep, maintain or permit a bee colony within the City, except as provided within the City's Land Development Code. (Centennial, CO §7-2-70).

Salem, Massachusetts *(2020 population 44,480)*

Honeybees must be owned, rented, or hosted by a resident, commercial tenant, or owner of the location who shall be responsible for the care and control of the honeybees....

Specific Rooftop Beekeeping Requirements.

> *Dimensional Regulations.* No hive shall exceed six (6) feet in height and twenty-five (25) cubic feet in size on any lot or roof.
>
> *Setback Requirements.* Hives shall be set back six (6) feet from the edge of the roof.
>
> *Hive Placement.* For any roof level hive that is within twenty (20) feet of the doors and/or windows of the principal building on an abutting lot or a shared access space, the hive opening must face away from doors and/or windows. (Salem, MA §3.2.7).

Portland, Oregon *(2020 population 652,503)*

Existing Specified Animal Facility Permit Holders.

[Bee Permits]:

Requirements and best practice recommendations.

All beekeepers must meet the provisions of this Title and any administrative rules for best practices determined applicable by the City Administrator.

Nuisances complaints. Beekeepers are required to respond immediately to remediate nuisance complaints regarding their bees such as, but not limited to: hive placement, warming, waste removal, watering practices, or hive entrance orientation.

Oregon Department of Agriculture. Beekeepers must comply with all Oregon Department of Agriculture registration requirements.

Neighbor notification. Prior to installing beehives, beekeepers must send a letter to the owners of the properties within 150 feet of the site outlining their intention to keep beehives on their property and how the provisions of this Title and any administrative rules for best practices will be met. The letter must include information on how to contact the beekeeper for more information, to ask questions or to share feedback. Beekeepers must keep documentation to prove this requirement has been met. This requirement is meant to allow neighbors an opportunity to become aware of and comment, in an informal manner, before the beehives are installed. By sharing information and concerns, all involved have the opportunity to identify ways to resolve potential conflicts. While the comments from the neighbors are not binding, a collaborative approach is encouraged.

Other development standards. If applicable, all structures must comply with the City's building code and must be consistent with the requirements of any applicable zoning code, condition of approval of a land use decision or other land use regulation. (Portland, OR §13.30).

***Savannah, Georgia** (2020 population 147,780)*

Beekeeping may be permitted provided the following requirements are met...

Mosquito control. Mosquito control operations are conducted to maintain a reasonable quality of life for residents and protect them from mosquito-borne diseases. Mosquito control staff will notify registered beekeepers prior to control operations that may affect their hives. It is the beekeeper's responsibility to take precautions that will help to protect their hives. Mosquito control staff can provide hive protection recommendations. (Savannah, GA §9-5045).

CHICKENS

INTRODUCTION

ABOUT CHICKENS

Newly hatched chickens are called hatchlings. Female chickens are called hens, and young female birds that have just begun to lay eggs are referred to as pullets. Male birds less than a year old are cockerels and mature male birds are roosters.

Most backyard chicken keepers raise chickens for egg production, in which case only hens are required. In fact, it is also a common misconception that a keeper will require a rooster, since hens will lay eggs whether fertilized or not. However, chickens may also offer a source of amusement and relaxation. Also, their droppings are high in nitrogen and can create very good compost when combined with carbon-rich materials (Seattle Tilth). Furthermore, chickens also contribute to garden maintenance by serving as natural pest controllers, effectively reducing the need for chemical pesticides.

Recent outbreaks of avian influenza (commonly known as “bird flu”) in 2016 and 2022 have led some cities to restrict and even repeal zoning regulations permitting backyard flocks, although appropriate flock management practices can reduce the chances that backyard flocks contract the disease (University of Minnesota Extension, 2026; Oklahoma Department of Health, 2022).

BREEDS

Many different breeds of chicken are suitable for the backyard farmer. The breed may be chosen depending on its size, temperament, egg production, or any other number of reasons. Breeds can be roughly separated into two major categories based on size. Bantams are small birds— typically one-fourth the size of a regular chicken— suitable for an urban environment since they require less feed and space. Bantam breeds can be dual-purpose, which means they can be produced for either eggs or meat. All other breeds are classified as large fowl breeds and are categorized depending on origin. The classes are: American, Asiatic, English, Mediterranean, Continental, and an Others category. The breeds within these classes may display specific characteristics, such as a certain egg color, a flighty disposition, or an ornamental aesthetic (Akers et al., 2002).



Figure 3-1. Backyard Chickens; Ames, IA. Photo courtesy of Andrea Vaage

BEHAVIOR

Chickens are social creatures and an owner should have several chickens in their brood. Chickens establish a social hierarchy referred to as a pecking order. Hens do not fight as often or violently as roosters. However, fighting often occurs when an unfamiliar hen is introduced to a flock (University of Maryland Extension, 2013)

EGG PRODUCTION BY CHICKENS

Hens will begin to lay eggs by the first six months and continue to lay nearly one egg per day thereafter. On average, most hens manage to produce approximately six eggs per week. The average egg production lifecycle for a hen lasts from five to ten years; however, the most productive years are within the first two years.

Hens will only lay eggs when exposed to sufficient daylight, which is generally at least twelve to fourteen hours per day. This means that peak production is during the summer, with production tapering off in fall when the hens begin to replace their feathers, or molt (Wieland and Nolden, 2025). Daylight can be artificially reproduced using a light bulb in areas that do not receive sufficient sunlight.

FEED

Although chickens will eat insects in the yard and vegetable scraps provided by the keeper, it is important to have the bulk of the diet composed of a balanced feed. Birds that are fed entirely by feed will still exhibit foraging behavior by pecking and scratching.

This is useful as birds can break apart manure piles or eat insects and larvae and keep down pest populations.

As with any other animal, chickens must be provided with a continuous, clean supply of drinking water. Water levels must be monitored carefully during the summer, when heat stress is more likely. Chickens do not sweat, rather they roll around in dust to remove oil and cool off. To reduce the possibility of heat stress, the keeper should provide an area of bare earth for chickens to roll in. Diatomaceous earth can also be added to a dust bathing area to help prevent mite infestation; however, the user should follow usage directions closely to avoid inhalation (Murillo and Mullens, 2016; National Pesticide Information Center).

LIVING ENVIRONMENT

Chickens require an enclosure that offers shelter from the elements and predators and provides them with a place to lay their eggs. Management of chickens is relatively simple thanks to their innate homing instinct. The birds will return to a shelter, called a coop, every night. The coop provides a place for chickens to lay their eggs and offers protection from predators and weather. Though coop designs differ dramatically based on the needs and requirements of a specific situation, the general design requirements involve four walls, a roof, a place to perch and lay eggs, and a run or fenced-in area to provide access to the outdoors (University of Maryland Extension, 2013). The coop should have adjustable ventilation to provide air movement in hotter months and reduced movement during the winter. The birds need to be let out of the coop during the day and locked in throughout the night.

The indoor floor space for each bird, and space per bird for outside runs varies depending on the type of bird. The indoor floor can be concrete, wood, or dirt, but litter, such as shavings or sawdust, should be spread on the chicken house floor. (University of Maryland Extension, 2013).

A natural instinct for chickens is to look for a higher elevation to roost on during the night in order to avoid most predators. Though it may not seem like there are many predators in an urban environment, even dogs and cats can pose a threat to a flock. Perches are simply wooden bars installed along the walls of the coop.

Laying boxes should be provided so that hens do not lay eggs on the floor of the coop. Only one nest is needed for every four to five birds. A wooden box lined with straw is the perfect laying nest. Nests should be placed 24 inches above the floor and in an area of relative darkness (University of Maryland Extension, 2013).

The coop should have an entrance that is attached to a fenced-in area so the hens have access to the outdoors. Some ordinances allow for chickens to roam free in a backyard, but in this case fencing for the entire yard should be required.

SANITATION

Chicken feeders and water containers should be cleaned out often. The coop should be cleaned weekly; bedding should be replaced and manure hauled out of any area that the chickens access. Manure can be managed in several ways. Composting may be best for areas with limited space. Composting can be done in the coop by adding more bedding to the floor and turning it occasionally to speed up the decomposition process. In an area with a large yard, a portable coop can be moved around the yard, and manure can be left to fertilize the yard. A final option would simply be to thoroughly clean out everything in the coop more than once a year (Wieland and Nolden, 2025).

LAND-USE CONCERNS

A common initial concern with keeping chickens involves noise levels. However, hens, unlike roosters, are relatively quiet animals.

Odors are another source of concern. Most poultry odor is associated with ammonia produced in moist and poorly ventilated coops. The solution is to properly ventilate the coop to keep bedding dry. Dehumidification may be necessary during times of frequent rain or high humidity.

Another issue is the potential for exposure to wild birds, rodents, pests, and predators. These problems can be minimized or eliminated with proper care and maintenance of the coop and other areas. Maintaining proper ventilation to keep the coop environment dry is crucial, as it limits the moisture required for fly and insect larvae to develop (Wieland and Nolan, 2025). To avoid wild bird problems, do not set up bird feeders near chicken coops and avoid wearing boots and clothes used to bird hunt when caring for domestic birds (Oklahoma Department of Health, 2022). It is also important to maintain the areas directly surrounding the coop free from weeds and grass, and store feed in containers that are impervious to rodents and wild birds.

There is also some concern about the potential for chickens to transmit diseases to humans. This risk is extremely low, however, with a properly maintained clean environment. Salmonellosis is the most common concern. *Salmonella* is generally contracted from undercooked eggs or contaminated raw chicken meat, but infection may rarely result from contact with chicken manure (Hady and Kean, 2011). To avoid this risk, it is advisable to refrain from eating, drinking, or putting anything in your mouth

while handling any chicken and wash your hands with soap and water immediately after handling chickens. Additionally, young children under the age of five should be supervised when handling or touching chicks, ducklings, or other live poultry, as they are more susceptible to transmitting such diseases (Oklahoma Department of Health, 2022).

Conscientious flock owners should routinely monitor and treat chickens for parasites. In general, though, responsible hygiene and sanitation practices significantly reduce the likelihood of disease and parasite transmission between humans and chickens.

EXISTING REGULATIONS SURVEY

In the examination of current municipal regulations, it is observed that many municipalities do not regulate chickens specifically, but rather, apply general policies on sanitation, nuisances, and animal care to address potential issues. However, among the municipalities that do have specific regulations for keeping chickens, there is variation in where and how they are permitted. Many municipalities restrict the keeping of chickens as an accessory use solely to single-family dwellings in residentially zoned districts, while some allow them as an accessory use to multi-family dwelling units in residentially zoned districts. Additionally, chickens may be permitted as a principal use, accessory use, or conditional use to schools, day care centers, and other community or educational facilities.

Almost all regulations prohibit roosters and set forth a maximum number of chickens permitted per lot; often stated as a ratio of chickens to the square footage of the lot. Furthermore, municipalities usually necessitate a permit from departments such as Animal Control, Public Health, or similar departments– distinct from zoning– to lawfully keep chickens within municipality limits regardless of whether the applicant intends to keep one chicken or the maximum allowable number, if any. Obtaining such permits generally involves additional fees and must be renewed within a specified timeframe established by the municipality. There are a few municipalities that impose a requirement for obtaining a permit to lawfully keep chickens within municipality limits if the flock exceeds a certain size such as the City of San Antonio, Texas. Moreover, some municipalities may also mandate that applicants receive relevant information or undergo training on raising chickens in an urban environment as part of the permitting process.



Figure 3-2. Backyard Chickens; Ames, IA. Photo courtesy of Andrea Vaage

Another common stipulation is that the chickens and structures must be kept at least fifty feet from property lines; however, proper care of flocks and their living environment make such a large setback unnecessary and will prevent those with smaller lots from owning chickens. In contrast, less restrictive ordinances specify that chickens must be located at a specified distance, ranging from ten to fifty feet away from adjacent residential structures. The City of Fort Collins, Colorado requires written consent be obtained from all adult residents and owners if a lot has multiple dwelling units. Some cities also specify that renters specifically must obtain written consent from their landlords as well

Most regulations address the need for enclosed coops and fenced-in outdoor space, typically mandating a minimum of four square feet of space per chicken within the enclosed coop. Almost all ordinances require that basic sanitary concerns are met (i.e., clean facilities, storage of food and waste, etc.) and that the owner takes measures to prevent the activity from becoming a nuisance.

Lastly, it is important to note that certain cities have provisions that extend regulations to encompass other domestic fowl, treating them similarly to chickens. Instead of solely using and defining the term "chicken," certain regulations employ the term "fowl," which can encompass various species such as ducks and quail. Different regulations and definitions may explicitly mention chickens, use the term "fowl" while specifying particular domestic fowl, or explicitly prohibit certain non-chicken domestic fowl in their definitions or regulations. For instance, the City of Cleveland, Ohio, specifically permits the keeping of chickens (hens) and ducks, but roosters, geese, turkeys, and predatory birds are explicitly prohibited in their regulations.

CODE LANGUAGE

DEFINITIONS

Iowa City, Iowa *(2020 population 74,828)*

Chicken - a member of the subspecies of Gallus—*gallus domesticus*, a domesticated chicken. (Iowa City, IA §8-4-12).

Aberdeen, South Dakota *(2020 population 28,495)*

Chicken coop - any cage, enclosure, or structure for the housing of chickens. (partially worded from Aberdeen, SD §8-11).

Davenport, Iowa *(2020 population 652,503)*

Chicken tractor - a lightweight portable chicken coop without a solid floor that allows the chickens to forage for weeds and insects. (Davenport, IA §6.06.010).

GENERAL RESTRICTIONS

Portland, Oregon *(2020 population 652,503)*

Backyard Livestock – Chickens and other domestic fowl.

Up to four (4) chickens, ducks, pigeons and/or other similarly sized domestic fowl may be kept on any lot. Up to six (6) small domestic fowl may be kept on lots of 10,000 square feet and greater. In addition to these numbers, up to four (4) small domestic fowl under 12 weeks of age are allowed. There is no maximum number on lots 20,000 square feet or greater that allow agricultural uses through [the zoning code] or that have an approved conditional use.

Geese, turkeys, peacocks, emus and/or other larger domestic fowl that have a tendency to be loud and/or aggressive, may be kept on lots 20,000 square feet or greater that allow agricultural uses through [the zoning code], or that have an approved conditional use. Six (6) geese, turkeys, peacocks, emus or other similarly sized domestic fowl are allowed on lots 20,000 square feet or greater. Two (2) additional animals are allowed for each 5,000 square feet greater than 20,000 square feet.

It is unlawful to have or keep roosters except for agricultural purposes on lots that allow agricultural uses.

It is unlawful to color or dye any fowl under two months of age. (Portland, OR §13.40.020).

Madison, Wisconsin *(2020 population 269,840)*

Keeping of Chickens.

Keeping of up to eight (8) chickens is allowed as an accessory use on lots with up to four (4) dwelling units. Keeping of up to eight (8) chickens is allowed as an accessory use to a museum, school, day care center, or recreation, community or neighborhood center. (Madison, WI §28.151).

Ann Arbor, Michigan *(2020 population 123,851)*

A person who keeps or houses birds on a property shall comply with all of the following requirements: …

> The principal use of the person's property is for a single-family dwelling, 2-family dwelling, or a primary or secondary school.... (Ann Arbor, MI §9:42).

LICENSING

Note: As with beekeeping, several municipalities' codes reference licensing schemes, either first requiring owners to obtain state-required licenses or registrations or establishing their own municipality-managed licensing scheme. Municipalities are urged to inquire with their appropriate state agency to find out if there are state-level licensing requirements or registration schemes for small flocks. The code sections set forth below are those that establish municipality-managed chicken keeping licensing.

Ann Arbor, Michigan *(2020 population 123,851)*

Any person who keeps chickens or ducks in the city shall obtain a 6-bird permit from the city prior to acquiring the chickens or ducks. Written statements waiving the distance requirement in subsection (3) below are required for 6-bird permits and shall be submitted at the time of application and become a part of the permit if issued. Application shall be made to the City Clerk and the fee for the permit shall be as determined by Council resolution.

Six-bird permits expire and become invalid 5 years after the date of issuance. A person who wishes to continue keeping birds shall have obtained a new permit on or before the expiration date of the previous permit. Application for a new permit shall be pursuant to the procedures and requirements that are applicable at the time the person applies for a new permit.

** Only as used in this section, the term "bird" means only chickens or ducks or a combination of both. (Ann Arbor, MI §9:42).

Fort Collins, Colorado *(2020 population 169,810)*

Any person keeping poultry pursuant to this provision must first have been issued a permit by the Humane Society and have received such information or training pertaining to the keeping of poultry as said agency deems appropriate. Prior to the issuance of said permit, a site inspection shall be conducted by the Humane Society to verify compliance with the requirements of this Subsection. (Fort Collins, CO §4.117).

Iowa City, Iowa *(2020 population 74,828)*

Urban Chicken Permits:

> No person shall raise, harbor or keep chickens without an urban chicken permit, or other permit, issued by the City.
>
> In order to obtain an urban chicken permit, an applicant must submit a completed application on a form provided by the City accompanied by the permit fee.
>
> Within thirty (30) days of submission of the application, the Police Chief, or designee, shall issue the urban chicken permit if the applicant meets the requirements of this provision and the policy adopted by City Council resolution or deny the application. If the application is denied, the Police Chief, or designee, shall state the reasons in writing.
>
> The urban chicken permit shall be valid for three (3) years and may not be sold, transferred or assigned.
>
> The Police Chief, or designee, may revoke an urban chicken permit as provided in the policy adopted by Council resolution.
>
> Appeals of the decision to deny or revoke an urban chicken permit are to the City Manager, or designee, and must be filed within ten (10) days of the decision.
>
> Subsections A through D of this section and section 8-4-15 of this chapter do not apply to this subsection.
>
> Additional requirements, including permit fees, shall be adopted by resolution of the City Council.
>
> Violation of this subsection or the terms of the urban chicken permit are punishable by a Municipal infraction with a civil penalty of one hundred dollars ($100.00) for first violation, two hundred fifty dollars ($250.00) for second violation, and five hundred dollars ($500.00) for third and subsequent violations. (Iowa City, IA §8-4-12).

Coralville, Iowa *(2020 population 22,318)*

Permit Required. No person shall raise, harbor, or keep Chickens within the city without a valid permit obtained from the Permitting Officer under the provisions of this Chapter.

Application. In order to obtain a permit, the Applicant must submit the completed application on forms provided by the city and pay the Urban Chicken Permit fee, said fees to be set by Resolution of the City Council.

Requirements for the issuance of the Urban Chicken Permit.

Prior to the issuance of an Urban Chicken Permit, the Permitting Officer shall ensure that the following requirements are met by the Applicant:

The application has been completed and all fees paid to the City.

The proposed Tract of land is in compliance with this Code of Ordinances.

In the case where a tenant is the Applicant, the Applicant has provided the City with signed permission from the Landlord.

The proposed tract of land is zoned for residential uses only.

The proposed tract of land shall contain only one Single Family Dwelling occupied by the Applicant at the time of completion of the application.

That the applicant certifies that the keeping or harboring of chickens does not violate the Restrictive Covenants that apply to the proposed tract of land.

All Chickens should be banded in accordance with procedures established by the City.

Proof of completion of an approved class in raising chickens in an urban environment.

Revocation of Urban Chicken Permit. The Permitting Officer may revoke an Urban Chicken Permit on the following grounds:

False statements on any application or other information given to the City by the Applicant.

Failure to pay any application, inspection or reinspection fee required by this chapter and City Council resolution.

Failure to comply with any of the requirements of this chapter.

Effect of Denial or Revocation. When an Applicant is denied an Urban Chicken Permit for violation of the provisions of Section 55.04 or the Permittee's Urban Chicken Permit is revoked pursuant to this chapter, the Applicant or Permittee, as the case may be, shall not be eligible for another permit until one (1) year has passed since said denial or revocation. If an Urban Chicken Permit is revoked, the Permittee shall remove all Chickens and enclosures from the Permitted Tract of land within ten (10) days of said revocation.

Appeals. No application for an Urban Chicken Permit shall be denied or Urban Chicken Permit be revoked unless the Applicant or Permittee, as the case may be, shall have the right to a hearing. The Permitting Officer may deny an application or revoke a permit by sending written notice of the same to the address listed on the application outlining the reasons for said denial or revocation. The Applicant or Permittee, as the case may be, shall have the right to request a hearing on said denial or revocation, by filing written notice of appeal with the City Clerk no later than ten (10) days after the issuance of the written denial or revocation. Failure to request a hearing will cause the decision of the Permitting Officer to be final. (Coralville, IA §55A.02).

Saint Paul, Minnesota *(2020 population 311,527)*

Chickens. No person shall keep, permit or harbor any female chicken in any dwelling or on the same lot or premises without a permit. Permits are divided into two (2) tiers.

> Tier 1 permits will permit one (1) to six (6) female chickens.
>
> Tier 2 permits will permit seven (7) to fifteen (15) female chickens. (Saint Paul, MN §198.02).

Consent. Applicants for any permit required under the provisions of [the above section] must notify and/or obtain written consent from nearby residents as required below:

> *Tier 1 permit.* Applicants must provide proof of written notification of the intent to keep female chickens to all adjacent property owners.
>
> *Tier 2 permit for female chickens and other types of animal permits.* Applicants for a Tier 2 permit or any other type of animal permit must obtain the written consent of seventy-five (75) percent of the owners or occupants of privately or publicly owned real estate within one hundred fifty (150) feet of the outer boundaries of the premises for which the permit is being requested or, in the alternative, proof that applicant's property lines are one hundred fifty (150) feet or

more from any structure. However, where a street separates the premises for which the permit is being requested from other neighboring property, no consent is required from the owners or occupants of property located on the opposite side of the street. Where a property within one hundred fifty (150) feet consists of a multiple dwelling, the applicant need obtain only the written consent of the owner or manager, or other person in charge of the building. (Saint Paul, MN §198.04).

San Antonio, Texas *(2020 population 1,434,625)*

If an owner desires to exceed the maximum number of domestic fowl specified in subsection (b), an owner must make an application for an excess animal permit with the department which shall be valid for one (1) year. The criteria for evaluating the application for an excess animal permit shall be those listed in subsection (b). In addition, all domestic fowl must be kept in a coop and run not less than fifty (50) feet from any business or dwelling occupied by any person other than the owner. The facilities shall be subject to inspection by the department. An owner with between twenty-six (26) and fifty (50) domestic fowl must keep the animals in a coop and run not less than seventy-five (75) feet from any business or dwelling occupied by any person other than the owner. An owner with fifty-one (51) or more domestic fowl must keep the animals in a coop and run not less than one hundred (100) feet away from any business or dwelling occupied by a person other than the owner and have a business license that demonstrates a need to house over fifty (50) domestic fowl. The facilities shall be subject to inspection by the department.

The maximum number of roosters allowed for excess animal permits shall be one (1) rooster for every ten (10) authorized domestic fowl.

Up to eight (8) fowl may be allowed to temporarily roam outside the coop and run at a time, but within an enclosed area within the boundaries of the real property of the owner between the hours of 6:00 a.m. and 10:00 p.m. (San Antonio, TX §5-107).

LOT SIZE / ANIMAL NUMBERS / SETBACKS / ENCLOSURES



Figure 3-3. Chickens roaming in a fenced-in backyard in front of their coop. Photo courtesy of Misty Keasler/Redux Pictures

Seattle, Washington *(2020 population 737,015)*

The keeping of small animals, farm animals, domestic fowl and bees is permitted outright in all zones as an accessory use to any principal use permitted outright or to a permitted conditional use [with conditions as set forth below]….

> Domestic Fowl. Up to eight domestic fowl may be kept on any lot ….
>
> On lots greater than 10,000 square feet that include either a community garden or an urban farm, one additional fowl is permitted for every 1,000 square feet of lot area over 10,000 square feet in community garden or urban farm use.
>
> Roosters are not permitted.
>
> Structures housing domestic fowl must be located at least 10 feet away from any structure that includes a dwelling unit on an adjacent lot. (Seattle, WA §23.42.052).

Cleveland, Ohio *(2020 population 372,624)*

Restrictions on the Keeping of Farm Animals....

Chickens, Ducks, Rabbits and Similar Animals. The keeping of chickens, ducks, rabbits and similar farm animals, and cages, coops and enclosures for the keeping of such animals, shall be governed by the following regulations.

In Residential Districts. In Residential Districts, the following regulations shall apply:

Number. No more than one (1) such animal shall be kept on a parcel of land for each eight hundred (800) square feet of parcel or lot area. For a standard residential lot of four thousand eight hundred (4,800) square feet, this regulation would permit no more than a total of six (6) such animals.

In Non-Residential Districts. In zoning districts other than Residential Districts, all regulations applicable in Residential Districts shall apply except that the number of such animals shall be limited to one (1) animals for each four hundred (400) square feet of lot area. (Cleveland, OH §347.02).

***Fairfield, Iowa** (2020 population 9,416)*

Primary fixed dwelling for poultry, including domestic female chickens, turkeys, geese and ducks raised for home use, or as pets, within the city limits must be:

Located only in the back yard; compliant with side yard requirements for district.

Located on the side of the yard farthest from neighboring dwelling, if one neighbor only; and approximately equal distance from neighboring dwellings, if more than one neighbor….

Constructed consistent with the capabilities of the breed of poultry confined (i.e., domestic poultry with no capability of flight, or wings clipped may not require fencing of the same height, as more flight capable breeds requiring wire coverings to the top of their confinements).

Limited to no more than ten [hens].

Limited to poultry not generally considered excessively noisy - chicken roosters, pea fowl and guinea fowl are expressly prohibited.

Located not closer than forty feet from any neighboring dwelling house(s). (Fairfield, IA §6.10.020).

***Madison, Wisconsin** (2020 population 269,840)*

Keeping of up to eight (8) chickens is allowed as an accessory use on lots with up to four (4) dwelling units.

Keeping of up to eight (8) chickens is allowed as an accessory use to a museum, school, day care center, or recreation, community or neighborhood center

Keeping of roosters is prohibited.

Slaughter of chickens is prohibited on site.

The chickens shall be provided with a covered enclosure and must be kept in the covered enclosure or a fenced enclosure at all times.

The enclosure shall be located at least twenty-five (25) feet from any residential structure on an adjacent lot.

The owner, operator or tenant must obtain a [municipal license]. (Madison, WI §28.151).

Little Rock, Arkansas *(2020 population 202,591)*

Small animals such as rabbits and guinea pigs and fowl, such as chickens, guineas, turkeys and the like may be kept within the city limits, subject to the following provisions:

1. All such animals must be provided with adequate housing. Floor space in such houses shall be in accordance with the following minimum requirements:

    a. For rabbits, four (4) square feet per animal over four (4) months of age.

    b. For turkeys, four (4) square feet per animal over four (4) months of age.

    c. For chickens and similar fowl, three (3) square feet per bird over four (4) months of age.

    d. For bantams, three (3) square feet per bird over four (4) months of age.

Provisions of this section do not apply to pea fowl or ducks.

2. All pens or yards where such animals are kept shall be placed the following minimum distances from any business establishment or any residence other than that of the owner of same:

    a. Rabbits, ten (10) feet.

    b. All other animals referred to in paragraph (1) of this section, twenty-five (25) feet; provided, however, that chickens or similar fowls must be kept at least five (5) feet from owner's residence as well as twenty-five (25) feet from the house of the nearest neighbor. (Little Rock, AR §6-44).

Fort Collins, Colorado *(2020 population 169,810)*

In those zone districts where the keeping of farm animals is not otherwise allowed, the keeping of chickens and/or ducks (poultry) shall be permitted subject to the following requirements and subject to all other applicable provisions of this Chapter:

Any person keeping poultry pursuant to these provisions must first have been issued a permit by the Humane Society and have received such information or training pertaining to the keeping of poultry as said agency deems appropriate.

The keeping of roosters or drakes (male ducks) is prohibited; only chicken or duck hens shall be permitted, and all references herein to poultry shall mean chicken or duck hens only.

Poultry may be kept in the following numbers:

On lots less than one-half (½) acre in size, up to eight (8) chickens and/or ducks may be kept;

On lots one-half (½) acre to one (1) acre in size, up to a total of twelve (12) chickens and/or ducks may be kept; and

On lots more than one (1) acre in size, up to six (6) additional chickens and/or ducks may be kept for every additional one-half (½) acre; provided, however, that if more than twelve (12) chickens and/or ducks, combined, are to be kept, all property owners abutting the parcel where the poultry will be housed must be notified in writing prior to obtaining a permit for said number of poultry.

If a lot has more than one (1) dwelling unit, all adult residents and the owners of the lot must consent in writing to allowing the poultry on the property.

Any person keeping poultry pursuant to this provision must first have been issued a permit by the Humane Society and have received such information or training pertaining to the keeping of poultry as said agency deems appropriate. Prior to the issuance of said permit, a site inspection shall be conducted by the Humane Society to verify compliance with the requirements of this Subsection.

The poultry must be provided with a covered, predator-resistant poultry house that is properly ventilated, designed to be easily accessed, cleaned and maintained, and must consist of at least four (4) square feet per chicken hen or duck.

During daylight hours, the poultry must have access to the poultry house and also have access to an outdoor enclosure that is adequately fenced to protect them from predators.

The poultry must be further protected from predators by being closed in the poultry house from dusk to dawn.

Neither the poultry house nor the outdoor enclosure may be located less than fifteen (15) feet from any abutting property line unless the owner or keeper of the poultry obtains the written consent of the owners of all abutting properties to which the enclosure is proposed to be more closely located, in which event the agreed-upon location shall then be deemed acceptable notwithstanding any subsequent change in ownership of such abutting properties.

The poultry must be sheltered or confined in such fashion as to prevent them from coming into contact with wild ducks or geese or their excrement.

The poultry may not be killed by or at the direction of the owner or keeper thereof except pursuant to the lawful order of state or county health officials, or for the purpose of euthanasia when surrendered to a licensed veterinarian or the Humane Society for such purpose, or as otherwise expressly permitted by law. (Fort Collins, CO §4.117).

Ann Arbor, Michigan *(2020 population 123,851)*

A person who keeps or houses birds on a property shall comply with all of the following requirements:

Have been issued the permit required under [6-bird permit section].

Keep no more than 6 birds [chickens and ducks]...

No person shall keep any rooster (male chicken). Both drakes (male ducks) and hen ducks (female ducks) may be kept.

No person shall slaughter any chickens or ducks.

The birds shall be provided with a covered enclosure and must be kept in the covered enclosure or a fenced enclosure, except as otherwise provided in this section. Fenced enclosures are subject to all provisions of [Unified Development Code].

A person shall not keep birds [chickens and ducks] in any location on the property other than in the rear yard, as defined in [definitions chapter], except as otherwise provided in this section. For properties where the principal use is a primary or secondary school, a person shall not keep birds in that property's front required setback area as defined under [definitions chapter] of this Code.

Notwithstanding other requirements of this section, the birds [chickens and ducks] may be kept outside of the covered enclosure or fenced enclosure subject to the requirements they may only be in the rear yard or side yard, as defined in [definitions chapter], and a person shall be present with the birds in the same location.

No covered enclosure or fenced enclosure shall be located closer than 10 feet to any property line of an adjacent property.

All enclosures for the keeping of chickens shall be so constructed or repaired as to prevent rats, mice, or other rodents from being harbored underneath, within, or within the walls of the enclosure. A covered enclosure or fenced enclosure shall not be located closer than 40 feet to any residential structure on an adjacent property provided, however, this requirement can be waived as follows:

> If the principal use of applicant's property is for a single-family dwelling, or a primary or secondary school, to obtain such a waiver the applicant shall present at the time of applying for a permit the written statements of all owners of adjacent property that there is no objection to the issuance of the permit.
>
> If the principal use of the applicant's property is for a 2-family dwelling, to obtain such a waiver the applicant shall present at the time of applying for a permit the written statements of the occupants of the other dwelling stating that there is no objection to the issuance of the permit. (Ann Arbor, MI §9:42).

Cedar Rapids, Iowa *(2020 population 137,710)*

The maximum number of chickens allowed is six (6) per tract of land regardless of how many dwelling units are on the tract.

Only female chickens (hens) are allowed.

Permits will be granted only for tracts of land located in residential districts as identified on the current Official Zoning Map on file with the City of Cedar Rapids.

A permit shall not allow the permittee to engage in chicken breeding or fertilizer production for commercial purposes.

Chickens must be kept in an enclosure or fenced area at all times. Chickens shall be secured within a henhouse or chicken tractor** during non-daylight hours.

Enclosures must be kept in a clean, dry, odor-free, neat and sanitary condition at all times.

Henhouses, chicken tractors and chicken pens must provide adequate ventilation and adequate sun and shade and must be impermeable to rodents, wild birds and predators, including dogs and cats.

Henhouses and chicken tractors shall be designed to provide safe and healthy living conditions for the chickens with a minimum of four (4) square feet per bird while minimizing adverse impacts to other residents in the neighborhood.

A henhouse or chicken tractor shall be enclosed on all sides and shall have a roof and doors. Access doors must be able to be shut and locked at night. Opening windows and vents must be covered with predator and bird proof wire of less than one (1) inch openings.

The materials used in making a henhouse or chicken tractor shall be uniform for each element of the structure such that the walls are made of the same material, the roof has the same shingles or other covering, and any windows or openings are constructed using the same materials. The use of scrap, waste board, sheet metal, or similar materials is prohibited. Henhouses and chicken tractors shall be well maintained.

Henhouses, chicken tractors and chicken pens shall only be located in the rear yard … unless the setback requirements cannot be met in which case they may be kept in other yard but within the required setbacks.

Henhouses, chicken tractors and chicken pens must be located at least ten (10) feet from the property line and at least twenty-five (25) feet from any adjacent residential dwelling, church, school or place of business.

Any enclosed chicken pen shall consist of sturdy wire fencing. The pen must be covered with wire, aviary netting, or solid roofing. (Cedar Rapids, IA §23A).

North Liberty, Iowa *(2020 population 20,479)*

Notwithstanding the provisions of this section, the keeping of domestic chickens (members of the subspecies of Gallus gallus domesticus) shall be permitted as an accessory use to single-family residences and zero-lot line duplexes (where each unit owner owns a separate and distinct portion of the lot), so long as such keeping is in strict compliance with this subsection and all other applicable City ordinances unless, despite compliance with the following, the presence of any particular chickens endangers the health, safety, peace, quiet, comfort, enjoyment of, or otherwise becomes a public nuisance to nearby residents or occupants or places of business.

> No person shall keep chickens inside any residence.
>
> A tenant must obtain the landlord's written permission to keep chickens, which shall be submitted as part of the application for a permit.

Chickens must be confined in a coop or fowl house or, in the alternative, within a single, unenclosed fenced pen area. The fenced pen area may be the entire rear yard, provided that the area satisfies all other requirements of this Chapter. Chickens must be kept within the coop, the fowl house, or the fenced pen area at all times unless removed for a temporary time for cleaning or for the safety of the chicken. Chickens must be housed in the coop from dusk until dawn.

The coop, the fowl house, or the fenced pen area shall be located in the rear yard (as defined in Section 167.01) only, must be of such a design to be reasonably expected to prevent entry by dogs, cats, or other animals, shall be completely enclosed (except fenced pen area), shall be well maintained, and shall be well drained so there is no accumulation of moisture.

The materials used in making a coop or fowl house (stationary or mobile) shall be substantially uniform for each element of the structure such that the walls are made of the same material, the roof has the same shingles or other covering, and any windows or openings are constructed using the same materials. The use of scrap, waste board, sheet metal, or similar materials is prohibited. Fencing materials must meet all requirements set forth in the zoning regulations; however, except as set forth herein, coops and fowl houses are not subject to building code requirements. By way of example, coop or fowl house walls consisting primarily of sturdy wire fencing, and coop or fowl house roofing consisting of sturdy wire, aviary netting or solid roofing are permitted.

A coop or fowl house shall have a minimum of four (4) and a maximum of twelve (12) square feet of floor area for each chicken. Any coop or fowl house shall be a minimum of ten (10) feet from any property line. Any coop or fowl house shall not be less than 18 inches in height, and shall not exceed eight (8) feet in height. Any coop, fowl house, or fenced pen area shall fully comply with all applicable zoning regulations.

Any coop, fowl house, or fenced pen area shall be kept clean, sanitary and free from accumulation of chicken excrement and objectionable odors. Chicken manure shall be managed so as not to create a nuisance.

Odors from chickens, chicken manure or other chicken related substances shall not be perceptible beyond the boundaries of the permitted tract of land. Noise from chickens shall not violate Section 55.04.

All chicken feed shall be stored in rodent-proof containers.

No more than six (6) chickens shall be kept or maintained per property.

All chickens shall have one wing clipped at any given time so as to eliminate the possibility of flight from the permittee's property.

All such chickens must be hens; no roosters are permitted.

The City shall not be liable for injury or death of chickens caused by dogs, cats, or other animals, domestic or wild, whether such animals are licensed by the City or not. Further, injury or death of a chicken caused by an animal is not, in and of itself, sufficient grounds for the City to determine that the animal is a vicious animal pursuant to Chapter 56 of this Code of Ordinances. Any dead chicken, not caused by slaughtering, shall be disposed of immediately upon discovering in a manner so as not to cause a nuisance pursuant to Chapter 50 of this Code of Ordinances.

Any slaughter of chickens not regulated by state law or otherwise forbidden or regulated shall be done only in a humane and sanitary manner and shall not be done open to the view of any public area or adjacent property owned by another.

No person shall keep any chickens unless they possess a City of North Liberty permit issued by the Zoning Code Official or designee.

The Zoning Code Official or designee shall provide an application form upon request.

The fees and associated costs shall be set by resolution.

Permits will be granted for one (1) year valid from January 1 through December 31. Permits may be purchased at any time during the year but will be valid only through December 31.

The applicant shall successfully complete an approved class in raising chickens in an urban setting prior to being issued a permit. The Permitting Officer shall maintain a current list of such approved classes.

By the granting of the permit to raise chickens and the application thereof, the permittee authorizes that the City or its agents have the right to go onto permittee's property any time and without prior notice for the limited purpose of inspection of the premises to ensure that all applicable conditions have been met.

Within thirty (30) days after the expiration of any permit, the permittee shall apply for and secure a renewal of the permit in the manner provided for in this chapter. Failure to renew a permit within the time herein provided shall result in a delinquent fee, in addition to the regular permit fee, as set by the city council. All applicants shall be furnished with permit rules and regulations at the time the application is made. Permit rules and regulations shall be approved by resolution of the city council.

The permit is a limited license for the activity, and no vested zoning rights arise from the permit being issued.

The permit does not run with the land. Private restrictions on the use of property shall remain enforceable and shall supersede the permit. The private restrictions include, but are not limited to, deed restrictions, condominium restrictions, neighborhood association bylaws, covenants and restrictions, and rental agreements.

In the event that an applicant or permittee does not fully and strictly comply with the requirements of this section, the application may be denied or the permit may be revoked. If an application is denied or a permit is revoked, the applicant or permittee shall be so informed in writing and also informed of the right to appeal said decision.

In any instance where the Zoning Code Official or designee has denied, revoked, suspended, or not renewed a permit, the applicant or permit holder may appeal the Zoning Code Official or desginee's decision to the City Administrator within ten (10) business days of receipt by the applicant or holder of the permit of the notice of the decision. The applicant or holder of the permit will be given an opportunity for a hearing. The decision of the City Administrator or any decision by the Zoning Code Official or designee that is not appealed in accordance to this chapter shall be deemed final action.

When an application for a permit is denied or when a permit is revoked:

The applicant may not re-apply for a new permit for a period of 1 year from the date of the denial or revocation unless the denial or revocation is due to administrative reasons only, as determined by the Zoning Code Official or designee.

Any chickens shall be removed immediately.

Any coop, fowl house, fencing or other structures shall be removed within ten (10) days of the date of the permit being denied or revoked.

An owner or possessor of animals on property that is newly annexed has ninety (90) days from the date of annexation to bring the property into compliance required by this section.

Any property owner possessing chickens in violation of the City's Animal Code prior to the date this ordinance or its amendment becomes effective, which is an illegal nonconforming use, shall have thirty (30) days to meet all requirements of this section and all other applicable provisions of the City's code of ordinances.

A violation of this subsection is a simple misdemeanor or a municipal infraction, as provided in [another chapter of the City's code of ordinances]. (North Liberty, IA §55.23).

San Antonio, Texas *(2020 population 1,434,625)*

[If a chicken owner does not exceed the maximum number of chickens allowed/require an excess animal permit

A maximum number of eight (8) domestic fowl is allowed at a residence of which only one (1) may be a rooster.

> An owner must comply with the following with regard to domestic fowl:
>
> > The owner must have adequate facilities to house the domestic fowl and ensure adequate sanitation.
> >
> > All domestic fowl must be kept in a coop and run that is at least twenty-four (24) square feet in size, or has at least six (6) square feet of space per fowl, whichever is larger.
> >
> > The domestic fowl must be kept housed or confined in a manner that does not allow them to create a nuisance.
> >
> > Sanitation must be addressed in a manner that prevents the attraction of pests.... (San Antonio, TX §5-107).



Figure 3-4. A golden laced cochin hen sits on a table during a class on raising urban hens held at the Nahant Marsh Education Center; Davenport, IA. Photo courtesy of John Schultz/Quad-City Times

MISCELLANEOUS

Cedar Rapids, Iowa *(2020 population 137,710)*

Odors from chickens, chicken manure or other chicken related substances shall not be perceptible beyond the boundaries of the permitted tract of land.

Noise from chickens shall not be loud enough beyond the boundaries of the permitted tract of land at the property boundaries to disturb persons of reasonable sensitivity.

The Permittee shall take necessary action to reduce the attraction of predators and rodents and the potential infestation of insects and parasites. Chickens found to be infested with insects and parasites that may result in unhealthy conditions to human habitation may be removed by a Cedar Rapids Animal Control Officer.

Chickens shall be provided with access to feed and clean water at all times. The feed and water shall be unavailable to rodents, wild birds and predators.

All stored manure shall be covered by a fully enclosed structure with a roof or lid over the entire structure. No more than three (3) cubic feet of manure shall be stored on the permitted tract of land. All other manure not used for composting or fertilizing shall be removed. The henhouse, chicken tractor, chicken pen and surrounding area must be kept free from trash and accumulated droppings. Uneaten feed shall be removed in a timely manner.

The Permittee shall not allow the Permittee's chickens to roam off the permitted tract of land. No dog or cat or other domesticated animal which kills a chicken off the permitted tract of land will be considered, for that reason alone, a dangerous or aggressive animal or the city's responsibility to enforce its animal control provisions.

The Permittee shall place and keep leg bands on all of his chickens showing the permit number.

It shall be unlawful for any person to keep chickens in violation of any provision of this Chapter or any other provision of the Cedar Rapids Municipal Code.

It shall be unlawful for any owner, renter or leaseholder of property to allow chickens to be kept on the property in violation of the provisions of this article.

No person shall keep chickens inside a single family dwelling unit, multi family dwelling unit(s) or rental unit.

No person shall slaughter any chickens within the city of Cedar Rapids.

No person shall keep a rooster

No person shall keep chickens on a vacant or uninhabited tract of land. (Cedar Rapids, IA §23A).

Fairfield, Iowa *(2020 population 9,416)*

Nothing in this chapter shall be deemed to exempt the owner of poultry within the city limits from the enforcement of nuisance, or other laws regarding the keeping of poultry, and the maintenance of the poultry enclosure. (Fairfield, IA §6.10.020).

Des Moines, Iowa *(2020 population 214,133)*

Animals inclusive of fowl maintained for educational purposes by schools, day care centers, vocational agricultural programs and for other public education programs; animals inclusive of fowl maintained for display at Blank Park Zoo, state and county fairs, science center, circuses; primates maintained for research or educational programs by the Iowa Primate Learning Sanctuary; and the bringing in of such animals and fowl on a temporary basis for exhibits or shows are exempt from this section, provided all other requirements under this Code are met.

Any person presently owning or maintaining animals that are not in compliance with this chapter may make application to the city manager or the manager's designee for a variance, provided such application meets the following conditions:

> The keeping of such animals has been of long-standing lawful duration, that is, in excess of three years, or is presently under commercial contract if legal non-conforming prior to 2009.
>
> The area where such animals are maintained is so located as to cause no safety or health hazards to the general public or interferes with the enjoyment of life and property by any neighboring resident.
>
> The keeping of roosters must meet the current code requirements of abutting neighbor consent as outlined in section 18-19 of this chapter.

Any such variance is conditioned upon all circumstances for the granting of the variance remaining constant. The city manager or the manager's designee may revoke the variance at any time after notice and opportunity for comment by the applicant, or it is determined that due to changed circumstances, the presence of the animals is causing a safety or health hazard to the general public or interferes with the enjoyment of life and property by any neighboring resident. (Des Moines, IA §18-4).

Davenport, Iowa *(2020 population 652,503)*

The City may utilize outside resources and volunteers in efforts to educate and train potential permit holders on the proper keeping of urban chickens in the City of Davenport. (Davenport, IA §6.06.130).

Aberdeen, South Dakota *(2020 population 28,495)*

Limitations on the number and keeping of chickens...

> Except for chickens properly slaughtered for consumption, dead chickens must be disposed of within 48 hours after death. Legal forms of chicken carcass disposal include burial and off-site incineration or rendering. All slaughtering of chickens shall be conducted so as not to be visible to the public or adjacent property owners and occupants. (Aberdeen, SD §8-14).

Stamford, Connecticut *(2020 population 135,470)*

No person shall keep any rooster in such location that the crowing thereof shall be annoying to any person occupying premises in the vicinity. Upon complaint of any such person so annoyed, the Director of Health shall have authority to order the owner/keeper of such rooster to remove it so that such annoyance shall cease. (Stamford, CT §111-2).

GOATS

INTRODUCTION

ABOUT GOATS

Goats have been considered as an addition to the urban farm in order to provide dairy, wool, and potentially meat. Many who raise goats mention that they have similar personalities to dogs and can provide a sense of companionship to the owner. Some statutes even classify goats as pets, rather than as farm animals. However, keeping goats is a much more space and labor-intensive endeavor than other forms of urban animal husbandry. Male goats are called bucks, castrated male goats are called wethers, does are female goats, and kids are young goats.

BREEDS

Miniature breeds are best suited for urban spaces and are generally the only breeds allowed in urban areas because “traditional” breeds require too much land. Even most miniature breeds require a minimum of 135 square feet of open area per goat (McLeod, 2003). The breeds generally allowed by local regulations are Pygmy and Nigerian Dwarf (also known as Dwarf).

Pygmy Goat

The Pygmy goat is a type of miniature goat that is particularly well-suited for an urban setting. Pygmy or other miniature goats may be the only breed allowed in some municipalities. Pygmy goats require much less space than other breeds and their diminutive size makes them easy to handle. The typical height at the withers (shoulder) ranges from 16 to 23 inches. The body type is stocky and heavy-boned (National Goat Consortium, 2021).

Nigerian Dwarf Goat

The Nigerian Dwarf goat is another type of miniature goat. The typical size for a doe is 17 to 22 inches at the withers. Nigerian goats were bred to look more like miniature dairy goats, and they have a much lighter structure than Pygmy goats. They can provide a surprising amount of milk for their size (National Goat Consortium, 2021).

Miniature Dairy Goats

Miniature dairy goats are actually a crossbreeding of a Nigerian Dwarf with any of a number of breeds that provide milk. It is common for urban keepers to cross breed Nigerian Dwarf goats with Oberhasli or Nubian breeds, since the resulting offspring produce more milk and require less living space than traditional dairy goat breeds.

MILK PRODUCTION BY GOATS

In order for a doe to produce milk, she must be bred. Dairy goats usually breed in late summer to early winter, though Pygmy goats used for milk production can be bred any time of year. The gestation period is about five months long (Duffy and Calvert, 2010). Once the doe has kidded, she will produce milk for about ten months. Many municipalities allow the owner to keep the kid as it is being weaned—generally for a period of 12 weeks—even if the kid causes the keeper to exceed the number of animals allowed on the property.

BEHAVIOR

Goats are sociable animals that live in herds. Keepers will want to own at least two animals; single goats are more prone to exhibit destructive behavior.

Goats are naturally curious, active animals that like to play, which means small spaces can sometimes lead to boredom. According to Purina Animal Nutrition (2026), 'Giving your goats items to climb or jump from, like a ball or hanging material, is a good idea' to keep them entertained." Toys can also be provided for entertainment; however, goats are prone to choking on whatever they decide to test out, so the owner should take care to keep the pen/yard area free of potentially hazardous objects.

FEED

Goats are ruminants. Their digestive system is different than that of people, dogs, and cats as they must eat the equivalent of 3% of their body weight in forage every day (Ohio State University Extension, 2017). Goats stay healthiest when the main part of their diet is forage such as grass and hay. Given the possibility for limited forage quality in a backyard and the pickiness of some goats, supplemental nutrition such as high fiber, low energy goat feed may be necessary in addition to goat mineral in the form of a block or loose bag (Ohio State University Extension, 2017)

The owner will also need to pay close attention to what their goat(s) eat and how much as they are prone to bloating due to overeating. A pH balancer can prevent and relieve bloat issues (Ohio State University Extension, 2017). Furthermore, they should not have access to trash or refuse (Adams and Van Metre, 2013).

MAINTENANCE

Goats that are kept in a backyard will need to have their horn buds removed when they are kids; a process called disbudding. Goats will also need to have their hooves trimmed every four to six weeks. If the hooves are not trimmed or worn down by a rough surface, health problems could occur. Finally, goats will require vaccinations and other veterinary care throughout their lifetime. Before purchasing goats, the potential owner

should locate a good veterinarian and learn about the type of vaccinations needed and create a schedule for vaccination.

LIVING ENVIRONMENT

Goats have the amazing ability to escape from any enclosure that is not well built and well maintained. If there is a gap in the fence, it is likely that a goat can get through it. The fence should be constructed of a tightly woven material including, but not limited to, chain link fence mater, woven wire, or hog panels set at ground level and at least four feet high for miniature goats.

Goats will also require a shelter to protect them from the elements. The type of structure will depend largely on local building requirements and the specific requirements for keeping goats. The building should be well ventilated and have dry walls and bedding. A shed with windows will do much to add light and help dry out the building (Steevens et al., 1993).

Many experts also suggest investing in a feeder for several reasons including monitoring feed intake to prevent bloating or obesity and to also avoid the spread of internal parasites (propagated via manure) present on feed on the ground (Ohio State University Extension, 2017).

A milking area should also be provided for those with dairy goats. This should be a concrete floor separate from the main housing area, with a platform for the goat to stand on. Additional equipment may be required depending on the size of the operation and the intended use of the milk (Steevens et al., 1993).

SANITATION

Deep bedding should be provided for goats. This should be dry and cleaned at least once a month, if not more frequently. Bedding can be composed of a variety of materials, including wood or pine shavings, straw, or other absorbent materials.



Figure 4-1. Dwarf Nigerian Milk Goat; Ames, IA. Photos courtesy of Practical Farmers of Iowa

LAND-USE CONCERNS

An important issue to consider for urban goat-keeping is the potential damage to property. Goats are notorious for their ability to escape pens. Even securely penned goats can damage their pens and destroy trees and shrubs in the pen.

Neighbors may complain of the aesthetics of having goats and raise concern over noise and smell (Bleyer, 2011). Bucks have a very strong odor and can be aggressive, so they are usually not allowed in urban areas. Wethers are not as aggressive, but don't have much use on an urban farm other than for temporary brush clearing.

Well-cared-for does do not have an odor. Most goat-keepers will admit, however, that noise and odor from feces can be concerns (Ohio State University Extension, 2017). Local governing bodies often take these concerns into account when deciding on the feasibility of allowing goats in urban areas. Some may even adopt a provision stipulating that waste disposal in goat-keeping operations must adhere to the best practices as outlined by a professionally accepted source and comply with state and federal water discharge regulations.

EXISTING REGULATIONS SURVEY

Relative to bees and chickens, fewer municipalities have adopted regulations to allow goats in urban areas. Nonetheless, there is a gradual rise in the number of municipalities that are embracing the practice of goat keeping and actively working towards reducing regulatory barriers associated with it. Where adopted, such regulations often allow residents to keep goats in residentially zoned districts often as an accessory use to the principal residential use.

Herd size is regulated in different ways, including specific zoning district regulations, the size of the area dedicated for the herd, or by imposing a straightforward numerical limit. Most municipalities that allow goat-keeping impose restrictions on the maximum number of goats allowed within a defined square footage of dedicated lot space.

As previously mentioned in the behavior section and as advised by goat experts, there are regulations that explicitly state that applicants may have no less than and no more than two goats within a defined area.

Meanwhile, the requirement for a distinct permit, separate from zoning regulations, to legally keep goats within municipality limits may vary depending on how the municipality categorizes goats. This categorization can include goats as a distinct category, or they may be classified as livestock. Typically, livestock require a permit.

Similar to regulations governing other animal uses, more stringent regulations stipulate that goats and the placement of their pens and shelters must be maintained at a minimum distance of 50 feet from property lines. However, taking proper care of goats and their living environment can render such a significant setback unnecessary, following the same rationale as with chickens. Conversely, less restrictive regulations specify that goats may be situated at a minimum distance of five to twenty feet from neighboring residences or other inhabited structures.

Another requirement may relate to the breed of goat. Municipalities may consider only allowing Pygmy, Dwarf, or miniature dairy goats. These breeds are of similar stature to household pets such as dogs, so they may be categorized as “small animals” rather than livestock in some ordinances.

Lastly, many regulations prohibit the keeping of bucks (adult male goats) or certain other breeds of goats, while others permit the keeping of bucks so long as they have been neutered and dehorned.

CODE LANGUAGE

DEFINITIONS

Tomball, Texas *(2020 population 12,341)*

Pygmy goat - a miniature domestic goat meeting the National Pygmy Goat Association's breeding standards. (Tomball, TX §8-122).

San Marcos, Texas *(2020 population is 67,553)*

Miniature goat - a pygmy goat, which is any goat that has been bred to attain a maximum shoulder height of 23 inches and a maximum weight of 70 pounds; or a dwarf goat, which is any goat that has been bred to attain a maximum shoulder height of 23.5 inches and a maximum weight of 80 pounds. (San Marcos, TX §6.001).

GENERAL RESTRICTIONS

Tomball, Texas *(2020 population 12,341)*

Livestock - Potbelly pigs and pygmy goats.

> When no more than two female or neutered male potbelly pigs and no more than four female or neutered male pygmy goats are kept, the stable, shed, pen or other enclosure in which they are kept shall be located at least 20 feet from every building or structure used for sleeping, dining or living, other than structures owned or occupied by the keeper of the potbelly pigs or pygmy goats.
>
> No more than two potbelly pigs and four pygmy goats may be kept by any one owner at any one location within the city, unless it becomes a kennel and the owner complies with all the requirements of [the kennels section] of this chapter for the operation of a kennel. (Tomball, TX §8-126).

San Marcos, Texas *(2020 population is 67,553)*

Other Animals – Keeping of miniature goats.

The keeping of miniature goats on a premise zoned as Conventional Residential District* in the development code is allowed with the following requirements:

> Male miniature goats shall be neutered.
>
> No more than, and no less than, two miniature goats shall be kept on the premises, except that offspring may be kept onsite for up to 12 weeks from birth.

Miniature goats shall be housed in a shed designed to be:

Predator proof;

Thoroughly ventilated;

At least three sides and with a roof;

Easily accessed and cleaned;

Watertight and draft free; and

A minimum of ten square feet of interior space.

Direct access from the shed to an outdoor enclosure shall be provided with the outdoor enclosure designed to be:

Secured with a minimum five-foot tall fence;

A minimum area of 400 square feet;

Secured from the outside in a manner that prevents the miniature goats from escaping;

Fenced so that spacing prevents the goat from sticking its head through the fence;

Free of objects that would enable the goats to climb out of the enclosure;

Easily accessed and cleaned; and

Located no less than 20 feet from an adjacent residence or business structure, excluding the residence of the owner.

Goat's milk, goat's cheese, and other goat-related food products shall be for personal consumption only; sale of such products is prohibited.

Slaughtering, processing, and composting of miniature goats within Conventional Residential Districts is prohibited and, otherwise, is subject to other applicable provisions of this chapter or the [zoning code].

It shall be a violation for any person who owns, harbors, or possesses miniature goats to refuse, upon request by the animal services manager, or his designee, to make

his/her goats, premises or facilities available for inspection for the purpose of ascertaining compliance with the provisions of this section. (San Marcos, TX §6.079).

San Antonio, Texas *(2020 population 1,434,625)*
Animal Limits; excess animal permit.

The total number of livestock allowed at a residence is two (2) animals from the following classes of livestock: Equines; bovines; sheep; goats; and llamas.

> All livestock must be enclosed in a pen the nearest point being at least one hundred (100) feet from any dwelling or business building owned or occupied by any person other than the owner. For the purpose of this section, a pen shall mean a fully enclosed space that is adequately sturdy to prevent the livestock from being unrestrained. An owner must comply with the following with regard to livestock:
>
> > The owner must have adequate facilities to house the livestock and ensure adequate sanitation.
> >
> > The livestock must be kept housed or confined in a manner that does not allow them to create a nuisance.
> >
> > Sanitation must be addressed in a manner that prevents the attraction of pests.... (San Antonio, TX §5-107).

Keeping of bovines, equines, sheep, and goats....

> An owner of livestock shall provide a minimum of five hundred (500) square feet of pen of which one hundred (100) square feet is under roof must be provided for each head of bovines or equines and, for each head of sheep or goat, shall provide a minimum of two hundred (200) square feet of pen of which forty (40) square feet is under roof.
>
> Any boarding stable or riding stable or academy must contain at least four hundred (400) square feet of space, of which one hundred (100) square feet is under roof, for each of such animals kept or maintained on the premises. The other provisions of this section shall not apply if the premises are zoned for operation of a riding stable or academy.
>
> The keeping of more than the maximum number of livestock permitted under this chapter is hereby declared to be an animal nuisance, and may be abated after notice has been provided to the owner and an opportunity to voluntarily come

into compliance has been given by the director. Upon delivery of a written "Notice to Remove Livestock" by the department, an animal owner or any adult occupant of the premises identified in said notice shall abate the therein described animal nuisance on the premises within ten (10) days from the date of notice. Delivery shall be accomplished either by hand to the animal owner or keeper or any adult occupant of the residence, or by posting in a conspicuous place on the main entrance fence gate of the premises or main entrance door of the structure on the premises, or by certified mail, return receipt requested. After proper notice, the animal nuisance may be abated by the director by seizing and impounding any unlawfully kept number of livestock and, after an administrative hearing, either euthanizing them or releasing them to any person or organization approved by the director, offering to lawfully keep and care for them. (San Antonio, TX §5-52).

Seattle, Washington *(2020 population 737,015)*
[Miniature goats are considered small animals]

Keeping of animals.

The keeping of small animals... is permitted outright in all zones as an accessory use to any principal use permitted outright or to a permitted conditional use, in each case subject to the standards of this Section.

Up to three small animals may be kept accessory to each business establishment other than an urban farm, or dwelling unit on a lot, except ....

> In neighborhood residential zones... up to four small animals are permitted on lots of at least 20,000 square feet; and
>
> one additional small animal is permitted for each 5,000 square feet of lot area in excess of 20,000 square feet. Accessory structures, including kennels, for four or more animals must be at least 10 feet from any other lot in a residential zone.

Farm Animals. Cows, horses, sheep and other similar farm animals are permitted only on lots of at least 20,000 square feet. The keeping of swine is prohibited, except for miniature potbelly pigs....

> One farm animal for every 10,000 square feet of lot area is permitted.
>
> Farm animals and structures housing them must be kept at least 50 feet from any other lot in a residential zone.

Miniature Goats. The types of goats commonly known as Pygmy, Dwarf and Miniature Goats may be kept as small animals, provided that male miniature goats are neutered and all miniature goats are dehorned. Nursing offspring of miniature goats licensed according to the provisions of this Code may be kept until weaned, no longer than 12 weeks from birth, without violating the limitations of [this subsection]. (Seattle, WA §23.42.052).

Tacoma, Washington *(2020 population 219,346)*

Animals – Keeping. Conditions for keeping.

[It]...is not intended to prohibit the keeping of such animals hereinabove designated [including goats], where and so long as a consent in writing to the keeping of the same has been secured by the owner of the premises from all of the residences, dwellings, hotels, apartment houses and rooming houses and from any other person occupying and controlling premises within a distance of 50 feet from the property line of the property upon which any such animals are to be kept, and such written consent filed with the City Clerk. Such written consent so obtained may be revoked at any time by the signer thereof or his successor in interest by serving a written revocation of such consent upon the keeper of such animals and filing a copy thereof with proof of service upon such owner, with the City Clerk, and thereupon the prohibitive provisions of this chapter shall again apply and become effective upon the owner of such animal kept in violation of these provisions.

In the case of the keeping of any such animals above designated as prohibited herein, at the time of the effective date of this chapter, such written consent for such keeping as hereinabove provided shall be filed within 30 days after the effective date.

The premises upon which such animals are kept shall have a total area of not less than 20,000 square feet and the premises upon which said animal or animals are housed and permitted to roam, shall be located not less than 50 feet from the adjoining property lines.

All buildings or structures housing such animals shall comply with the City of Tacoma Building Code and be of rodent- proof construction, and no condition shall be allowed to exist on the premises that provides rodent harborage.

Floors shall be constructed of tight, easily cleanable material. Walls and ceilings shall be of such construction as to be easily maintained in a sanitary condition.

Roaming area shall be graded and drained and so maintained that there are no standing pools of water or accumulation of organic wastes.

Feed, with the exception of hay, that is maintained on the premises must be stored in rodent-proof containers.

Feeding troughs or bins shall be used and of such construction as to be readily cleanable and no feed shall be scattered on the ground or floor.

All unconsumed food of a perishable type must be collected after each feeding and placed in fly and water-tight containers pending final disposal.

Manure and other organic wastes must be collected daily and stored in a water-tight and flyproof pit or chamber and shall be removed at intervals sufficiently frequent to prevent odor problems from developing. Manure must be disposed of by burial or in some other manner which will not cause an odor or fly problem.

Fly control measures must be practiced that will assure freedom of flies from the premises.

No condition shall be allowed to develop or continue on any premises which creates objectionable odors or noises or is unsightly.

The failure of the owner or occupant of the premises herein referred to, to maintain at all times the conditions herein prescribed, shall constitute a violation of this chapter. (Tacoma, WA §5.23.020).

Portland, Oregon *(2020 population 652,503)*

Backyard Livestock – Miniature goats and miniature sheep.

Up to three (3) miniature goats and/or miniature sheep may be kept on any lot. Up to five (5) miniature goats and/or miniature sheep may be kept on lots 10,000 square feet and greater. Nursing offspring that exceed the number allowed may be kept until weaned, but no longer than 12 weeks from birth. There is no maximum number of miniature goats and/or miniature sheep on lots 20,000 square feet or greater that allow agricultural uses through [the zoning ordinance], or that have an approved conditional use.

Upon request from the City Administrator, animal keepers must produce documentation that their animal is a recognized miniature breed and weights no more than 100 pounds.

Standard size goats and sheep must meet the standards of [the Large Livestock section]. (Portland, OR §13.40.020).

Backyard Livestock – Large Livestock.

Large Livestock may only be kept on lots 20,000 square feet or greater that allow agricultural uses through [the zoning code], or that have an approved conditional use.

Maximum number.

> Two (2) standard goats, standard sheep, miniature horses, or other similarly sized livestock are allowed on lots 20,000 square feet or greater. One (1) additional animal is allowed for each 10,000 square feet greater than 20,000 square feet.
>
> One (1) horse, cow, llama or similarly sized livestock is allowed on lots 20,000 square feet or greater. One (1) additional animal is allowed for each 20,000 square feet greater than 20,000 square feet.

Additional Standard for Large Livestock. It is unlawful to picket any Large Livestock or allow them to roam, so that it may approach within 50 feet of any building used as a residence, or any commercial building in which foodstuff is prepared, kept or sold. (Portland, OR §13.40.030).

San Diego, California *(2020 population 1,414,545)*

It is unlawful to bring or maintain, within a non–agricultural zone within the City, any... goats....This section shall not apply to the following:

Any goats brought in temporarily, to privately-owned non-agricultural zones for the purpose of performing brush management.

The keeping of miniature goats on a premises zoned for a single dwelling unit or developed with a single dwelling unit consistent with the following requirements:

Miniature goats are those goats commonly known as Pygmy, Dwarf, and Miniature Goats.

All miniature goats shall be dehorned.

Male miniature goats shall be neutered.

No more than, and no less than, two miniature goats shall be kept on the premises, except that offspring may be kept onsite for up to twelve weeks from birth..
Miniature goats shall be housed in a shed designed to be:

> Predator proof;
>
> Thoroughly ventilated;

Easily accessed and cleaned;

Watertight and draft free;

A minimum of ten square feet of interior space; and

Located outside of all required setbacks ....

Direct access from the shed to an outdoor enclosure shall be provided with the outdoor enclosure designed to be:

Secured with a minimum five-foot tall fence;

A minimum area of 400 square feet;

Secured from the outside in a manner that prevents the miniature goats from escaping;

Free of objects that would enable the goats to climb out of the enclosure; and

Easily accessed and cleaned.

Goat's milk, goat's cheese, and other goat-related food products shall be for personal consumption only; sale of such products is prohibited.

Property owners shall remove and properly dispose of droppings from cattle, goats or sheep as needed to prevent accumulation, to avoid a health or sanitation problem, or the breeding of flies, and to prevent discharge into [storm sewers]. (San Diego, CA §44.0307).

Denver, Colorado *(2020 population 715,522)*
Animals; Permit. Livestock or fowl permit required.

A restricted livestock or fowl license is required for the keeping of... up to 2 goats.... The following requirements must be met:

No intact male goats older than six (6) weeks...may be kept....

There must be at least one hundred and thirty (130) square feet of permeable land area available for each goat, plus adequate shelter space for each goat.

Adequate shelter must be provided to protect the...goats from the elements and to prevent wildlife or other predators from gaining entry.

> Adequate fencing shall be provided to prevent the... goats from escaping when not in their shelters. (Denver, CO §8-91).

Fort Collins, Colorado *(2020 population 169,810)*
Animals – Restrictions. Keeping of goats.

In zone districts where the keeping of farm animals is not otherwise allowed, two (2) pygmy or dwarf goats, plus any number of their offspring younger than twelve (12) weeks, may be kept on any lot in the City. The keeping of just one (1) pygmy or dwarf goat is prohibited. Only female or altered male Nigerian Dwarf or African Pygmy breeds of goats shall be permitted. No bucks or other breeds shall be allowed.

Except as prohibited above, goats may be kept subject to the following requirements:

> Any person keeping goats pursuant to this provision must first have been issued a permit by the Humane Society, and must also have received such information or training pertaining to the keeping of goats as said agency deems appropriate, including, but not limited to, training on animal husbandry, care, disease prevention and management, and methods to minimize the risks of exposure to Q fever during the goat birthing process. Prior to the issuance of said permit, a site inspection shall be conducted by the Humane Society to verify compliance with the requirements of this Subsection.
>
> If a lot has more than one (1) dwelling unit, all adult residents and the owners of the parcel must consent in writing to allowing the goats on the property.
>
> On any residential zoned lot, the goats must be maintained in the rear fifty (50) percent of the lot. On any residential zoned corner lot, the rear fifty (50) percent of the lot shall mean that portion of the lot on the opposite side of the residence from the front lot line. The front lot line shall mean the lot line facing the primary entrance to the principal building on the lot.
>
> The goats must be provided with a covered, predator-resistant shelter that is properly ventilated and designed to be easily accessed, cleaned and maintained.
>
> During daylight hours, the goats must have access to the shelter and also have access to an outdoor enclosure that is adequately fenced to protect them from predators, which shall be in total at least one hundred fifty (150) square feet per goat in size.
>
> The goats must be closed in the shelter from dusk to dawn.

Neither the shelter nor the outdoor enclosure may be located less than fifteen (15) feet from any abutting property line unless the owner or keeper of the goats obtains the written consent of the owners of all abutting properties to which the enclosure is proposed to be more closely located, in which event the agreed-upon location shall then be deemed acceptable notwithstanding any subsequent change in ownership of such abutting properties.

The goats may not be killed by or at the direction of the owner or keeper thereof except pursuant to the lawful order of state or county health officials, or for the purpose of euthanasia when surrendered to a licensed veterinarian or the Humane Society for such purpose, or as otherwise expressly permitted by law.

Any person who owns or keeps goats over twelve (12) weeks of age shall have such goats vaccinated against rabies when the goats become twelve (12) weeks of age, and shall continue to have the goats vaccinated by a veterinarian at intervals recommended by the veterinarian. (Fort Collins, CO §4-121).

Lakewood, Colorado *(2020 population 155,984)*

[Dwarf goats are permitted as an accessory use in the R-1-43, R-1-18, R-1-12, and R-1-9 residential zoning districts; as a limited accessory use in the R-1-6 and R-2 residential zoning districts under certain standards; and as a limited accessory use in all mixed-use zoning districts that have a single-family home or duplex that exists as a nonconforming use – must also follow R-1-6 and R-2 residential zoning district standards, subject to the following standards]

Animals, Small - Dwarf Goats....

A maximum of three female dwarf goats or two females and one wether shall be allowed on a single property. Goats shall be counted towards the total number of household pets permitted on a property. Unneutered male dwarf goats shall be prohibited.

A predator-resistant enclosure must be provided. The enclosures shall have a minimum of 10 square feet of living space for each animal, and shall be secure, roofed, and well ventilated. However, the total size of an enclosure shall not exceed 90 square feet, and shall not exceed 10 feet in height.

Goats shall be kept in the enclosure or in a fenced yard at all times. A fence with a minimum height of 4 feet shall enclose the yard area.

> An enclosure or fenced area shall not be located in a front yard or closer to any property lines than the accessory structure setbacks for the applicable zone district identified in [residential district dimensional standards]….

Slaughtering of animals on the premises shall be prohibited. (Lakewood, CO §17.4.3.1).

Oklahoma City, Oklahoma *(2020 population 649,821)*

[Animal Raising: Personal is permitted as a principal use in the Agricultural (AA) District, Neighborhood Conservation Districts, and the Stockyards City Development District; and as a conditional use in the Agricultural and Residential Districts (except AA), Office and Commercial Districts, and Industrial Districts. Off-street parking for Animal Raising: Personal may be allowed upon Director Approval (Oklahoma City, OK §Table 10600.1)].

Use Unit Classifications – Agricultural Use Unit Classifications.

> *Animal Raising: Personal.* Premises where agricultural animals are fed or kept for personal use and for agriculturally related projects of the owner or occupant of the premises. For this use unit, agricultural animals shall mean livestock and poultry including, but not limited to, the following domesticated animals:...goats.... This use unit shall be subject to use regulations set forth in [Animal Raising: Commercial and Animal Raising: Personal]. (Oklahoma City, OK §59-8150.5).

Animal Raising: Commercial (59-8150.3) and Animal Raising: Personal (59-8150.5).

> Animal raising structures, enclosures and activities shall be subject to applicable provisions of [the Animal Code]
>
> These uses shall be subject to the development regulations of the district in which located, except as modified by this section.
>
> These uses shall be allowed only on sites at least one acre in size. For purposes of this section, lot and/or parcel size shall be defined to mean net usable area, excluding public and private street rights-of-way.
>
> On parcels between one and five acres in size, raising, feeding, maintaining and breeding of not more than one of the following (excluding unweaned offspring less than six months of age) shall be permitted per each one-half acre:…
>
> > Two goats, sheep or similar animals....
>
> No building or enclosure in which animals are quartered shall be located closer than 200 feet to any dwelling, church, school building or place of business on

adjacent properties. (An enclosure is any area, corral, open-sided shelter or enclosed shelter, which has artificial flooring or is substantially denuded of permanent vegetation as a result of animal activity, and would include unfenced areas that become areas of animal congregation such that permanent forage is removed.)…

The following exceptions to the 200-foot setback [above] above apply, provided that no more than one of the following conditions is applied:…

When no more than a combined total of four sheep, goats or similar animals are maintained on the property, there shall be a 75-foot setback on enclosures....

Structures in which animals are quartered, existing as of the date on which this section takes effect, if not complying with provisions of [the above section], shall be deemed legally nonconforming structures.

If any dwelling, church or school building or place of business is constructed adjacent to property on which animal raising activities are taking place, structures or enclosures existing on said property in which animals are quartered and located closer than 200 feet to said dwelling, church or school building or place of business shall be considered legally nonconforming as of the date of issuance of a building permit for said dwelling, church, school building or place of business. (Oklahoma City, OK §59-9350.8).

Sale of animals as toys, novelties, premiums prohibited.

It shall be unlawful for any person to sell, offer for sale, barter, or give away any animal or animals as toys, premiums or novelties.

this section shall not be construed to prohibit the sale or display of baby animals in proper facilities by breeders or stores engaged in the business of selling them to be raised for commercial or noncommercial purposes.

this section shall not be construed to prohibit the raising of animals by a private individual for his/her personal use and consumption provided he maintains proper brooders and other facilities for the care and containment of the animals while they are in his/her possession.(Oklahoma City, OK §8-116).



Figure 4-2. Dwarf Nigerian Milk Goats; Ames, IA. Photos courtesy of Practical Farmers of Iowa

***Menlo, Iowa** (2020 population 345)*

The prohibition against keeping goats within the City of Menlo shall not apply if one of the following conditions is met:

> the goats are kept on premises containing two (2) acres or more or
>
> the goats are kept within an enclosure at least three hundred (300) feet from any residence now existing or hereafter erected, except that of the owner.

A premise shall have no more than four goats. (Menlo, IA §4-1-5).

***Des Moines, Iowa** (2020 population 214,133)*

Pet Animals - Types permitted.

The following animals may be owned per property as pets under the following conditions....Pygmy goats, not to exceed three in number. (Des Moines, IA §18-136).

Pet Animals – Enclosures.

Any enclosure, pen, coop, or hutch in which pets are maintained shall be cleaned at a minimum of every other day or more often if deemed advisable or necessary by a health officer. They shall be located at a minimum of 25 feet from a neighboring dwelling, as the term "dwelling" is defined in... this Code. No animal may be enclosed or fenced in the front yard of a dwelling. (Des Moines, IA §18-137).

Pittsburgh, Pennsylvania *(2020 population 302,971)*
Urban Agriculture (Accessory Use) With Animals.

Urban Agriculture (Accessory Use) applications for the housing of...miniature goats... shall be authorized as Permitted by Right and shall be subject to the following standards:

> The sale of non-mechanical agricultural and farm products that are grown, used, produced on-site, or are part of an affiliated Community Supported Agriculture program shall be permitted only in non-residential districts, and shall comply with the standards of [outdoor retail sales and service section (accessory use)];
>
> All applications shall be subject to the Environmental Overlay District regulations...;
>
> All applications shall include a detailed plot plan with scaled representation of all proposed structures and uses;
>
> Signage shall not be permitted;
>
> All seed, fertilizer, and animal feed shall be stored in a secured, rodent-proof container and housed within an enclosed structure;…
>
> For property between two thousand (2,000) square feet and ten thousand (10,000) square feet in size, the resident is permitted to keep no more and no less than two (2) dehorned, adult, female or neutered male, miniature goats (and offspring less than 12 weeks old) with no other livestock;
>
> For property with a minimum of ten thousand (10,000) square feet in size, the resident is permitted two (2) dehorned, adult female or neutered male goats. For every additional five thousand (5,000) square feet of property, the owner is permitted one (1) additional dehorned, adult, female or neutered male, goats;
>
> All animal structures and roaming areas shall be kept sanitary and free from accumulations of animal excrement and objectionable odor;
>
> Outdoor roaming areas for...goats shall be sufficiently enclosed and screened from the street and neighboring properties to protect them from vehicular traffic, and to minimize external impacts of the outdoor roaming areas;
>
> The keeping of...goats shall be permitted only where there is an occupied residence. (Pittsburgh, PA §912.07.B).

Charlottesville, North Carolina *(2020 population 46,553)*

Animals and Fowl – Keeping hogs, goats, and sheep.

No hogs, goats (other than miniature goats) or sheep shall be kept in the city except for immediate shipment or slaughter.

Miniature goats may be kept within any residential zoning district in the city, subject to the following:

> Males must be neutered;
>
> Goats must be dehorned;
>
> No more than three (3) miniature goats may be kept at the same time on the same property, except that nursing off-spring may be kept on the property until the age of twelve (12) weeks, and shall not be included in the number of goats allowed. (Charlottesville, NC §4-9).

Stamford, Connecticut *(2020 population 135,470)*

Public Safety and Animal Welfare.

Livestock.

> It shall be unlawful for any person to trespass upon any of the sidewalks or parkland in the city by willfully riding, driving or leading...other livestock thereon, with the exception of those areas of parkland where the listed activities would not adversely affect other uses of parkland.
>
> No owner/keeper of or person having the charge of any...goats...shall permit the same to go or to be at large in any of the public roads, parks or public spaces of the city, or permit the same to be upon any of these public spaces for the purposes of being pastured thereon, either with or without an owner/keeper.... (Stamford, CT §111-1).

Maintenance of enclosures.

> No person shall own/keep any live poultry or livestock in any building or pen which is less than fifty (50) feet from any dwelling or apartment house in the city. (Stamford, CT §111-3).

LICENSING

Note: As with keeping chickens and bees, several municipalities' codes reference licensing schemes, either first requiring owners to obtain state-required licenses or registrations, or establishing their own municipality-managed licensing scheme. Municipalities are urged to inquire with their appropriate state agency to find out if there are state-level licensing requirements or registration schemes for goat herds. The code sections set forth below are those that establish municipality-managed goat keeping licensing.

San Antonio, Texas *(2020 population 1,434,625)*

Animal Limits; excess animal permit.

The total number of livestock allowed at a residence is two (2) animals from the following classes of livestock: Equines; bovines; sheep; goats; and llamas....

> Livestock permits are required for every livestock animal.

If an owner desires to exceed the maximum number and type of livestock specified in this section, an owner must make an application for an excess animal permit with the department which shall be valid for one (1) year. The criteria for evaluating the application for an excess animal permit shall be those listed in [this section] and [the keeping of bovines, equines, sheep, and goats chapter]. (San Antonio, TX §5-107).

Denver, Colorado *(2020 population 715,522)*

Animals; Permit. Livestock or fowl permit required.

Except as permitted...below, it shall be unlawful for any person to own or keep on any property within the city any livestock or fowl such as, but not limited to...goats... unless a livestock or fowl permit therefor has been issued by the executive director. Such permit is required to be renewed annually. A fee shall be assessed for each new and renewal permit application.

A restricted livestock or fowl license is required for the keeping of...up to 2 goats. Such license shall allow the keeping of the animals by the licensee on a specific property and shall be personal to the licensee and non-transferable. The license shall be valid indefinitely. A fee shall be charged for each new license.... (Denver, CO §8-91).

Livestock of Fowl Permit.

A Livestock or Fowl Permit allows an individual to keep livestock or fowl such as, but not limited to...goats...on their property.

In order to obtain a Livestock... Permit you must first send a (pre-approval) letter to the Director of Denver Animal Protection at [Denver Animal Shelter address], with the following information:

> Your name, address, phone number.
>
> The number of each type of livestock...you are attempting to house on your property.
>
> Size of area where animal(s) will be held.
>
> Veterinarian's name, address and phone number.
>
> Indicate if the animal is spayed or neutered.
>
> Indicate where they dispose of excrement.
>
> List of vaccinations the animal has received.

If the request is approved, a pre-approval letter will be issued to the owner.

The owner must contact zoning to finalize request [Zoning phone number].

If Zoning approves the request, the owner will need to send a copy of the zoning approval letter to the Director of Denver Animal Protection....

Annual Permit Fee [animal zoning code section]

> Livestock: $100 (Denver, CO Livestock or Fowl Permit website).

Lakewood, Colorado *(2020 population 155,984)*
Animals, Small - Dwarf Goats:

> A permit for the keeping of dwarf goats must be obtained from the City....
>
> A permit shall apply only to the occupant of the property at the time of approval.
>
> The Director may revoke any permit issued pursuant to this Section at any time if the Director finds that any provision of this Zoning Ordinance has been violated.... (Lakewood, CO §17.4.3.1).

CROP AGRICULTURE IN THE URBAN ENVIRONMENT

INTRODUCTION

For the purposes of this chapter “crop agriculture” encompasses a broad spectrum of activities. Although many terms being used to describe such activities seem at first glance to make meaningful distinctions, they are in fact often referring to closely related land use practices. It is important to define the distinctions because the regulatory contexts of these activities vary substantially. Although not a perfect system of classification, the treatment of crop agriculture in this chapter is organized around the following practices:

- Home gardens—including front-yard gardening
- Individual or group gardening on vacant lots
- Community gardens on city-owned lands
- Market gardens and urban farms

The code provisions for each category are found at the end of each section.



Figure 5-1. Front-yard Garden; Ames, IA. Photo courtesy of Andrea Vaage

LAND USE ACTIVITIES

HOME GARDENS, INCLUDING FRONT-YARD GARDENING

Home gardening has been practiced since people have lived in homes with tillable land. Owners of single-family detached residences have always been able to grow fruits and vegetables in their backyards, largely unchallenged by zoning regulations.

Generally speaking, municipal regulations for home gardens are sparse. They focus more on the definition of home garden (or similar terms) to distinguish it from other types of gardening. The definition may have a stipulation concerning the residency of the individual(s) on the respective lot or plot where the garden is situated. The definition may also, or instead, identify home gardening as being for noncommercial purposes.

The increasing popularity of consuming home-grown produce has expanded the backyard garden to the front yard. Front-yard gardening can bring additional benefits beyond increasing home produce production. Front-yard gardening can reduce the intensive fertilization and irrigation needed for a traditional lawn and also add attractive plots and raised beds as edible landscape elements. A homeowner may start front-yard gardening for a variety of other reasons. It may simply be a desire to grow more produce, or it may be the case that the quality of land on the lot is better in the front yard than in the back yard. Oftentimes, backyards are too shady for gardens, and the front yard is the only reasonable location.

LAND-USE CONCERNS

The seemingly inconsequential move of the backyard garden to the front yard has given rise to a host of zoning-related issues. Gardening in the front-yard does pose some public risks that are not present in backyard gardening. These concerns involve issues of safety and visibility for both pedestrians on the sidewalk and automobile users in the road, particularly if sweet corn or other tall-standing crops are being grown. In response, many cities have restrictive codes that only allow specific species and heights of plants (Kurutz, 2012).

Concerns over the aesthetics of front-yard gardening also are regularly voiced. Manicured lawns are the cultural norm, and produce gardens often appear overgrown and weedy compared to that cultural expectation. One person’s sustenance can be perceived by others as a nuisance.



Figure 5-2. Front-yard Garden; Ames, IA. Photo courtesy of Andrea Vaage

EXISTING REGULATIONS SURVEY

Home gardens receive little attention in zoning codes. They appear in codes most generally to define a distinction between home gardens and other types of gardening (addressed later in this chapter) to subject the other types to greater regulation.

Most municipalities do not explicitly ban front yard gardening in their zoning codes, though language on what is allowed in front yards may inadvertently restrict most typical garden vegetation. In fact, for many communities simply lifting such bans or broadening the definition of allowable vegetation (rather than adopting proactive enabling language) is all that is needed to allow front-yard gardening. The regulation of front-yard gardens typically addresses vegetation height, the percentage of the front yard that can be dedicated to the garden, gardening in the strip between the sidewalk and the road, maintenance of the “sight triangle” to allow motorists unobstructed views of oncoming traffic, fencing, and obstruction of the sidewalk.

CODE LANGUAGE

DEFINITIONS

Council Bluffs, Iowa *(2020 population is 62,799)*

Residential household garden - the area of land managed and maintained on the primary premises by the inhabitants of a single-family, two family, or multi-family dwelling(s) to grow horticulture materials, such as flowers, shrubs, or trees intended for ornamental or landscaping purposes and/or for the purpose of food production such as vegetables and fruits for personal use, consumption or donation. Areas for growing may include common open space managed and maintained by any or all occupants of the premises. (Council Bluffs, IA §15.03.302a).

Kansas City, Missouri *(2020 population is 508,090)*

Home garden - a garden maintained by one or more individuals who reside in a dwelling unit located on the subject property. Food and/or horticultural products grown in the home garden may be used for personal consumption, and only whole, uncut, fresh food and/or horticultural products grown in a home garden may be donated or sold on-site.... "Row crops" shall be defined as grain, fruit or vegetable plants, grown in rows, which are 24 inches or more in height.... (Kansas City, MO §88-312-02-A).

Independence, Missouri *(2020 population is 123,011)*

Home garden - a garden maintained by one or more individuals who reside in a dwelling unit located on the subject property to grow and harvest food and/or horticultural products for personal consumption or for sale or donation. (Independence, MO §14-200-07).

Falcon Heights, Minnesota *(2020 population is 5,369)*

Edible landscaping - the intentional planting, caring for, or otherwise cultivating plants that could produce food that is consumed by people. These plants include fruit and nut trees, berry bushes, vegetables, herbs, or edible flowers.

Residential garden - an area of edible landscaping on a lot that is conducted by the property owners or residents of that lot. (Falcon Heights, MN §54-38).

Maplewood, Minnesota *(2020 population is 42,088)*

Home garden - a garden within a residential property. (Maplewood, MN §44-6).

GENERAL RESTRICTIONS

Kansas City, Missouri *(2020 population is 508,090)*

Home Garden...Row crops are not permitted in the front yard of a residentially zoned and occupied property, except property zoned R-80 [Residential District 80 which once was the Agricultural and Agriculture zoning districts], if whole, uncut fresh food and/or horticultural products grown in the home garden are donated or sold onsite....."Row crops" shall not mean cultivated or attended trees, bushes, or shrubbery less than 6 feet in height, or trees in excess of 6 feet in height, and shall not include grain, fruit or vegetable plants that are part of the front yard's borders, that extend no more than 8 feet from the side property lines or from the front of the principal building. A home garden is an accessory use to a principal residential use, and must comply with the lot and building standards for its zoning district.... On-site sales made in accordance with this section shall not be considered to be commercial activity under this Code, and shall not be subject to the restrictions for home occupations in [home occupation section].... [The conflicting provisions section] shall govern any conflict between the provisions of this section and any private homeowner covenants or restrictions. Any area of land that is managed and maintained in a manner that fits within the description of Community Supported Agriculture ... cannot be considered to be a Home Garden. (Kansas City, MO §88-312-02-A).

Independence, Missouri *(2020 population is 123,011)*

Home gardens are permitted in all residential, industrial, office and commercial zoning districts as well as the Drumm Farm zoning district (a special purpose and overlay district known as the Drumm Farm area)]. (Independence, MO §14-300-03, §14-302-03, §14-301-03, §14-911-02).

Falcon Heights, Minnesota *(2020 population is 5,369)*

[Edible landscaping areas are permitted as an accessory use in the one-family R-1 residential district and B-1 neighborhood convenience district]. (Falcon Heights, MN §54-38, §113-174, §113-177).

Location of restoration areas, planned landscape areas, and edible landscaping areas.

Setback. A restoration area, planned landscape area, or residential garden must provide the following minimum setbacks:

> Front lot line...abutting a street or alley: two feet, and two feet from publicly maintained pavement or sidewalk....

Maintenance Standards. Every owner of property shall maintain the vegetation growing thereon according to the minimum standards set forth in this subsection:

> The setback area required by [above section] shall be composed of a soil retention cover such as mulch, regularly mowed turf grasses or groundcovers maintained at six inches or less, native or ornamental plants maintained at ten inches or less, trees or shrubs, or as may be required by the city administrator to protect the soil and aesthetic values on the lot and adjacent property.
>
> Non-woody vegetation in a planned landscape area shall be cut at least once annually between April 15 and July 15 to a height no greater than 10 inches.
>
> It is unlawful to plant any tree or shrub within five feet of a property lot line abutting a right-of-way of a public street or alley.
>
> Property owners shall prune trees and shrubs located on private property so they will not obstruct pedestrian sidewalk traffic, nor obstruct the view of any traffic sign, street, alley, or intersection. Overhanging portions of trees and shrubs must be pruned to maintain a minimum clearance of eight feet over all sidewalks, and 16 feet over all streets.
>
> Properties shall be free of blight and blighting factors, as described in [blight section].
>
> Properties shall be free of public nuisances, as described in [nuisances section].
>
> The city may require the owner or occupant who has planted, or has allowed to be planted, native plants or other vegetation within a drainage or utility easement to remove the native plants or other vegetation from the drainage and utility easement at no expense to the city if the city determines the native plants or vegetation interferes with the utility easement. The city will not be responsible for damage to turfgrass and/or any landscaped areas resulting from public works improvements or snow removal activities within drainage and utility easements.
>
> Retail sales of produce from edible landscaping activities shall not occur on the property. (Falcon Heights, MN §54-38).

Maplewood, Minnesota *(2020 population is 42,088)*

[Home gardens are a permitted accessory use in all residential zoning districts]. (Maplewood, MN §44-47, Accessory use table).

[The city also allows plantings or gardens in the area of the right-of-way between one's property and the street per its public rights-of-way section]:

Nothing herein shall be construed to repeal or amend the provisions of a city ordinance permitting person to plan or maintain boulevard plantings or gardens in the area of the right-of-way between their property and the street. Persons planting or maintaining boulevard plantings or gardens shall not be deemed to use or occupy the right-of-way, and shall not be required to obtain any permits or satisfy any other requirements for planting or maintaining such boulevard plantings or gardens under this division. However, nothing herein relieves a person from complying with the provisions of the Minn. Stats. ch. 216D, Gopher One Call law. (Maplewood, MN §32-8).

Lawrence, Kansas *(2020 population is 94,934)*

Crop Agriculture. Crops may be grown within the public right-of-way adjacent to the property without a use of right-of-way permit. However, the use shall be temporary and any such crops shall be subject to removal by the City, at its discretion, when street or infrastructure repairs or improvements are undertaken in the right-of-way.

The following locational requirements apply to all crops:

> Crops may not exceed 3 feet in height when located within 8 feet of the roadway to avoid interference with visibility for driveways and other access points.
>
> If a sidewalk or property is more than 8 feet from the roadway, crops may not exceed 3 feet in height between the sidewalk and the roadway.
>
> Crops may not exceed 3 feet in height within 3 feet either side of a sidewalk to allow for visibility.
>
> Crops may not be planted within 1 foot on either side of the sidewalk and may not be allowed to grow onto the sidewalk.
>
> Crops taller than 3 feet are not permitted within the sight distance triangle (area created by connecting the endpoints of two 25 feet lines, measured along the curb line, from the intersection of two adjacent streets)….

The following maintenance requirements apply to all Crop Agriculture uses:

> The site shall be designed and maintained so as to prevent the free flow of stormwater, irrigation water, chemicals, dirt, or mud across or onto adjacent lots, properties, public streets, sidewalks, or alleys.

> The site shall be kept free of debris or high grass or weeds, taller than 12 inches (Crop Agriculture plants are not considered weeds as defined in [trees definitions section] of the City Code and are exempt from the weed provisions in [weeds section] of the City Code). (Lawrence, KS §20-548).

Columbus, Ohio *(2020 population, 905,748)*

[An agricultural use,...field crops,...are permitted in the Manufacturing Use Districts, the Institutional Use District, and the Excavation and Quarrying District without restriction as to the operation of incidental vehicles and machinery or restriction as to the incidental sale and marketing of produce grown on premise.] (Columbus, OH §3363, §3365, §3367, §3349, §3369).

[An agricultural use,...field crops,...are permitted in any Planned Unit Development District, any Planned Community District, the Traditional Neighborhood District, the Manufactured Home Park District, any Apartment Residential District, and any Residential District contained in this chapter or a district allowing primary residential uses without restriction as to the operation of incidental vehicles and machinery or restriction as to the incidental sale and marketing, including produce stands, of products raised on the premises, provided that:

> *The agricultural use is located on-premises and on a minimum lot area of one (1) acre...*
>
> *The agricultural standards comply with the appropriate regulations of the Columbus Health Department.].* (Columbus, OH §3345, §3347, §3320, §3343, §3333, §3332).

Fort Worth, Texas *(2020 population, 918,915)*

In all residential districts as a primary use and "ER" Neighborhood Commercial as a primary use:

> When the agricultural use is accessory to a primary residential use:
>
> [On site sales shall be allowed sunrise to sunset, not to exceed three days per week. A maximum sales area 50 square feet with one temporary structure to be used the day of the sale. A maximum two foot by two foot signage shall be allowed the day of sale. A temporary sandwich board sign shall be allowed within ten feet of the site of sales.]; and
>
> Front yard gardens are allowed for crop production. Once production ceases and plants begin to die back, the yard shall be maintained. No weeds or other unkempt conditions shall remain. Plants that seed shall be allowed to remain

during the seeding process but shall be otherwise maintained. (Fort Worth, TX §5.146).

Orlando, Florida

[One-Family and Two-Family Residential Development Standards]

Front Yard. At least 40% of the pervious area of the front and street sideyards shall be landscaped with shrubs and groundcovers, or a combination thereof. The remainder may be planted with turfgrass, annuals and vegetable gardens, up to a maximum of 60%. (Orlando, FL §60.223).

North Redington Beach, Florida (2020 population is 1,495)

Front yard gardens. Front yard gardens will be allowed by calendar-year yearly permit upon application to the town clerk and adhering to the following regulations:

Gardens shall be no more than 120 square feet;

No plants taller than 32” shall be allowed;

There shall be no exposed soil (ground between plants must be covered with some other material);

No vining plants, tomatoes or corn shall be allowed;

If any resident with a front-yard garden receives three violations of these restrictions within one permit year, the permit shall be canceled and the garden removed. (North Redington Beach, FL §30-57(f)).



Figure 5-3. Garden on Vacant Lot; Des Moines, IA. Photo courtesy of Linda Gobberdiel

INDIVIDUAL OR GROUP GARDENING ON VACANT LOTS

For our purposes we distinguish “Individual or Group Gardening on Vacant Lots” from other crop agricultural practices included in this chapter on the basis of (1) ownership of the lot (the gardeners are not the owners of the lot), and (2) gardening as the primary (and not accessory) use of the lot.

Putting vacant lots in urban areas to use as gardens is not a new concept. In 1894 Detroit Mayor Hazen Pingree started an urban gardening program on vacant lots in the city in response to an economic recession that had left many of the city’s industrial laborers unemployed. Known as “Pingree’s Potato Patches,” the program provided unemployed workers with plots of land on vacant city lots, seeds, tools, and instructions on how to cultivate gardens. (Smithsonian Gardens, 2013). The most recent history of vacant lot gardening has seen it surge in popularity in de-urbanizing areas, where neighborhoods and community leaders seek to combat systemic food deserts, revitalize thousands of vacant lots left by industrial decline, and provide crucial economic and health opportunities to residents in those neighborhoods and communities.

LAND-USE CONCERNS

The issues that must be addressed when considering gardening on vacant lots are many and include challenges such as:

- Determining ownership and gaining permission for gardening
- Possible soil contamination,
- Finding water sources for cultivation,
- Vandalism and theft,
- Loss of investments in operation if/when land is put to another use.

While some of these can be addressed in various ways through zoning others are beyond the scope of this guidebook.

EXISTING REGULATIONS SURVEY

Municipal regulations addressing gardening on vacant lots may draw distinctions between gardens for commercial versus noncommercial purposes. They often outline conditions for on-site or off-site sales. The regulations will generally identify gardening on vacant lots as a permissible primary use. Subjects regulated are minimum or maximum lot size, hours of operation, use of chemicals, noise, accessory buildings such as toolsheds, and proof of land tenure, among others.

CODE LANGUAGE

DEFINITIONS

Council Bluffs, Iowa *(2020 population is 62,799)*

Private multiple-user garden (off-premise) - the area of land managed and maintained by a private individual or group/organization when not on the primary premises of the individual or group/organization to grow horticulture materials, such as flowers, shrubs, or trees intended for ornamental or landscaping purposes and/or for food production such as vegetables and fruits for use, sale, consumption or donation by the individual or group/organization. (Council Bluffs, IA §15.03.302c).

Detroit, Michigan *(2020 population 639,111)*

Urban garden - a zoning lot...up to one acre in land, used to grow and harvest food or non-food crops for personal or group use. The products of an urban garden may or may not be for commercial purposes. (Detroit, MI §50-16-421).

Inner Grove Heights, Minnesota *(2020 population is 35,801)*

Personal garden - an area of land that is managed and maintained by the owner of the land or by the occupant of the dwelling on the land or by two (2) or fewer individuals who do not own or dwell upon the land to grow and harvest food crops and/or nonfood ornamental crops such as flowers for personal use, consumption or donation.

Community garden - An area of land that is managed and maintained by a group of three (3) or more individuals (either within or outside of an organization) that do not own or dwell upon the land to grow and harvest food crops and/or nonfood ornamental crops such as flowers for personal use, group use, consumption or donation, excluding cannabis cultivation. Community gardens may be divided into separate distinct plots for cultivation respectively by different individuals or different groups of individuals and/or may be farmed collectively by members of the same group and may include common areas maintained and used by group members. (Inner Grove Heights, MN §10-2-2).

Kansas City, Missouri *(2020 population 508,090)*

Community garden - an area of land managed and maintained by a group of individuals to grow and harvest food and/or horticultural products for personal or group consumption or for sale or donation. A community garden area may be divided into separate garden plots for cultivation by one or more individuals or may be farmed collectively by members of the group. A community garden may include common areas (e.g., hand tool storage sheds) maintained and used by the group.... (Kansas City, MO §88-312).

New Port Richey, Florida *(2020 population is 16,728)*

Community garden - a piece of land dedicated to urban agriculture and gardened by a group of people that provides access to fresh produce and plants as well as access to satisfying labor, neighborhood improvement, sense of community and connection to the environment. They are privately functioning in terms of ownership, access and management.

Community gardening - an activity on property where more than one (1) person grows produce and/or horticultural plants for their personal consumption and enjoyment, for the consumption and enjoyment of friends and relatives and/or donation to a not-for-profit organization, generally on a not-for-profit basis, except as expressly allowed herein. (New Port Richey, FL §21.01.00).

El Cajon, California *(2020 population is 106,215)*

Community garden - means a property used for food crop cultivation by individuals or a collective group of individuals or organizations, which may be divided into multiple individual garden plots.. (El Cajon, CA §17.105.020).

GENERAL RESTRICTIONS

Iowa City, Iowa (2020 population is 74,828)

Community gardens explicitly are a principally permitted use with provisions [see directly below] in all form-based zones/zoning districts (§Table 14-2H-3B-1)

Community Gardens - General Standards.

Only the following buildings and structures are allowed on-site:

Stands for sale of produce grown on-site limited in size to one hundred twenty (120) square feet;

Sheds for storage of tools limited in size to one hundred twenty (120) square feet;

Greenhouses, consisting of buildings made of glass, plastic, or fiberglass in which plants are cultivated, limited in size to one hundred twenty (120) square feet and designed in compliance with setbacks for accessory structures; and

Other small hardscape areas and amenities (including, but are not limited to, benches, bike racks, raised/accessible planting beds, compost or waste bins, picnic tables, seasonal farm stands, fences, garden art, rain barrels, and children's play areas).

The combined area of all structures shall not exceed fifteen percent (15%) of the community garden site area.

On-site storm water systems and irrigation shall be consistent with applicable City standards.

Limitations On Use.

Retail is allowed on-site but only for retail of produce grown on-site.

Outdoor storage of tools and materials is not permitted.

Maintenance Required. Maintenance of community gardens shall ensure that no conditions constituting a nuisance are created, including that water and fertilizer will not drain onto adjacent property. If conditions constituting a nuisance are created, the owner or other individual(s) responsible for the community garden shall ensure that it is replaced with landscaping in compliance with all applicable standards in...(Zoning Code) and/or seeded. (Iowa City, IA §14-2H-3(C)).

Cedar Rapids, Iowa *(2020 population is 137,710)*

Urban agriculture uses are allowed as principle uses by-right in all zoning districts, except the Industrial, Solid, and Hazardous Waste districts, subject to the following regulations.

Urban Agriculture - agricultural activities permitted within an urban setting. Urban Agriculture under this definition shall be limited to the cultivation of plants and produce and shall not include animal husbandry or the keeping of livestock. Beekeeping or the keeping of Urban Chickens shall not be permitted under this definition but may be separately permitted. Urban Agriculture uses shall comply with the following Use-Specific Standards:

A Special Use Permit shall be obtained when Urban Agriculture is the primary use on any parcel or when Urban Agriculture is established as an accessory use and 10,890 sq. ft. or more of land is disturbed on any parcel.

Use of mechanical farm equipment shall be limited to walk-behind equipment or small garden tractors of a size typical of residential use. Larger machinery

intended for industrial agricultural operations shall not be used as part of urban agriculture.

Pesticides, insecticides, fertilizers, and other chemical products used in Urban Agricultural operations must be designed for household use. Chemical products designed for commercial agricultural operations shall not be used.

All seed, chemicals, tools and equipment stored on-site shall be in a permitted primary or accessory structure.

Urban Agriculture may encroach into or be incorporated into required landscaping or bufferyards, but a minimum setback of 5 feet shall be maintained from front, street side and rear lot lines.

Parcels used for urban agricultural uses shall be situated, equipped, operated and maintained so as to minimize to the maximum extent possible, using the best available methods, any impacts on, or interference with other land uses and activities in the general area, or the public health, safety and general welfare. Specific requirements include:

Odor control;

Debris control;

Rodent and pest control.... (Cedar Rapids, IA §32.03.03.E.1.b).

Peoria, Illinois *(2020 population is 113,150)*

Community gardens have been found to be a viable use of vacant land for the cultivation of crops by community groups and individuals. The purpose of this ordinance is to ensure that urban garden areas are appropriately located and protected to meet needs for local food production, community health, community education, garden-related job training, environmental enhancement, preservation of green space, and community enjoyment on sites for which urban gardens represent the highest and best use for the community.

Community Gardens shall not require zoning approval; however, the following performance standards apply:

Approval. Consent of the property owner is required.

Size. Community gardens shall be limited to less than 1 acre in size.

Setbacks. No setback is required for the planting area, associated fence, or raised garden beds less than 3 feet in height; however, garden and associated structures shall not obstruct visibility from a driveway to an abutting street or vice versa.

Accessory structure. Accessory structures/storage structures, including trellises, raised planting beds 3 feet or taller in height, benches, covered trash receptacles, hoop houses limited to 250 square feet, one greenhouse (limited to 250 sq. ft.), one seasonal farm stand (limited to 120 sq. ft.), and one storage shed (limited to 120 sq. ft.) shall be permitted on the site. Accessory structures must meet the applicable district setback requirements and height requirement of 14 feet. If placed behind the principal structure on the adjacent lot, the setback for an accessory structure in a rear yard shall be applied (1.5 feet from the rear property line and 1.5 feet from the side property line). Accessory structures and storage buildings may not occupy more than 10% of the community garden site.

Fences. Fences shall not exceed four feet in height and may be placed on the property line.

Signage. One non-illuminated sign not exceeding four square feet in area and five feet in height shall be permitted.

Composting. Must be in an enclosed container, limited only to the materials generated on site and must be used on site.

Animals or livestock or bees. The keeping of animals or livestock is prohibited.

Maintenance. The garden shall be properly maintained throughout the year with weekly mowing of grassy areas, weekly removal of weeds and grasses from the garden, weekly collection of rotting vegetables and fruit from the garden area, and weekly collection of all garbage and debris deposited on the site. At the end of each growing season annual vegetation shall be cut down and the site shall be properly maintained at the end of the season. (Peoria, IL §5.3.2.G.1).

Fitchburg, Wisconsin *(2020 population is 29,609)*

Community gardens shall be allowed in all zoning districts subject to the following:

Gardens shall be limited to the cultivation of fruits, vegetables, herbs, plants and flowers.

Gardens shall be run by a nonprofit entity, community group, or neighborhood group acting as a garden coordinator. The garden shall be served by a water

supply sufficient to support the cultivation practices on the site. A small storage shed, 100 square feet or less, shall be permitted, but it shall meet the front setback for the respective district, shall be at least four feet from a side or rear lot line and shall not be greater than 15 feet in height.

Greenhouses and/or hoophouses associated with a community garden require a conditional use permit (except within the R-D Rural Development and A-X/A-T Agricultural Districts where they are permitted) and those structures shall follow the dimensional standards of the zoning district. (Fitchburg, WI §22-6).

Belding, Michigan *(2020 population is 5,938)*

Community gardens are allowed as principle uses by-right in all zoning districts in the city of Belding, Michigan subject to the following regulations:

Size limitation. A community garden may not be greater than four (4) acres in size.

Setback. All garden plots and any permitted structure shall meet the setbacks of the zoning district except as follows:

Except in the B-1 district, the setback from any lot line in a residential district shall be no less than the zoning district requirement or twenty-five (25) feet, whichever is greater.

In the B-1 district, the setback from any lot line in a residential district shall be fifteen (15) feet. The buffer [set forth in the code] shall not be required.

Permitted structures. Only the following structures will be permitted in a community garden:

Greenhouses, storage sheds, shade pavilions, planting preparation sheds and hoophouses; however, hoophouses shall not be permitted in the B-1 district. Height. No building or other structure may be greater than fourteen (14) feet in height.

Maximum coverage. The combined area of all buildings, excluding hoophouses, shall not exceed three hundred (300) square feet.

Hoophouse coverings must be maintained and kept intact. The coverings must be removed during non-growing seasons.

Fences. Fencing shall be subject to [the fence regulations of the code] except for the following:

In the B-1 district, an opaque six-foot fence on or near the property line or landscaping no less than six (6) feet in height that completely obscures the garden site shall be placed within the garden property along any adjacent residential lot line.

Barbed wire shall not be permitted.

A fence within the front yard shall not exceed six (6) feet in height. No fence located in a front yard shall be more than sixty (60) percent opaque.

Above ground water tanks, or tanks mounted to trailers or skids, provided that no tank shall not have a capacity greater than one thousand (1,000) gallons.

Benches, picnic tables, trellises, arbors and garden art. Planting beds raised up to three (3) feet above grade.

Compost bins and rain barrel systems, which may not be located within the required setback or within ten (10) feet of a property line, whichever is greater.

Walkways. Walkways shall be unpaved and covered with mulch, gravel or other aggregate treated to control dust.

Signs. Each community garden shall have one (1) sign indicating the name of the community garden and the contact information of the principal operator, including the name and current telephone number. The sign may not exceed six (6) square feet in area nor exceed six (6) feet in height.

Trash receptacles shall be provided on site and emptied in a timely manner.

Parking. Except in the B-1 district, a designated parking area with a minimum of one (1) parking space per each three (3) garden plots (as designated on the approved site plan) shall be provided. Parking areas shall be maintained as a grass area and kept in a dust-free manner. A community garden in the B-1 district is not required to provide off-street parking.

Noise. The use or operation of power tools, mechanical equipment or agricultural implements used outdoors in a community garden adjacent to land in a residential zone district is prohibited before 8:00 a.m. and after 8:00 p.m. The use of hand tools and domestic gardening tools is encouraged.

Organic gardening is encouraged. Measures shall be implemented to prevent chemical and water runoff onto adjacent properties.

Except for sales of plants produced within the community garden, there shall be no retail sales on the site.

Use of land in the B-1 [Community Business] district. In the B-1 district, a community garden shall be considered a transitional use until a different allowed use can be established on the property. The required land use agreement shall contain a clause that allows for termination of the community garden at the end of the current growing season if a suitable commercial or mixed use allowed in the district is found for the site. (Belding, MI §2.30).

APPLICATION REQUIREMENTS

Council Bluffs, Iowa *(2020 population is 62,799)*
Temporary Use Permit.

Private, Multiple User Garden (Off-premise).

At the discretion of the community development department director or his/her [designee]... a permit may be issued in any zoning district.

The duration of the temporary use permit shall be for twelve (12) calendar months from the date of issuance. The following shall be submitted with the application:

> A letter of support from the property owner of each adjacent residential property(s).
>
> Properties located within a subdivision, or in a neighborhood with an established neighborhood association and/or homeowner's association shall include a letter of support.
>
> A notice will be sent to each immediately abutting property owner giving them an opportunity to provide comment prior to issuance.

A site plan and plan of operation are required.

Detail plan of water supply.... (Council Bluffs, IA §15.02.110(E)(8)).

Belding, Michigan *(2020 population is 5,938)*
An application for [administrative][site plan] [special land use] approval must be submitted to the zoning administrator along with the following documentation:

Notarized letter signed by the property owner giving permission for use of property as a community garden.

A site plan, drawn to scale, showing the property size with dimensions.

The site plan shall show the location of all existing structures on the property as well as on adjacent properties.

The plan shall show the location and setback of all proposed structures and garden plots, including any area or structure proposed for the sale of plants grown on the site.

The plan shall show the proposed maximum division of garden plots, by area. The plan shall include proposed fencing and screening, if required.

The plan shall indicate the area reserved for parking and the number of parking spaces provided, if required.

The plan shall identify the source of water that will be used for irrigation purposes. (Belding, MI §2.30).

St. Paul, Minnesota *(2020 population is 311,527)*

Approval of a site plan showing the location of all growing plots, sheds, structures, and fencing, with contact information for a site manager. A soil lead test showing that lead levels are less than one hundred (100) parts per million shall be submitted to the zoning administrator with the site plan or raised planting beds with soil barriers and clean, imported soil will be required.

In residential, traditional neighborhood, and business districts, an agriculture use having an area greater than one (1) acre requires a conditional use permit.

The use shall be subject to the minimum property maintenance standards ...and noise regulations ... of the city. (St. Paul, MN §65.771).



Figure 5-9. Preparing Garden on Vacant Lot; Des Moines, IA. Photo courtesy of Lina Gobberdiel

COMMUNITY GARDENS ON CITY-OWNED LANDS

According to The Trust for Public Land there were more than 29,000 garden plots in city parks in just the 100 largest U.S. cities in 2018. Community gardening on city-owned lands provides gardeners a somewhat greater degree of certainty than gardening on vacant, privately-owned lots in that the change in uses of publics land is far more infrequent. The tradeoff is that competition for garden plots on city-owned lands is often greater.

EXISTING REGULATIONS SURVEY

Gardening on city-owned land is regulated less through zoning than through a permitting process. Since the city controls the use of the land most compliance is enforced through the terms of the permit. The “code” sections below include cities’ program descriptions and guidelines. Common requirements include permitting fees, processes for establishing priority in competition for gardening plots, maintenance of plots and cultivation practices.

CODE LANGUAGE

PROGRAM DESCRIPTIONS AND GENERAL RESTRICTIONS

Omaha, Nebraska *(2020 population is 486,051)*
Urban Gardens.

The Community Development Division makes City-owned lots available for use as community gardens on an interim basis. Ultimately, most of the lots will be used for new housing or other civic purposes. While most of the lots are generally not available as permanent community gardens, a limited number have become permanent gardens.

Lot inventory changes throughout the year. Selected applicants must sign a Seasonal Gardening Agreement.... (Omaha, NE Urban Gardens website).

Urban Agriculture.

Livestock is permitted in AG and DR districts. Bees and chickens may be kept with receipt of a permit. Sales from roadside stands are permitted from AG and DR districts, and some commercial districts. (Omaha, NE Zoning and Urban Agriculture)

Private Use of Public Property.

It shall be illegal for any person or governmental entity other than the city to use city-owned property other than right-of-way...or for any person or governmental entity other than the city or franchised utilities to use such right-of-way without first entering into a lease agreement with the city, except as permitted [below]….

The lease requirements of this article shall not apply to a vacant lot owned by the city, if there is an agreement with a person or organization to maintain such lot for the purpose of gardening activities. Such gardening agreement shall be for one growing season at a time, and shall be on such terms as stated on a gardening agreement form provided by the planning director. (Omaha, NE §34-141, §34-144).

Hartford, Connecticut *(2020 population is 121,054)*
Municipal garden program. The Parks and Recreation Advisory Commission is hereby empowered to develop and administer a program to encourage the use of vacant public land owned by the City for gardening purposes by the general public. This Commission may:

(1) Maintain an inventory of vacant public lands owned by the City;

(2) Establish and administer a procedure for selection of persons to use public lands for gardening purposes; and

(3) Adopt regulations governing the use of vacant public lands for gardening purposes.

The Commission shall obtain the permission of the appropriate department, agency, officer or board charged with the lawful responsibility to manage and control the vacant public land prior to using the property for the municipal garden program. Nothing in this section shall limit the right of the City to enter and take control at any time those public lands being used for the municipal garden program; nor shall the City be limited by any of the actions of its employees or officers from ejecting and denying access to these public lands to any and all individuals when the City deems it desirable and in the best interests of the City.

The City shall be held harmless and indemnified by all participants and persons in the municipal garden program from all suits, claims of liability of each name and nature arising out of or in consequence of the use of public land in the municipal garden program.

The Commission may recommend a schedule of user fees to the Council to cover the administrative costs of the municipal gardens program. Those fees shall reflect the actual cost of administering and maintaining the municipal garden program. (Hartford, CT § 26-15).



Figure 5-6. The Fairfield Millennium Green and Community Orchard. Fairfield, IA. Photo courtesy of Andrea Vaage

MARKET GARDENS

The primary characteristic that distinguishes market gardens from community gardens in most city regulatory schemes is that all or a portion of the harvest is offered for retail sale.

LAND-USE CONCERNS

The land use concerns over market gardens are similar to those of community gardens except that allowing on-site sales of all or part of the harvest brings with it the expected negative effects of traffic, parking, lighting, signage, and hours of sales operations. In addition, regulators must make provisions for accessory buildings or farm stands where retail trade is conducted.

CODE LANGUAGE

DEFINITIONS

Portland, Oregon *(2020 population is 652,503)*

Market garden - a site where food is grown to be sold. The food may be sold directly to consumers, restaurants, stores, or other buyers, or at farmers markets. (Portland, OR §33.910.030).

Philadelphia, Pennsylvania *(2020 population is 1,603,797)*

Market or community-supported farm - an area managed and maintained by an individual or group of individuals to grow and harvest food crops or non-food crops (e.g., flowers) for sale or distribution that is not incidental in nature. Market farms may be principal or accessory uses and may be located on a roof or within a building. (Philadelphia, PA §14-601(11)).

Harrisonburg, Virginia *(2020 population is 51,814)*

Business garden - a home occupation, where areas of a parcel are managed and maintained by individuals residing on the same parcel or adjoining parcels under the same ownership, used to cultivate fruits, vegetables, herbs, or flowers for sale purposes. This definition does not include cultivation only for personal consumption or use. (Harrisonburg, VA §10-3-24).

Inner Grove Heights, Minnesota *(2020 population is 35,801)*

Market garden - a growing space where food crops to be sold are grown. A market garden is distinguished from a farm by its smaller scale and lack of mechanization. A market garden is distinguished from a community garden by its exclusionary control. (Inner Grove Heights, MN §10-2-2).

GENERAL RESTRICTIONS

Portland, Oregon *(2020 population is 652,503)*
Market gardens are allowed in all zoning districts subject to special limitations.

Maximum area. The maximum area allowed for a Market Garden is specified in Table 5-1 [below]. The area of a Market Garden includes the area under cultivation, the area covered by any structures associated with the garden, the compost pile, any off-street parking, or any other area associated with the activities of the garden.

TABLE 5-1: Maximum Area for Market Gardens

Zone	Maximum Area Allowed per site.	Maximum area Allowed per Site if Neighbor Notification and meeting requirements of section 33.237.500 are met
RF Zone	174,000 square feet	261,000 square feet
R20 Zone	40,000 square feet	60,000 square feet
R10 Zone	20,000 square feet	30,000 square feet
R7 Zone	14,000 square feet	21,000 square feet
RS and R 2.5 Zones	10,000 square feet	15,000 square feet
Multi-Dwelling Zones	14,000 square feet	21,000 square feet
Sites with Institutional Uses in residential, CI1, and IR Zones	14,000 square feet or 10 percent of the total site area, whichever is larger.	21,000 square feet or 15 percent of the total site area, whichever is larger.
Industrial, Employment, CI2, Commercial/Mixed Use, and Open Space Zones	No maximum	——

Sales.

On-site sales.

Nonresidential zones. In nonresidential zones, on-site sales are a Retail Sales And Service Use; and the following regulations apply:

Exterior display is allowed; and

Only food and value-added products made from produce grown on site, such as jams and pickles, may be sold.

Residential zones. In residential zones, on-site sales are allowed as accessory to the Agriculture use, and the following regulations apply:

Exterior display is allowed;

Only food and value-added products made from produce grown on site, such as jams and pickles, may be sold;

Sales are allowed only between 7 AM and 9 PM; and

Sales are allowed up to 70 days in each calendar year.

Off-site sales. Off-site sales are not limited by the regulations of this Chapter.

Hours of operation in residential zones.

In residential zones, operation may begin at sunrise or 7 AM, whichever is earlier, and must end at sunset or 9 PM, whichever is later. A Market Garden is operating if people are on the site. Automatic equipment functioning, such as sprinklers, is not considered operation.

Use of motorized equipment in residential zones is allowed only between 7 AM and 9 PM.

Fences. Fences are regulated by the base zones.

Signs. Signs are regulated by...Signs and Related Regulations [section]. (Portland, OR §33.237.100).

Neighbor Notification and Meeting.

Notification.

A letter must be sent to the owners of property within 150 feet of the site, to the Neighborhood Association for the area, and to the Planning and Zoning Section of the Land Use Division of Portland Permitting & Development. The letter must be sent by US Mail, FedEx, UPS, or similar service. The letter may not be sent electronically or delivered by hand.

The letter must:

a. Describe the proposal in detail;
b. Include information on how to contact the person or organization making the proposal;
c. Show the location of the site on a map, and give the address of the site; and
d. Invite people to a meeting to discuss the proposal, specifying the date, time, and location of the meeting.

The letter must be mailed at least 14 days before the meeting.

At least one copy of the letter must be posted on the site.

a. A copy of the letter must be placed on each street frontage of the site. If a street frontage is over 600 feet long, a notice is required for each 600 feet, or fraction thereof. Notices must be posted within 10 feet of a street lot line and must be visible to pedestrians and motorists. Notices may not be posted in a public right-of-way. Notices are not required along street frontages that are not improved and allow no motor vehicle access.
b. Letters must be posted at least 14 days before the meeting, and may not be removed before the meeting.

A copy of the letter and the mailing list must be retained in the files of the person or organization making the proposal. D. Meeting. A meeting to discuss the proposal must be held at a location within the boundaries of the neighborhood association that the site is within. The person making the proposal must attend the meeting. (Portland, OR §33.237.500).

Philadelphia, Pennsylvania *(2020 population is 1,603,797)*

Urban Agriculture. General. All urban agriculture uses are subject to the following standards:

Sales are permitted on the same lot as the urban agriculture use or in locations where retail sales are an allowed use.

The site must be designed and maintained so that water and fertilizer will not drain onto adjacent property.

Community Gardens, Market and Community-Supported Farms. The following standards apply to community gardens, and market and community-supported farms:

For market and community-supported farm uses only: A fence or dense vegetative screen shall be provided along front, side, and rear lot lines that are

adjacent to a Residential zoning district. The fence or dense vegetative screen must comply with the...Fencing and Walls [requirements]. If a fence is used, the fence shall be at least as finished in appearance as the side facing the applicant's use. Fencing shall be constructed of wood, welded wire, or ornamental metal; chain-link and barbed wire are prohibited as fencing material.

Refuse and compost bins must be rodent-resistant and located as far as practicable from abutting residential uses. Refuse must be removed from the site at least once a week.

Storage areas for tools and equipment must be enclosed and located as far as practicable from abutting residential uses.

No outdoor work activity that involves power equipment or generators may occur between sunset and sunrise. (Philadelphia, PA §14-603(15)).

Required Parking in Residential Districts.

Minimum Required Parking Spaces (spaces per unit/sq. ft. of gross floor area/beds/seats) [for] Market or Community-Supported Farm: None if lot area is less than 5,000 sq. ft., otherwise 2 (Philadelphia, PA §Table 14-802-1).

Required Parking in Commercial Districts.

Minimum Required Parking Spaces (spaces per unit/sq. ft. of gross floor area/beds/seats) [for] Market or Community-Supported Farm: None if lot area is less than 5,000 sq. ft., otherwise 2. (Philadelphia, PA §Table 14-802-2).

Harrisonburg, Virginia *(2020 population is 51,814)*

Business gardens are considered a home occupation. Home occupations are permitted by-right in all residential zoning districts subject to the following regulations.

General use regulations and requirements.

Individuals operating business gardens shall apply for a home occupation permit. The residential character of all parcels involved shall be maintained.

All transactions shall occur off-site.

No on-site advertising is permitted.

Apiculture or other animal husbandry is prohibited.

Areas shall be maintained in a healthy growing condition, free of refuse, debris, overgrown weeds, and dead or spent plant materials. Such areas are subject to [the code section addressing] weeds, etc. on lots.

Compost shall be used only to support onsite operations.

Area and yard restrictions. Land used for business gardens shall be no larger than fifty (50) percent of the area of the parcel involved including areas of multiple, adjacent parcels under the same ownership. Cultivation in accessory structures such as hoophouses, green houses, cold frames, etc., and areas used for exterior activities such as storage, compost and disposal areas shall be included in the allowable area. Activities on or within principal buildings including covered and uncovered porches and decks, enclosed accessory storage structures, upon rooftops, and vertical growth areas are exclusive of the allowable area.

All areas used for business gardens shall maintain at least a five-foot separation from all property lines unless such areas are enclosed with a wall or fence of at least three (3) feet in height.

Accessory structures. Accessory structures shall be governed by...accessory buildings [section] of this chapter.

All structures shall be securely affixed to the ground.

Storage and screening. Storage of equipment, materials, and compost and disposal areas shall be inside a principal or accessory structure or screened.

Abandonment. Business gardens which have ceased permanent operation or been abandoned shall be cleared, all structures removed and the area re-vegetated no more than thirty (30) days after the date of discontinued operations unless otherwise specified by the zoning administrator not to exceed ninety (90) days. (Harrisonburg, VA §Article BB).

Inner Grove Heights, Minnesota *(2020 population is 35,801)*

Where permitted, market gardens shall be subject to the following provisions:

Market garden planting areas can be no larger than ten percent (10%) of lot area and shall not be located in front yards.

Retail Sales Allowed. On-site sales are allowed under the following conditions:

The only products sold are the food crops grown in the market garden on the property;

Sales are limited to a maximum of seventy-five (75) sales days per calendar year;

Sales shall take place only between the hours of eight o'clock (8:00) A.M. to seven o'clock (7:00) P.M. weekdays and nine o'clock (9:00) A.M. to seven o'clock (7:00) P.M. on weekends;

Sales cannot take place on the public sidewalk or boulevard.

Setback. The market garden shall be set back a minimum of five feet (5') from all property lines in order to provide a vegetated buffer of grass or other plants to minimize the transfer of sediment and to delineate the edges of the market garden.

Equipment. Market garden equipment shall be limited to that which is commonly used for household gardening. Any tools, equipment, and material shall be stored and concealed within an enclosed, secured structure.

Negative Impacts Prohibited. The market garden site shall be designed and maintained to prevent negative impacts to adjacent properties from gardening activities including, but not limited to, irrigation, fertilizer, soils, stormwater, cultivated areas, and garden debris.

Maintenance. Market gardens shall be maintained in a neat and orderly manner. Trash, weeds, dirt piles and debris of any sort shall not be allowed to accumulate on the market garden site. When a market garden is discontinued the property shall be restored with native plantings, grass, or other allowed ground cover.

Nuisance. Improperly maintained market gardens are subject to nuisance abatement procedures as detailed elsewhere in this code. (Inner Grove Heights, MN §10-15-33).



Figure 5-7. Matthew 25 Urban Farm; Cedar Rapids, IA. Photo courtesy of Neo Mazur

URBAN FARMS

An American Planning Association report defines an urban farm as being “Typically larger than market gardens and include larger-scale production of food-producing or ornamental plants, bees, fish, poultry, or small to medium sized farm animals for commercial purposes using a variety of horizontal and vertical growing techniques including in-soil, container, hydroponic, and aquaponic growing systems. End products are typically sold on- or off-site at a stand, market, or store....” (Hodgson et al., 2011). Urban farms are thus the most intensive and potentially more complex crop agriculture operations in an urban environment.

Most urban farms are privately run by individuals or groups. A common type of urban farm is a Community Supported Agriculture (CSA) farm, where individuals unrelated to the farm’s operations pay for a share of the farm’s output and receive produce each week during the growing season. CSA retailing is expanding rapidly, along with related models such as farm-to-school, farm-to-campus, restaurant-supported agriculture, and institutional-based agriculture.

LAND-USE CONCERNS

As stated earlier, noise and dust is a concern with large mechanical farming equipment and the negative impacts from chemical pesticides or herbicides, such as runoff onto nearby properties, must be mitigated.

Also, if a municipality allows urban farms to have other forms of urban agriculture such as beekeeping, aquaculture or livestock agriculture in conjunction with their operation, this can raise land-use concerns

EXISTING REGULATIONS SURVEY

Some municipalities restrict urban farms as an accessory use within certain zoning districts

Also, as stated earlier, though urban farm operators may wish to use large mechanical farming equipment (for example, tractors versus walk-behind tillers) and chemical pesticides or herbicides, some municipalities—like the City of Seattle, Washington—restrict farm equipment to only those typically used for home use.

CODE LANGUAGE

DEFINITIONS

Detroit, Michigan *(2020 population 639,111)*

Urban farm - a zoning lot, as defined in this article, over one acre, used to grow and harvest food or non- food crops for personal or group use.... An orchard or tree farm that is a principal use is considered an urban farm. An urban farm may be divided into plots for cultivation by one or more individuals and/or groups or may be cultivated by individuals and/or groups collectively. The products of an urban farm may or may not be for commercial purposes. (Detroit, MI §50-16-421).

GENERAL RESTRICTIONS

Seattle, Washington *(2020 population is 737,015)*

Urban farms are permitted as an accessory use in residential zones and as a primary or accessory use in commercial and industrial zones in Seattle, Washington, subject to the following regulations:

All Urban Farms in Residential Zones. In all residential zones all urban farms are subject to the following provisions:

Mechanical equipment. Only mechanical equipment designed for household use may be used.

Sales. Retail sales and all other public use of the farm shall begin no earlier than 7:00 a.m. and end by 7:00 p.m. every day of the week.

Deliveries. Commercial deliveries and pickups are limited to one per day. On-site sales are not considered commercial pickups.

Motor vehicles. No more than two motor vehicles, each with a gross vehicle weight of 10,000 pounds or less, may be used for farm operations.

Location. The farm shall be located on the same lot as the principal use to which it is accessory or on a lot where the planting area is within 800 feet of the lot where the principal use is located.

Signs. One identification sign is permitted, not exceeding 64 square inches in area.

Structures. On a lot with no principal structure:

The total gross floor area of all structures for urban farm use may not exceed 1,000 square feet.

Structures for urban farm use may not exceed 12 feet in height, including any pitched roof.

Structures for urban farm use are also subject to the development standards that would apply to an accessory structure in the zone.

Urban Farms Requiring Conditional Use Permits in Residential Zones [those with over 4,000 square feet of planting area].

Management Plan. The applicant shall provide a proposed urban farm management plan that addresses any probable impacts of the type described in this subsection 23.42.051.B and includes any proposed mitigation measures. The plan shall include, without limitation:

a site plan;

description of the type of equipment necessary or intended for use in each season and the frequency and duration of anticipated use;

disclosure of any intent to spray or otherwise apply agricultural chemicals or pesticides, frequency and duration of application, and the plants, diseases, pests or other purposes they are intended for;

disclosure of whether the operation of the farm would involve 750 square feet or more of land-disturbing activity, or would otherwise require drainage approval under Chapter 22.800 et seq.; and

a proposed sediment and erosion control plan.

Potential Impacts and Mitigation. The Director, in determining whether to approve, approve with conditions or deny the application, shall consider the potential impacts and mitigation, including:

Water Quality and Soils. Impacts of irrigation run-off on adjacent properties, water bodies and environmentally critical areas, and proposed sediment and erosion control measures.

Traffic and Parking. Impacts related to the number of staff onsite during work hours, and the number of potential visitors regularly associated with the site.

Visual Impacts and Screening. Visual impacts relating to the proposed nature, location, design, and size of proposed features, structures and activities, including the location of composting activities and planting areas, and any existing or proposed screening.

Noise and Odor. Impacts related to the location on the lot of the proposed urban farm, any trash or compost storage areas, any farm stand or additional accessory structure, and any other noise-generating or odor-generating equipment and practices.

Agricultural Chemicals. Impacts related to the use of chemicals, including any fertilizer and pesticide.

Mechanical Equipment. Impacts related to the operation of equipment, including noise, odors, and vibration.

Conditions of Approval. Conditions of approval may include, without limitation:

measures such as landscaping or fences to mitigate potential visual impacts on adjacent property and public areas;

measures such as landscaping, sound barriers or fences, mounding or berming, adjustments to location of parking or yard standards, structure design modifications, and limited hours of operation for facilities or activities, to mitigate potential noise and/or odor impacts; and

measures related to operation of the urban farm consistent with some or all of the provisions of the urban farm management plan, with any amendments required or permitted by the Director.

Odors or Fumes. In all zones, no odors or fumes from an urban farm shall be allowed to escape into the open air in such amounts as to be detrimental to the health of any individuals or the public; or noticeable, discomforting or disagreeable so as to offend the sensibilities of a reasonable individual at a distance of more than 200 feet from an urban farm. (Seattle, WA §23.42.051).



Figure 5-5. Matthew 25 Urban Farm; Cedar Rapids, IA. Photo courtesy of Neo Mazur

SEASON EXTENDERS

INTRODUCTION

Season extenders refer to any method of protecting crops from the elements in order to extend the length of the growing season. The growing season is defined as the average length between the last spring frost and the first autumn frost. Season extenders use a covering to protect plants from wind and other elements and to capture sunlight and retain heat. They may be used by homeowners for their own gardens, by community gardeners, or by commercial urban farmers.

The types of season extenders are numerous. A plastic tarp that covers individual plants or a row of plants is a season extender, as is a commercial greenhouse complete with heating and ventilation systems. The greatest regulatory challenges are those posed by structures that fall in between these extremes.

Cold frame. Cold frames are typically wooden boxes with transparent lids made of glass or plastic film (DeLong, 2001). The lids can be raised during the day for venting. Cold frames are used in small garden beds and do not use an active energy source. They are the smallest and least intrusive season extenders. As such, they do not pose regulatory problems and are not further addressed in this chapter.

Low Tunnel, Hoophouse, and High Tunnel. Low tunnels, hoophousesb and high tunnels are lightweight, typically temporary structures. Coverings such as tarps or spun-bonded polyethylene are pulled over hoops formed by sticking the ends of PVC pipe or other similarly stiff, flexible rod into the ground on both sides of the bed being covered, or by using stakes that pipe ends will fit over. The covering may also be fastened by attaching straps to the sides of raised beds. Low tunnels are small; just large enough to cover the crops being protected. The terms “hoophouse” and “high tunnel” are used interchangeably by most; however, sometimes “hoophouse” is used to refer to a structure that is large enough to walk through, while “high tunnel” may refer to a structure large enough to drive through. These structures are taken down before winter unless they have solid end walls. None of these structures incorporate active (mechanical) venting.

Greenhouse. Greenhouses are large, usually permanent structures that provide the greatest amount of climate control. These structures typically include ventilation and heating systems. Greenhouses come in a variety of materials.



Figure 5-11. Hoophouse, Louise's Prairie Roots Farm; Pella, IA. Photo courtesy of Jim Zaffiro

LAND-USE CONCERNS

The primary land use concern with season extenders is the sturdiness of the structures. Will this structure stand up in high winds, or will it become a hazard if inclement weather causes it to break apart and blow down the street? The other obvious land use concern is, again, aesthetics. Many neighbors do not wish to see large plastic tarps covering unknown materials when they look out of their kitchen window.

EXISTING REGULATIONS SURVEY

The regulatory challenges communities seek to address with regard to season extenders are (1) how to determine where they should be allowed to locate, (2) the safety and sturdiness of the design of temporary structures, and (3) the point at which to classify any given season extender as a permanent structure. Other than (1), the other issues are generally addressed through local building codes.

Because the term season extender applies to a continuum of structures it is difficult to summarize their treatment in current codes. Broadly speaking, the movement along the continuum from low tunnels to greenhouses increases the level of regulatory attention.

The line between hoophouses (generally temporary structures) and greenhouses (permanent structures) is significant for regulatory treatment. Hoophouses are often excluded from calculations of maximum site coverage and maximum number of buildings on a lot while greenhouses are treated as any other permanent structure. Many codes pertaining to season extenders, other than cold frames and low tunnels in home gardens, allow them only in areas that already permit agricultural uses such as community and market gardens, or urban farms, or in Urban Agriculture Districts (discussed in a later chapter).

CODE LANGUAGE

DEFINITIONS

Cleveland, Ohio *(2020 population is 327,624)*

Greenhouse - a building made of glass, plastic, or fiberglass in which plants are cultivated.

Hoophouse - a structure made of PVC piping or other material covered with translucent plastic, constructed in a “half-round” or “hoop” shape.

Coldframe - an unheated outdoor structure consisting of a wooden or concrete frame and a top of glass or clear plastic, used for protecting seedlings and plants from the cold. (Cleveland, OH §336.02).



Figure 5-10. Cold Frames; Des Moines, IA. Photo courtesy of Linda Gobberdiel

Wheat Ridge, Colorado *(2020 population is 32,398)*

Hoophouse - a structure not exceeding 1,000 square feet in floor area with a maximum six mils thick poly film roof and wall covering installed over rounded structural members in which there is no storage of solvents, fertilizers, gases or other chemicals or flammable materials. Structures not complying with all of the specifics set forth in the definition above shall be defined in accordance with adopted code and standard practice. Hoop houses exceeding 1,000 square feet in size shall be defined as greenhouses for the purpose of determining applicability of adopted codes and regulations.

Hoop houses as defined [above] that do not exceed 400 square feet in floor area, that are not occupied by the general public, and that do not contain mechanical or electrical devices, equipment or systems [are exempt from the building code]. (Wheat Ridge, CO §5-76).

GENERAL RESTRICTIONS

Cleveland, Ohio *(2020 population is 372,624)*

Accessory uses. Only the following accessory uses and structures shall be permitted in an Urban Garden District:

> Greenhouses, hoophouses, cold-frames, and similar structures used to extend the growing season.

Location. Buildings shall be set back from property lines of a Residential District a minimum distance of five (5) feet.

Height. No building or other structure shall be greater than twenty-five (25) feet in height.

Building Coverage. The combined area of all buildings, excluding greenhouses and hoophouses, shall not exceed fifteen percent (15%) of the garden site lot area. (Cleveland, OH §336).



Figure 5-12. Low Tunnel, Matthew 25 Urban Farm; Cedar Rapids, IA. Photo courtesy of Neo Mazur

***Belding, Michigan** (2020 population is 5,938)*

Permitted structures. Only the following structures will be permitted in a community garden:

> Greenhouses, storage sheds, shade pavilions, planting preparation sheds and hoophouses.....
>
> Height. No building or other structure may be greater than fourteen (14) feet in height.
>
> Maximum coverage. The combined area of all buildings, excluding hoophouses, shall not exceed three hundred (300) square feet.
>
> Hoophouse coverings must be maintained and kept intact. The coverings must be removed during non-growing seasons. (Belding, MI §2.30(D)).

Peoria, Illinois *(2020 population is 113,150)*

Community Gardens and Urban Farms. Community Gardens shall not require zoning approval; however, the following performance standards apply:

> Setbacks: No setback is required for the planting area, associated fence, or raised garden beds less than 3 feet in height; however, garden and associated structures shall not obstruct visibility from a driveway to an abutting street or vice versa.
>
> Accessory structures: Accessory structures/storage structures, including trellises, raised planting beds 3 feet or taller in height, benches, covered trash receptacles, hoop houses limited to 250 square feet, one greenhouse (limited to 250 sq. ft.), one seasonal farm stand (limited to 120 sq. ft.), and one storage shed (limited to 120 sq. ft.) shall be permitted on the site. Accessory structures must meet the applicable district setback requirements and height requirement of 14 feet. If placed behind the principal structure on the adjacent lot, the setback for an accessory structure in a rear yard shall be applied (1.5 feet from the rear property line and 1.5 feet from the side property line). Accessory structures and storage buildings may not occupy more than 10% of the community garden site. (Peoria, IL §5.3.2(G)).

Milwaukee, Wisconsin *(2020 population is 577,222)*

Principal Building Required. No accessory building shall be located on a lot not containing a principal building, unless the principal use of the lot is for the raising of livestock, a community garden or a commercial farming enterprise. If a principal building on a lot is removed, any accessory building on the lot shall also be removed within 60 days and the premises made compliant with this code....

Permitted Structures. The following accessory structures supporting the raising of livestock, a community garden or a commercial farming enterprise shall be permitted:

> Sheds.
>
> Large agricultural structures.
>
> Hoop houses.

Maximum Number. Not more than one shed and one large agricultural structure may be located on a single lot. The number of hoop houses on a single lot is unlimited.

Lot Coverage. The total lot coverage of all sheds, large agricultural structures and hoop houses on a single lot shall not exceed 70% of lot area. The total lot coverage of sheds and large agricultural structures on a single lot shall not exceed 15% of lot area.

Setbacks.

The minimum front setback, side street setback or rear street setback for a shed, large agricultural structure or hoop house shall be the average plus 5 feet.

The minimum side setback or rear setback for a shed, large agricultural structure or hoop house shall be 5 feet.

Maximum Height.

The maximum height of the sidewall of an agricultural accessory structure shall be 8 feet for a shed, 10 feet for a large agricultural structure and 14 feet for a hoop house.

The maximum overall height of an agricultural accessory structure shall be 10 feet for a shed, 14 feet for a hoop house, 14 feet for a large agricultural structure on a vacant lot, and 24 feet or the height of the principal building for a large agricultural structure on a lot containing a principal building. (Milwaukee, WI §295-505-3).

COMPOST

INTRODUCTION

ABOUT COMPOSTING

Composting can be a useful way for urban gardeners to manage food waste, leaves, and grass clippings. In many municipalities, it is unacceptable to dispose of food and/or yard waste in landfills or combustion facilities. Furthermore, when they are discarded in this manner, valuable nutrients and carbon contained in these materials are wasted, potentially leading to methane generation in anaerobic (oxygen-deprived) conditions. Therefore, turning these materials into compost can be a cost-saving solution that yields nutrient-rich organic matter, and mitigates negative environmental impacts (Environmental Protection Agency, 2026).

Compost piles work by creating an environment conducive to microbial growth. Among these microorganisms, aerobic bacteria, which oxidize organic matter, play a crucial role in the composting process (Environmental Protection Agency, 2025). As these bacteria flourish, they feed on the compost materials and break them down into organic matter. To function optimally, these organisms need specific conditions, which include:

- *Proper aeration* - The bacteria and organisms that exist in the pile require oxygen to perform the functions of decomposition. A compost pile will create some circulation as the pile warms and heated air is forced upward; however, as the composting process advances, the space between particles in the pile decreases (Environmental Protection Agency, 2025). To ensure uniform, rapid decomposition, the pile must be turned regularly to provide oxygen. The more frequently the pile is turned, the more rapidly the heat builds (Jauron, 2013).
- *Adequate moisture* - Moisture levels also affect the speed at which compost decomposes. Oversaturation may cause odor and slow the decomposition of the pile. Piles that are too dry will cause the activity of microorganisms in the pile to slow or cease altogether (Rosen et al., 1988). The material should feel like a damp sponge – a drop or two of water should drip out when tightly squeezed (Jauron, 2013).
- *Particle size* - Items going into a compost bin should be smaller than 2 inches (Rosen et al, 1988). For bulkier items, it is recommended to cut, shred, or mulch these items before placing them in the bin. Porosity can be affected by materials that are too small, however, so balance should be maintained between the size of materials added to the compost pile.

- *Carbon/nitrogen ratio* - The ideal carbon-to-nitrogen ratio in compost piles is 30:1. Materials with large amounts of carbon are thought of as ‘brown’ materials. These include woody materials, leaves, and straw. Materials that contribute nitrogen to a pile are ‘green’ materials. These include vegetable waste, coffee grounds, grass clippings, and manure from poultry. Since carbon-to-nitrogen ratios are very high in woody materials, a good rule of thumb would be to mix two parts ‘brown’ material to one part ‘green’ material (Starbuck, 2026).
- *Temperature* - All the factors previously mentioned influence temperature. The heat of the pile will ultimately determine how quickly the composting process occurs. The optimum temperature of the pile is between 135-140 degrees Fahrenheit (Starbuck, 2026). The temperature can be monitored using a thermometer specifically for compost piles or by simply feeling if the internal temperature of the pile feels warmer than air temperature.

HOME COMPOSTING METHODS

Many types of composting systems exist. Aside from indoor vermicomposting (worm composting) (Environmental Protection Agency, 2025), the most common types of composting structures used in an urban context are holding units, turning units, and heaps (Texas A&M AgriLife Extension Service, 2009).

Holding Units

Holding units are containers or bins that hold yard and garden materials until composting is complete. Plastic holding units can be purchased, or they can be easily built from almost any type of material, including wire fencing and snow fence. Holding units are the least labor intensive to manage. They are good for small compost amounts of yard wastes; however, unless the unit allows for a way to aerate the material, they are also the slowest way to compost (Texas A&M AgriLife Extension Service, 2009).

Turning Units

Turning units allow organic material to be turned on a regular schedule. A turning unit is generally either a series of bins, or a horizontally mounted rotating barrel (Texas A&M AgriLife Extension Service, 2009). With a substantial input of labor, a large volume of yard waste can be composted in a relatively short time. Turning bins can require a greater expense to buy or effort to build.

Heaps

No structure is required for heap composting; it is simply a pile (heap) of composting material. The size of the pile should be at least 5 feet by 5 feet by 3 feet high (Starbuck,

2026). Heaps are the least expensive way to compost as no physical structure is needed; however, heaps may not appear as neat and tidy as using holding or turning units (Starbuck, 2026). Some municipalities prohibit composting heaps for aesthetic reasons or to minimize pest attraction.



Figure 6-1. Three-Bin Backyard Compost; Ames, IA. Photo courtesy of Andrea Vaage

LAND-USE CONCERNS

Concerns about composting in urban areas are minimal and usually involve aesthetics, odors, or the attraction of insects or animals. Well-managed compost piles that have a proper mix of materials do not have an odor nor attract pests. A proper mix of materials is commonly household kitchen scraps covered with leaves, grass clippings, or a layer of soil. Animal fats, flesh, and/or bones are generally inappropriate and often expressly prohibited in compost piles because they generate odor, do not break down easily, and attract animals and insects (Jauron, 2013). Most compost operators will admit, however, that even uncooked vegetable scraps may attract flies, so they should be covered up with organic yard waste.

Though compost piles do not need to be in a structure to work, in municipalities it is generally required for aesthetic and health concerns, and it may even help speed the decomposition process. Screening and/or fencing of composting piles may also be required by a municipality for aesthetic concerns.

Additionally, while composting filters stormwater and reduces nutrient and sediment runoff (Environmental Protection Agency, 2026), there is a potential concern regarding

water contamination from the composting process itself. Furthermore, inadequate management of composting operations may lead to runoff that leached nutrients and contaminants into nearby water bodies. For example, the City of Rosemount, Minnesota, imposes locational and setback restrictions on where a composting container can be on a lot to prevent runoff and how far (in feet) it can from any water body, flood plain, or shoreland area.

EXISTING REGULATIONS SURVEY

There is little variation in most local composting regulations. Where adopted, such regulations generally allow home composting—distinct from off-site or commercial composting operation. However, they often impose restrictions on the composting pile or structure's location, volume, and the types of materials allowed.

Additionally, most regulations either explicitly state or imply that composting is considered an accessory use to a principally permitted use (often an occupied, residential structure) and/or within a certain zoning district (often residential and agricultural).

Regarding the locational and dimensional requirements for structures associated with the composting operation, most municipalities restrict compost piles and structures to the rear yard and pose volume restrictions up to 125 cubic feet and height restrictions up to 4 to 5 feet.

Concerning composting materials, most municipalities expressly allow yard waste such as leaves and grass clippings, as well as raw and uncooked kitchen food waste, yet specifically prohibit materials such as bones, meat, fish, whole eggs, and dairy products. This may be listed in a municipality's composting definition(s) or a distinct regulation.

Some ordinances may incorporate provisions addressing nuisance prevention, although nuisances are often regulated in other sections of the municipal code. It should also be noted that municipalities and residents are obligated to adhere to their state's administrative regulations relating to composting, where applicable.

Nonetheless, it is assuring that most municipalities are encouraging composting among residents by eliminating permit requirements or even establishing municipal composting programs or municipal compost drop-off sites.

CODE LANGUAGE

DEFINITIONS

Ankeny, Iowa *(2020 population is 67,887) and* ***Sergeant Bluff, Iowa*** *(2020 population is 5,015)*

Composting - the controlled biological reduction of organic waste to humus.

Kitchen waste - any uncooked plant matter not contaminated by or containing meat, fish and/or dairy products.

Yard waste - the organic waste produced from the growing, trimming and removal of grass, branches (not exceeding one inch in diameter), bushes, shrubs, plants, leaves, and garden debris. (Ankeny, IA §110.07; Sergeant Bluff, IA §107).

Windsor Heights, Iowa *(2020 population is 5,252)*

Composting - a controlled microbial degradation of organic waste to produce a relatively nuisance-free product of potential value as soil conditioner. (Windsor Heights, IA §105.02).

Rosemount, Minnesota *(2020 population is 25,650)*

Composting - the controlled biological decomposition and management of selected solid waste to produce an innocuous, humus-like material, which can be used as a soil conditioner.

Food waste - vegetable, fruit and other organic waste resulting from the handling, preparation, cooking and consumption of food, except for meat, bones, whole eggs and dairy products.

Mixed municipal solid waste - garbage, refuse, and other solid waste from residential, commercial, industrial, and community activities that the generator of the waste aggregates for collection but does not include auto hulks, street sweepings, ash, construction debris, mining waste, sludges, tree and agricultural wastes, tires, lead-acid batteries, motor or vehicle fluids and filters, and other materials collected, processed, and disposed of as separate waste streams....

Source separated or source separation - the process whereby generators separate, from mixed municipal solid waste, materials that will be reused, recycled, used as substitutes for raw material in a manufacturing process, or converted into a usable soil amendment.

Yard waste - Garden wastes, leaves, lawn cuttings, weeds, shrub and tree waste, and prunings generated at residential, commercial, or public properties. (Rosemount, MN §5-1-1).

Chicago, Illinois *(2020 population is 2,746,388)*

Compost - the humus-like product of the process of composting organic waste, which may be used as a soil conditioner.

Composting - a controlled biological treatment process by which microorganisms or worms decompose the organic fraction of waste, producing compost.

Composting material - organic waste undergoing composting.

Composting operation - all composting activities conducted on a site, including all composting material, stored organic waste and end-product compost located on any site at any one time.

Food scrap - garbage that is (i) capable of being composted, (ii) separated by the generator from other waste, including non-compostable garbage; and (iii) managed separately from other waste, including non-compostable garbage....

Landscape waste - grass or shrubbery cuttings, leaves, tree limbs and other materials accumulated as a result of the care of lawns, shrubbery, vines and trees, and includes any discarded fruits, vegetables and other vegetative material or crop residue generated in the care of a garden. The term "landscape waste" does not include soil other than incidental soil (e.g., soil attached to sod or attached to other materials accumulated as a result of the care of lawns, shrubbery, vines, trees or a garden).

Limited organic waste - organic waste, other than landscape waste, which does not include: fish; fish products; poultry; poultry products; meat; meat products; eggs (excluding egg shells); cheese, butter or other dairy products; fat; grease; oil or oily food; cat, dog, or other animal excreta; animal feed losses or animal bedding; colored or glossy paper; sawdust from pressure-treated plywood or lumber; diseased or insect-infested houseplants or soil; or biodegradable or compostable plastic.

Organic waste - food scrap, landscape waste, uncontaminated wood waste or other non- hazardous carbonaceous waste that is collected and processed separately from the rest of the municipal waste stream. (Chicago, IL §7-28-710).

Grand Rapids, Michigan *(2020 population is 198,917)*

Residential composting - the collection of organic materials from household kitchen food and yard waste, in a fully enclosed and commercially manufactured compost receptacle. (Grand Rapids, MI §9-107).



Figure 6-2. Backyard Compost Progress; Ames, IA. Photo courtesy of Andrea Vaage

GENERAL RESTRICTIONS

Ankeny, Iowa *(2020 population is 67,887)*

Maintenance. All compost piles shall be maintained using approved composting procedures to comply with the following requirements:

> All compost piles shall be enclosed in a free-standing compost bin. Each compost bin shall be no larger in volume than 125 cubic feet and shall be no taller than 42 inches.
>
> All compost bins shall be so maintained as to prevent the attraction or harborage of rodents and pests.
>
> All compost bins shall be so maintained as to prevent unpleasant odors.
>
> No compost bin shall be allowed to deteriorate to such condition as to be a blighting influence on the surrounding property or neighborhood or City in general.

Location. All compost bins shall be located not less than three (3) feet from a property line or principal building or dwelling and three (3) feet from any detached accessory building. A variance from these setback requirements may be applied for if the property owner can show a hardship exists which prohibits compliance. In addition, any variance application must include a signed written approval of the variance request from the adjacent property owner. Variances may be granted by the Building Inspector on an annual basis upon the proper application being submitted by the property owner. Screening and/or fencing of compost bins may be required as a condition of a variance being granted. No compost bin shall be located in any yard except a rear yard. A compost bin may be located in a side yard subject to the variance procedure contained in this subsection and must be screened from view to the street....

Owner Responsibility. Every owner or operator shall be responsible for maintaining all property under said owner's control in accordance with the requirements of this section. Each day that a violation of the provisions of this section continues shall be considered a separate offense. (Ankeny, IA §110.07).

Windsor Heights, Iowa *(2020 population is 5,252)*

Disposal of Yard Waste. The collection, storage, and disposal of yard waste shall be subject to the following:

> *Separation of Yard Waste Required.* All yard waste shall be separated by the owner or occupant from all other solid waste accumulated on the premises. The owner or occupant may either compost the yard waste on the premises or contain it in bags, containers, or bundles for collection and disposal. All bags or containers must be clearly marked "Yard Waste."
>
> *Yard Waste Containers.* Persons choosing not to manage yard waste on their own property shall place yard waste in bags, containers, or bundles for collection and disposal. Bags shall be any untreated paper bags acceptable to the composting station used by the licensed yard waste collection hauler. Tree limbs less than four (4) inches in diameter and brush shall be securely tied in bundles not larger than forty-eight (48) inches long and eighteen (18) inches in diameter when not placed in containers. The weight of any individual bag, container, or bundle shall not exceed seventy-five (75) pounds.
>
> *Composting.* Back yard composting of yard waste is encouraged. Information about this process is available to all residents and may be obtained from the office of the City Administrator located at the City Hall. Owners and occupants are encouraged to accumulate upon property under their respective control such quantities of yard waste as can be properly composted without creating offensive

odors, litter, fire, or vector problems. Such composting so carried out shall be deemed to be an acceptable, alternative disposition of yard waste and shall satisfy any requirement to separate yard waste contained in this Code.

Frequency of Collection. All yard waste not composted shall be collected from residential, commercial, industrial, and institutional premises at least once per week. Yard waste shall be collected on a City-wide basis between March 1 and November 30. City residents may arrange for individual yard waste pickup with the City, or its agent, between December 1 and February 28.

Location of Containers. Containers for the storage of yard waste awaiting collection shall be placed at the curb by the owner or occupant of the premise served. Yard waste must be placed a minimum of three feet from other solid waste.

Number of Bags or Containers. The number of bags, containers, or bundles containing yard waste which persons may place out for collection shall be unlimited.

Time Limit. Bags, containers, or bundles of yard waste shall not be placed for collection more than forty-eight (48) hours in advance of the regularly scheduled collection day.

Licensing of Yard Waste Collection Hauler. No person shall collect, transport, process, or dispose of yard waste generated within the jurisdiction of the City for compensation unless such person holds a valid license issued in accordance with the provisions of this section. In addition to meeting the requirements under this chapter for solid waste collectors, each licensed collector of yard waste shall provide the City a detailed description of the manner in which the collector intends to collect and haul away yard waste. Each such licensed collector shall haul yard waste to a compost site approved pursuant to State or local law or regulation and shall keep an accurate accounting of the amount of such yard waste. Each licensed collector shall submit an annual written report to the City detailing the amount of such yard waste that has been collected and delivered for composting during each month of the reporting year. Any collector licensed under the provisions of this section shall not mix yard waste and solid waste together. The license of any hauler who delivers for disposal yard waste and solid waste mixed together shall be subject to revocation.

Containers and Charges. Containers and charges for yard waste collection and disposal shall be fixed and determined by the Council, adopted by resolution, and uniformly enforced. Such containers and corresponding charges may, from time to time, be

amended by the Council by resolution. A copy of the resolution setting forth the currently effective containers and corresponding charges shall be kept on file in the office of the City Administrator, and be open to inspection during regular business hours. Residents shall purchase their own bags, which are in addition to these charges. No additional charge will be imposed upon a resident for the collection of holiday trees and wreaths.

Owner May Transport. Nothing in this section is intended to prevent an owner from transporting yard waste accumulating on the premises of the owner, provided such yard waste is disposed of at composting stations approved pursuant to State or local law or regulation and in accordance with policies established by the composting station.

Violations. No person shall place or cause to be placed any yard waste into the solid waste collection system of the City. Any person violating any of the provisions of this chapter concerning yard waste shall be guilty of a misdemeanor. (Windsor Heights, IA §105.11).

Iowa City, Iowa *(2020 population is 74,828)*
Nuisance: Definitions.

> Compost pile... is screened from the street view, is located in a confined area, is no larger than twenty five (25) square feet in area, is located more than twenty feet (20') from a habitable structure and at least five feet (5') from a property boundary line, is located more than five feet (5') from any wood structure, excluding fences, is not located in a natural drainageway and is not located in the area between any building and the street right of way and is collected for reuse as a soil amendment. (Iowa City, IA §6-1-1).

Sergeant Bluff, Iowa *(2020 population is 5,015)*
...Maintenance of Compost Piles.

> All compost piles shall be maintained using approved composting procedures to comply with the following requirements:
>
> All compost piles shall be enclosed in a freestanding compost bin. Each compost bin shall be no larger in volume that 125 cubic feet, and shall be no taller than 42 inches.
>
> All compost bins shall be so maintained as to prevent the attraction or harborage of rodents and pests.
>
> All compost bins shall be so maintained as to prevent unpleasant odors.

No compost bin shall be allowed to deteriorate to such condition as to be a blighting influence on the surrounding property or neighborhood or City in general.

All compost bins shall be located not less than three feet from a property line or principal building or dwelling and three feet from any detached accessory building.

No compost bin shall be located in any yard except a rear yard....

Variance Permitted For Setback Requirements.

A variance from the setback requirements set out [above] may be applied for if the property owner can show a hardship exists which prohibits compliance. In addition, any variance application must include a signed written approval of the variance request from the adjacent property owners. Variances can be granted by the Building Inspector on an annual basis upon the proper application being submitted by the property owner. Screening and/or fencing of compost bins will be required as a condition of a variance being granted.

Owner Responsibility.

Every property owner on which a compost bin is located shall be responsible for maintaining all property under his or her control in accordance with the requirements of this chapter. (Sergeant Bluff, IA §107).

Rosemount, Minnesota *(2020 population is 25,650)*

Composting. Composting shall be allowed only in residential and agricultural zoned districts. All composting shall be subject to the requirements of this chapter....

Location.

The compost container must be in the rear yard at least ten feet (10') from all property lines and no closer than twenty feet (20') to any residential dwellings, except the dwelling on the property at which the compost container is located.

No compost container may be placed within twenty five feet (25') of any body of water or area designated as flood plain or shoreland. No compost container may be placed within wetland buffer areas as defined in the most recent version of the Rosemount comprehensive wetland management plan.

> Composting containers shall be located and designed so that seepage from the compost will not run off into public or private streets, storm sewers, drainage ditches, water retention basins, streams or lakes....

Composting Container.

> All composting must occur in a container constructed of wood, wire mesh, concrete block, or a combination thereof, or in a commercially available compost bin designated for composting organic waste.

Composting Container Size.

> Composting containers shall not exceed one hundred fifty (150) cubic feet in volume for those lots of ten thousand five hundred (10,500) square feet or less.
>
> For those lots of more than ten thousand five hundred (10,500) square feet, composting containers shall not exceed two hundred fifty (250) cubic feet in volume.
>
> The maximum height of the composting container shall be five feet (5').

Maintenance.

> The compost shall be periodically turned and watered to incorporate air and properly mix wet and dry material and to promote a rapid degradation of the composting material.

Nuisance.

> A compost container must not be established or maintained in such a manner as to create an odor or other nuisance and any composting shall be suspended or terminated if at any time the city determines a nuisance exists or that conditions exist constituting a fire hazard or health hazard, or if there is a threat to surface or ground water from runoff or leaching. (Rosemount, MN §5-4).

Rockford, Minnesota *(2020 population is 4,500)*
Compost Regulations.

Private Compost Sites. Persons are allowed to have one compost site on their property. The compost site must not be located in the front yard nor any closer than 5 feet to the side yard property line or closer than 5 feet to the rear yard property line. All private compost sites must be contained within screening or fencing to prevent blowing and

scattering of material. A private compost site must not be any larger than 25% of your yard. No private compost site may exceed 25% of the total lot size and shall not exceed 500 square feet and four feet in height.

Municipal Compost Site. The City municipal compost site is designated on the public works waste water treatment plant/garage site. The site will be a fenced area and the entrance shall be clearly marked by signs, which will also state the time of operation for the site. The city council may from time to time, by resolution, as the City Council may determine, change the location of the above referenced site or the time of operation.

> Only compost material that originates or comes from within the City limits shall be collected or accepted at the municipal site, unless otherwise authorized by the City Council.
>
> Compost materials shall be received at the collection site in bulk form or in reusable, recyclable or disposable bags or containers which must be emptied and shall not be added to the compost pile. No plastic bags or containers shall be left at the site. Vehicles delivering compost materials in bulk form must be enclosed or covered....
>
> The composting operation, including delivery shall not generate off-site nuisances, such as dust, odor and wind blown debris. The operation shall be free of pests and vermin.
>
> Compost materials must be fenced, screened or covered, to prevent blowing or scattering of materials and to prevent animals from disturbing or removing the contents....
>
> Composting shall be accomplished in accordance with the regulations and requirements of all other agencies, organizations, or entities have jurisdiction over such activity.
>
> There shall be no fee charged for city residents to drop their yard waste at the municipal site, and no charge for City residents to pickup the finished material. The City will notify residents when compost is available for their use and schedule times for receiving it. (Rockford, MN §903.07).

Chicago, Illinois *(2020 population is 2,746,388)*
Composting standards.

1. Any composting operation which meets the qualifications of paragraphs (3), (4) or (5) of this section shall be exempt from the permit requirements of [the Environmental Protection and Control chapter].
2. *General composting standards*. All composting operations which meet the qualifications of paragraphs (3), (4) or (5) shall promote proper conditions for composting and shall operate under the following standards, in addition to all applicable local, state and federal laws, rules and regulations:
    a. *Nuisance*. In no event shall any composting activities be conducted in a manner which creates an odor, litter, dust or noise nuisance, or attracts vectors or pests.
    b. *Rat and other vector control.* The presence of insects, rodents, birds and other vectors or pests shall be controlled through specific measures. These specific measures may include grinding the ingredients, providing screens or netting, or conducting the composting operation in-vessel.
    c. *Surface water*. The composting operation shall be located or designed and constructed to prevent the composting material and compost from sitting in ponded surface water. In no event shall any composting activity be conducted in a manner which creates standing water resulting from leachate.
    d. *Mixing*. Composting material shall be mixed or turned at regular intervals as conditions mandate to re-mix ingredients, distribute moisture, rebuild porosity and aid in physical breakdown until composting is complete....
    e. *Sewage restriction*. The composting material shall not contain sewage, sludge, septage or catch basin waste....
3. (i) *Tier I garden composting operation.* A composting operation that composts only landscape waste shall be exempt from the permit requirements of [the Environmental Protection and Control chapter] if it meets the following criteria:
    a. *Ingredients*. The composting operation composts only landscape waste.
    b. *Noncommercial*. The composting operation is not engaged in commercial activities related to composting, the acceptance of landscape waste or commercial landscaping.
    c. *Size*. The composting operation contains no more than a total of 10 cubic yards of landscape waste, composting material and end product compost on-site at any one time, unless express written authorization has been issued by the commissioner of streets and sanitation allowing a greater volume, not to exceed 25 cubic yards.
    d. *Compost use*. All generated compost must be used on-site.

3. (ii) *Tier II garden composting operation*. A composting operation that composts only landscape waste, whether or not generated on-site, shall be exempt from the permit requirements of Chapter 11-4 of this Code if it meets the following criteria
    a. *Ingredients*. The composting operation composts only landscape waste and limited organic waste. The limited organic waste shall not exceed 10% of the total material in the process of being composted on-site at any one time.
    b. *Processing*. All limited organic waste that constitutes food scrap must be processed into the composting operation by the end of the day it was generated on-site or received from off-site. Other limited organic waste must be processed into the composting operation or be contained in a properly maintained covered steel or rigid plastic container by the end of the day it was generated on-site or received from off-site.
    c. *Record keeping.* The operator shall, in a form prescribed by the commissioners, maintain on site and shall make available for inspection records of all limited organic waste received from off-site.
    d. *Compost use.* All generated compost must be used on-site.
    e. *Noncommercial*. The composting operation is not engaged in commercial activities related to composting, the acceptance of limited organic waste or landscape waste, or commercial landscaping.
    f. *Size*. The composting operation contains no more than a total of 10 cubic yards of landscape waste, limited organic waste, composting material and end product compost on-site at any one time, unless express written authorization has been issued by the commissioner of streets and sanitation allowing a greater volume, not to exceed 25 cubic yards.
3. (iii) *Registration*. Any operator shall annually register with the city's on-line or other registration portal, or a third party registration portal approved by the commissioners by rule. Such registration must include the name and contact information of the operator, the name and contact information of the owner, the name and contact information of the individual principally in charge of the site operations (if different from the operator), and any other information that may be required by the commissioners by rule. The operator must keep such information current as provided by the commissioners by rule.
4. *On-site organic waste composting operation.* A composting operation that composts food scrap and/or non-hazardous carbonaceous waste, whether or not landscape waste is added to the composting mixture, shall be exempt from the permit requirements of [the Environmental Protection and Control chapter] of this Code if it meets the following criteria:

a. *Ingredients*. The composting operation composts only organic waste that is generated on-site.
b. *In-vessel requirement.* Any composting of food waste and/or non-hazardous carbonaceous waste is conducted in-vessel. This requirement also applies to mixtures of landscape wastes with these wastes.
c. *Size*. The composting operation contains no more than a total of 5 cubic yards of landscape waste, composting material and end product compost on-site at any one time, unless express written authorization has been issued by the commissioner of streets and sanitation allowing a greater volume.
d. *Compost use.* All generated compost is used on-site. (Chicago, IL §7-28-715).



Figure 6-3. Compost Piles, Central College Garden; Pella, IA. Photo courtesy of Paul Weihe

***West Dundee, Illinois** (2020 population is 7,686)*
Compost Piles and Bins.

Compost piles or heaps must be contained in a bin or structure that is:

No greater that four feet (4') in height and no greater than sixty four (64) cubic feet in volume (a compost pile 4 feet long, 4 feet wide, and 4 feet high would be 64 cubic feet).

Constructed out of a durable material that allows the compost pile or heap to breathe from the sides. Examples of such materials include snow fencing, woven wire, wood, and block or bricks which are laid to permit aeration.

Adequately drained and does not allow water to stand.

Compost piles and bins may only be located in rear or side yards and must be set back a minimum of six feet (6') from of any property line.

Compost piles and bins must be located a minimum of five feet (5') from any surface water, creek, or spring....

Outside Source Compost Prohibited.

The addition of yard waste and compost materials generated outside the property on which the compost pile or bin is located is prohibited.

Maintenance Requirements.

Compost piles must be maintained neatly and contained within the bin or structure. Allowing the pile to sprawl or overflow the bin is not an acceptable compost practice and will be considered to be in violation of this chapter

Odor Nuisance.

Compost piles or bins cannot emit odorous matter in such quantities as to be readily detectable at any point along lot lines, or to otherwise produce a public nuisance or hazard beyond lot lines.

Penalty.

Any person, firm, or corporation violating any provision of these regulations shall be fined as provided in the general penalty [code section] for each offense; and a separate offense shall be deemed committed on each day during or on which a violation occurs or continues. (West Dundee, IL §4-2A).

Tinley Park, Illinois *(2020 population is 55,971)*
Composting.

All composting shall be done in compliance with the following standards and conditions:

> All compost piles shall be enclosed in a freestanding compost bin.
>
> Each compost bin shall be no larger in volume than 125 cubic feet, and shall be no taller than five feet.
>
> No more than three compost bin[s] may be located on any lot used for residential purposes.

All compost bins/piles shall be maintained so as to prevent the attraction or harborage of rodents.

All compost bins/piles shall be maintained so as to prevent unpleasant odors.

All composting shall be done in accordance with any process which has been found to be an acceptable composting process by the Illinois Department of Energy and Natural Resources....

No compost pile/bin shall be located in any front yard or corner side yard.

A compost pile/bin may be located in a side yard provided, however, that it shall not be located in any side yard setback....

A compost pile/bin may be located in a rear yard provided, however, that it shall not be located within ten feet of any lot line. In cases where a rear yard adjoins a street, a compost pile/bin shall be located no closer than 50 feet to the street. (Tinley Park, IL §96-16).

Prospect Heights, Illinois *(2020 population is 16,058)*

Waste Disposal Definitions: Composting.

Properly maintained compost piles may be utilized by single- family units for gardening and landscaping purposes. Such may be located in the side or backyard, the farthest distance possible on site from neighboring residential structures, patios and swimming pools, a minimum of five feet (5') from the property line. Compost piles shall not contain household garbage and must be regularly maintained by turning the composing material to permit aeration and/or by application of chemicals to induce rapid decomposition and prevent offensive odors. (Prospect Heights, IL §3-9-7).

Cincinnati, Ohio *(2020 population is 309,317)*

Waste disposal.

It shall be unlawful to store waste containers so that odors, flies, or other pests prevent the use of doors, windows, and other openings for ventilation, or create a nuisance in neighboring premises.

It shall be unlawful to contain combustible or non-combustible waste materials in open cans, barrels, boxes, cartons, crates, or other unapproved containers that may provide a rodent, insect, or other pest harborage.

Lids shall be placed tightly on all rigid waste containers except during the time of depositing waste in the containers.

It shall be unlawful for any person to throw, deposit, let fall, or permit to accumulate any solid, hazardous, or infectious waste, rubbish, paper, cans, ashes, refuse, garbage, or putrescible organic matter, litter, junk, combustible or noncombustible waste, junk vehicles, or miscellaneous debris on any lot, yard, shed, roof, porch, or other such place. Any place used to store such materials must be designated as a "sanitary landfill" or a "licensed solid waste transfer station" as provided in Ohio Revised Code and licensed by the Cincinnati Health Department or zoned as a business to handle such material and operated according to the provisions of the regulations of the Cincinnati Board of Health and the Cincinnati Municipal Code. Stored materials shall be stacked neatly in piles elevated at least eighteen (18) inches above the ground or floor so as not to provide a rodent, insect or other pest harborage.

The owner of lots, yards, or other places littered with rubbish, paper, cans, garbage, ashes, refuse, or waste material of any kind shall cause said material to be removed.

Yard waste shall either be incorporated into the soil, household composted, converted into mulch or removed.

Yard waste shall either be incorporated into the soil, household composted, converted into mulch or removed....

> No person shall create or maintain a household compost pile in such a manner that it becomes a rodent or insect harborage, or that it produces offensive and noxious odors, or that it causes any form of surface or groundwater pollution.
>
> > Household compost piles shall be located:
> >
> > A maximum practical distance from any occupied structure;
> >
> > Five (5) feet from any auxiliary structure;
> >
> > Fifty (50) feet from any private water supply system;
> >
> > Five (5) feet from any lot line;
> >
> > Ten (10) feet from any roadway, alley, or other public right-of-way;

Twenty (20) feet from any natural watercourse;

A household compost pile shall not be constructed in a natural wetland.

Household compost piles shall be maintained in a safe and sanitary manner. Household compost piles that produce offensive odors or that harbor insects or rodents shall be removed. Household compost piles shall have adequate natural drainage, such that any liquids generated by the decomposing yard waste shall be absorbed into soil. (Cincinnati, OH §00053-7).

Steubenville, Ohio *(2020 population is 18,161)*
Composting.

Composting shall be permitted only when accessory to a permitted principal use and when in compliance with the following requirements:

….Composting shall only be conducted in ways that fire, rodent or disease carrying insect hazards or noxious odors are not created....

Compost shall be kept free of other garbage.

All composting shall be conducted in accordance with the guidelines issued by the Ohio State University Cooperative Extension Service for composting at home. (Steubenville, OH §1185.11).

Willoughby, Ohio *(2020 population is 23,959)*
Regulation of Compost Piles....

There shall be no more than one compost pile on any residential lot in the City, unless authorized in writing by the Director of Public Service.

No compost pile in the City shall exceed four feet in height above-ground level, thirty square feet in total surface area, and a total volume of 120 cubic feet.

Any compost pile maintained within a residence district, composed in part or wholly of kitchen waste, shall be confined in a compost bin or similarly enclosed structure to prevent the attraction of rodents and other nuisance animals.

All compost piles in the City shall be beyond ten feet of the rear building line. Unless agreed to by the affected adjoining property owners, all compost piles

shall further be maintained at the minimum distances of ten feet from any adjoining side lot line and five feet from any adjoining rear lot line.

All compost piles in a residence district shall be maintained and restricted to the back yard of residential dwellings.

Any compost pile in the City, which is found to be in violation of the regulations contained in this section by the City, shall be removed completely within seven days after receipt of written notice from the City to the property owner or person lawfully in possession of the property upon which the compost pile is located. Failure to remove a compost pile pursuant to a notice given in this section shall be deemed a violation of this section.

Whoever violates any of the provisions of this section is guilty of a minor misdemeanor on a first offense; for a second or subsequent offense, such person is guilty of a misdemeanor of the fourth degree. (Willoughby, OH §521.14).

Grand Rapids, Michigan *(2020 population is 198,917)*
Nuisances Prohibited on Public and Private Property....

Residential composting is only permitted on the premises of an occupied, residential dwelling....

The compost must be completely contained in a fully enclosed compost receptacle, with a tightly fitted lid.

The compost receptacle must be located in the rear yard of the residential dwelling.

The compost receptacle must be kept tightly covered except when opened for deposit or removal of compost materials.

The compost receptacle shall have a capacity of no greater than 64 cubic feet.

The compost receptacle shall be constructed of rigid and durable materials, which shall not include any of the following: burlap, tarp, vehicle tires, wire mesh, chicken wire, flexible fencing material of any kind, or any substantially similar materials. (Grand Rapids, MI §9.108).

Edgar, Wisconsin *(2020 population is 1,439)*
Composting Regulations....

> *Maintenance*. All compost piles shall be maintained using approved composting procedures to comply with the following requirements:
>
> All compost piles shall be enclosed in a free standing compost bin. Each compost bin shall be no larger in volume than one hundred twenty-five (125) cubic feet, and shall be no taller than forty-two (42) inches.
>
> All compost bins shall be so maintained as to prevent the attraction or harborage of rodents and pests. The presence of rodents in or near a compost bin shall be cause for the Village to proceed under [rodent control section].
>
> All compost bins shall be so maintained as to prevent unpleasant odors.
>
> No compost bin shall be allowed to deteriorate to such condition as to be a blighting influence on the surrounding property or neighborhood or the Village in general.
>
> All compost bins shall be located not less than six (6) feet from a property line or principal building or dwelling and three (3) feet from any detached accessory building.
>
> > A variance from these setback requirements may be applied for if the property owner(s) can show a hardship exists which prohibits compliance. In addition, any variance application must include a signed written approval of the variance request from the adjacent property owner(s). Variances can be granted by the Building Inspector on an annual basis upon the proper application being submitted by the property owner(s). Screening and/or fencing of compost bins may be required as a condition of a variance being granted.
> >
> > No compost bin shall be located in any yard except a rear yard. A compost bin may be located in a side yard subject to the annual variance procedure contained [in the above subsection] and must be screened from view to the street.
> >
> > Those composting bins which existed prior to the adoption of this section shall be given one (1) year to comply with the requirements set forth herein....

Owner Responsibility. Every owner or operator shall be responsible for maintaining all property under his or her control in accordance with the requirements of this section.

Municipal Exception. Any municipal composting site maintained by the Village of Edgar shall be exempt from the provisions of this section. (Edgar, WI §8-1-10).



Figure 6-4. Inside of a composting container

COMPOST MATERIALS

Ankeny, Iowa *(2020 population is 67,887)*
….Prohibited Ingredients. No compost bin shall contain any of the following:

Lakeweeds;

Cooked food scraps of any kind or type;

Fish, meat or other animal products;

Manures;

Large items that will impede the composting process.

Permitted Ingredients. Permitted ingredients include the following:

Yard waste;

Coffee grounds and used tea leaves;

Uncooked plant matter not contaminated by or containing meat, fish and/or dairy products;

Commercial compost additives.... (Ankeny, IA §110.07).

Ames, Iowa *(2020 population is 66,427)*

Notwithstanding any other sections in this chapter, the following materials may be included in composting piles:

a. Yard waste including leaves, grass clippings, straw and hay, sawdust, and finely chopped or shredded tree and shrub prunings;
b. Kitchen scraps including fruit and vegetable trimmings (including rhubarb leaves), coffee grounds, and eggshells;
c. Shredded newspapers;
d. Wood ashes (no more than 1 cup per bushel of compost).

The following materials shall not be included in composting piles:

a. Human or animal feces;
b. Diseased plant material or weeds that have gone to seed;
c. Kitchen scraps that include animal meat, bones or fat;
d. All other materials not listed...above.... (Ames, IA §10.26).

Chicago, Illinois *(2020 population is 2,746,388)*

Tier I garden composting operation....

Ingredients. The composting operation composts only landscape waste....

Tier II garden composting operation....

Ingredients. The composting operation composts only landscape waste and limited organic waste. The limited organic waste shall not exceed 10% of the total material in the process of being composted on-site at any one time.... (Chicago, IL §7-28-715).

Urban Agriculture Districts

INTRODUCTION

ABOUT URBAN AGRICULTURAL DISTRICTS

Unlike the previous chapters of this report, which review different agricultural practices and then offer zoning code provisions enabling those practices, this chapter is itself about a particular type of zoning district. Urban agriculture districts (UADs) are zoning districts created for the specific purpose of protecting land in urban areas for local food production. (American Planning Association, n.d.).

In many cities with thriving urban food systems, the lands placed into agricultural production have been vacant, neglected spaces with low market value for alternative land uses. A challenge has been keeping these lands in production as the market for other uses increases and property values rise. Many landowners and local officials simply view urban agriculture as a temporary activity until a “better offer” comes along. UADs are the most direct method of protecting tillable land in urban areas from conversion to residential, commercial or industrial uses. (American Planning Association, n.d.).

While allowing community gardens, market gardens, and urban farms as permitted uses in other zoning districts is a positive promotion of urban food production, such lands remain susceptible to conversion for other permitted uses in those districts with little involvement from the city or public. The typical A-1 Agricultural districts found in many city codes allow low- or very low-density residential development by-right without a rezoning or conditional use permit. UADs, in contrast, limit permissible uses to agriculture and related activities. Since a rezoning from UAD to another classification is necessary to convert a parcel from agriculture to another use, the public at least is given an opportunity to comment on the loss of urban agricultural land and its effect on the local food system. The adoption of a UAD sends a clear message that city officials regard urban agriculture and its contribution to the local food system as equally important as other land uses.

LAND-USE CONCERNS

UADs could be used to zone small parcels or large tracts of undeveloped land for agricultural purposes. While UAD zoning demonstrates the importance of city policy toward agricultural production, it of course does not eliminate the pressure to rezone

parcels to other uses if the land market makes those other uses more attractive. This dynamic still creates a disincentive for landowner producers to make substantial investments in their agricultural operations.

Food processing and product sales are often included as allowable uses in UADs. If these uses are to be allowed in a UAD the code should be written to keep those uses accessory to the agricultural production taking place on-site so that they do not transform the area to industrial or retail over time. (Healthy Food Policy Project, 2024).

Of course, the same concerns over carrying on crop agriculture and animal husbandry in an urban environment highlighted in previous chapters—noise, smells, pesticides and herbicides, runoff, etc.—apply to activities in UADs.

EXISTING REGULATIONS SURVEY

While UADs are gaining recognition, they are not yet widely implemented. The activities regulated by these UADs are like those found in provisions for community gardens and urban farms. A community could choose to mix and match with provisions from any other chapters in this report. If a community wants more precise regulatory language concerning beekeeping in its UAD, for example, language from Chapter 2 can be incorporated. If a community is concerned about allowing residents to keep animals and bees on parcels without an occupied residence, such as where the principal use is a community or market garden, the community could require that a care plan be submitted for the animals and bees, among other potential solutions (Haywood, 2017).

Some cities establish Urban Agriculture Overlay Districts to support urban agriculture as a variation of a UAD. Instead of creating separate base zoning districts like UADs, Urban Agriculture Overlay Districts “overlay” an additional set of agricultural-related regulations over existing zoning designations, allowing for the cultivation of crops, raising of animals, and other agricultural activities within specified boundaries while maintaining compatibility with existing land uses. They often include provisions related to setbacks, building height restrictions, and other factors to address potential conflicts with neighboring properties (Coffey, n.d.).

Some cities also include urban agriculture as an allowable amenity that can be designed into Planned Unit Developments (PUDs) or conservation subdivision regulations (APA, Urban Agriculture, n.d.).

CODE LANGUAGE

DISTRICT DESCRIPTIONS AND GENERAL RESTRICTIONS

Cleveland, Ohio *(2020 population is 372,624)*

Urban Garden District. The Urban Garden District is hereby established as part of the Zoning Code to ensure that urban garden areas are appropriately located and protected to meet needs for local food production, community health, community education, garden-related job training, environmental enhancement, preservation of green space, and community enjoyment on sites for which urban gardens represent the highest and best use for the community.

Definitions.

> *Community garden* - an area of land managed and maintained by a group of individuals to grow and harvest food crops and/or non-food, ornamental crops, such as flowers, for personal or group use, consumption or donation. Community gardens may be divided into separate plots for cultivation by one (1) or more individuals or may be farmed collectively by members of the group and may include common areas maintained and used by group members.
>
> *Market garden* - an area of land managed and maintained by an individual or group of individuals to grow and harvest food crops and/or non- food, ornamental crops, such as flowers, to be sold for profit.
>
> *Greenhouse* - a building made of glass, plastic, or fiberglass in which plants are cultivated.
>
> *Hoophouse* - a structure made of PVC piping or other material covered with translucent plastic, constructed in a “half-round” or “hoop” shape.
>
> *Coldframe* - an unheated outdoor structure consisting of a wooden or concrete frame and a top of glass or clear plastic, used for protecting seedlings and plants from the cold.

Permitted Main Uses.

Only the following main uses shall be permitted in an Urban Garden District:

> Community gardens which may have occasional sales of items grown at the site;
>
> Market gardens, including the sale of crops produced on the site.

Permitted Accessory Uses

Only the following accessory uses and structures shall be permitted in an Urban Garden District:

Greenhouses, hoophouses, cold-frames, and similar structures used to extend the growing season;

Open space associated with and intended for use as garden areas;

Signs limited to identification, information and directional signs, including sponsorship information where the sponsorship information is clearly secondary to other permitted information on any particular sign, in conformance with the [supplemental regulations below];

Benches, bike racks, raised/accessible planting beds, compost bins, picnic tables, seasonal farm stands, fences, garden art, rain barrel systems, chicken coops, beehives, and children's play areas;

Buildings, limited to tool sheds, shade pavilions, barns, rest-room facilities with composting toilets, and planting preparation house, in conformance with the [supplemental regulations below];

Off-street parking and walkways, in conformance with the [supplemental regulations below].

Supplemental Regulations

Uses and structures in an Urban Garden District shall be developed and maintained in accordance with the following regulations.

Location. Buildings shall be set back from property lines of a Residential District a minimum distance of five (5) feet.

Height. No building or other structure shall be greater than twenty-five (25) feet in height.

Building Coverage. The combined area of all buildings, excluding greenhouses and hoophouses, shall not exceed fifteen percent (15%) of the garden site lot area.

Parking and Walkways. Off-street parking shall be permitted only for those garden sites exceeding fifteen thousand (15,000) square feet in lot area. Such

parking shall be limited in size to ten percent (10%) of the garden site lot area and shall be either unpaved or surfaced with gravel or similar loose material or shall be paved with previous paving material. Walkways shall be unpaved except as necessary to meet the needs of individuals with disabilities.

Signs. Signs shall not exceed four (4) square feet in area per side and shall not exceed six (6) feet in height.

Seasonal Farm Stands. Seasonal farm stands shall be removed from the premises or stored inside a building on the premises during that time of the year when the garden is not open for public use.

Fences. Fences shall not exceed six (6) feet in height, shall be at least fifty percent (50%) open if they are taller than four (4) feet, and shall be constructed of wood, chain link, or ornamental metal. For any garden that is fifteen thousand (15,000) square feet in area or greater and is in a location that is subject to design review and approval by the City Planning Commission or Landmarks Commission, no fence shall be installed without review by the City Planning Director, on behalf of the Commission, who may confer with a neighborhood design review committee, if one exists, so that best efforts are taken to ensure that the fence is compatible in appearance and placement with the character of nearby properties. (Cleveland, OH §336).

Madison, Wisconsin *(2020 population is 269,840)*
Urban Agricultural District.

Statement of Purpose. The purpose of [the Urban Agriculture District] is to ensure that urban garden and farm areas are appropriately located and protected to meet needs for local food production, and to enhance community health, community education, garden-related job training, natural resource protection, preservation of green space, and community enjoyment. Because urban agriculture will typically exist in close proximity to residential and other uses, concern will be given to ensuring compatibility between uses.

Permitted and Conditional Uses [partial list]

Permitted Uses

- Some forms of cultivation
- Some community events
- Some public utility and public service uses

- Some outdoor cooking operations
- Community garden
- Market garden
- Composting
- Keeping of honeybees
- On-site farm stand
- Selective cutting of timber
- Mobile grocery store
- Solar energy systems
- Transit stops
- Composting

Conditional Uses

- Some forms of cultivation
- Some community events
- Some public utility and public service uses
- Some outdoor cooking operations
- Farmers' market
- Animal husbandry
- Clear-cutting
- Greenhouse, nursery

Table 8-1: Dimensional Requirements for Permitted and Conditional Uses
Requirements represent minimums unless otherwise noted. Dimensions are in feet unless otherwise noted.

Dimensional Standard	Dimensional Requirements
Lot area sq. ft.	15,000 Lot area of less than 15,000 square feet may be allowed as a conditional use
Lot width	50 ft
Front yard setback (structures)	15 ft or the setback of the adjacent district, whichever is greater
Side yard setback (structures)	6 ft or the setback of the adjacent district, whichever is greater
Rear yard setback (structures)	20 ft or the setback of the adjacent district, whichever is greater
Maximum height	25 ft
Maximum lot coverage (buildings and paved areas)	15% (excluding greenhouses and hoophouses)

(Madison, WI §28.093).

Boston, Massachusetts *(2020 population is 675,647)*
Open Space Subdistricts.

Statement of Purpose.

> The purposes of this article are to encourage the preservation of open space for community gardens... to enhance the quality of life of the city's residents by permanently protecting its open space resources; to distinguish different open space areas in order to provide for uses appropriate to each open space site on the basis of topography, water, flood plain, scenic value, forest cover, urban edge, or unusual geologic features; to prevent the loss of open space to commercial development; to restore Boston's conservation heritage of Olmsted parks; to coordinate state, regional, and local open space plans; to provide and encourage buffer zones between incompatible land uses and mitigate the effects of noise and air pollution; to promote and maintain the visual identity of separate

and distinct districts; to enhance the appearance of neighborhoods through preservation of natural green spaces; and to ensure the provision of adequate natural light and air quality by protecting the supply of vegetation and open space throughout Boston.

Definitions....

Vacant public land - any land owned by a Public Agency that is not in use for an essential public purpose.

Petitioning for Open Space Subdistricts.

Any property owner, or property owner representing a Planning and Zoning Advisory Committee or Neighborhood Council, or the Boston Redevelopment Authority, or the Boston Conservation Commission may petition the Zoning Commission to establish or to substantially change the use of an open space subdistrict within an open space (OS) district.

Land Eligible for Open Space Subdistrict Designation.

Open space subdistricts may be established by the Zoning Commission only on land within an OS zoning district. An open space subdistrict designation imposes land use restrictions... which augment the basic use restrictions pertaining to OS districts.... An open space subdistrict may be established on any land contained within one or more open space districts, provided that such land is:

owned by a Public Agency, including but not limited to the City of Boston, the Boston Conservation Commission, the Boston Parks and Recreation Department, the Boston Redevelopment Authority, the Boston School Department, the Massachusetts Department of Environmental Quality Engineering, the Massachusetts Port Authority, the Metropolitan District Commission, the Boston Public Facilities Department, the Boston Real Property Department, or the Boston Water and Sewer Commission; or

owned by a private person, entity, or conservation trust, such as the Boston Natural Areas Fund, which consents in writing to the establishment of an open space subdistrict on such land.

Any property owner, or property owner representing a Planning and Zoning Advisory Committee or Neighborhood Council, or the Boston Redevelopment Authority, or the Boston Conservation Commission may petition the Zoning

Commission to establish or to substantially change the use of an open space subdistrict within an open space (OS) district.

Minimum Area of Open Space Subdistricts. There shall be no minimum land area requirement for an open space subdistrict.

Community Garden Open Space Subdistricts.

Community Garden open space (OS-G) subdistricts shall consist of land appropriate for and limited to the cultivation of herbs, fruits, flowers, or vegetables, including the cultivation and tillage of soil and the production, cultivation, growing, and harvesting of any agricultural, floricultural, or horticultural commodity; such land may include Vacant Public Land.... (Boston, MA §33).

Kansas City, Missouri *(2020 population is 508,090)*

Urban Agricultural Zone.

Definitions.

The following words, terms and phrases, when used in this article, shall have the meaning ascribed to them in this section, except where the context clearly indicates a different meaning:

Agricultural products - an agricultural, horticultural, viticultural, or vegetable product, growing of grapes that will be processed into wine, bees, honey, fish or other aquacultural product, planting seed, livestock, a livestock product, a forestry product, poultry or a poultry product, either in its natural or processed state, that has been produced, processed or otherwise had value added to it in Missouri.

Blighted area - an area of the city which the city council determines that by reason of age, obsolescence, inadequate, or outmoded design or physical deterioration has become an economic and social liability, and that such conditions are conducive to ill health, transmission of disease, crime or inability to pay reasonable taxes....

Grower UAZ - a UAZ that is:

A qualifying small business approved by the state department of agriculture, unless otherwise exempted as provided in section 74-208 of this article; and

Engaged in growing produce; producing value added agricultural products; raising laying hens (not to exceed 50); raising broiler chickens (not to exceed

650); raising cattle, calves, sheep, swine, ratite birds including but not limited to ostrich and emu, llamas, alpaca, buffalo, elk documented as obtained from a legal source and not from the wild, goats, or rabbits raised in confinement for human consumption (not to exceed 30 collectively); or raising aquatic products as defined by RSMo § 277.024 (no limit)….

Processing UAZ - a UAZ that is:

Meets federal and state processing laws and standards;

Is a qualifying small business approved by the state department of agriculture; and

Processes, for human consumption, any one or more of the following and which shall have been located in the state or within 250 miles of the processing UAZ for not less than 90 consecutive calendar days or the entirety of its life, whichever is shorter, immediately preceding harvesting or slaughter: Produce or any domesticated bird intended for human consumption, cattle, calves, sheep, swine, ratite birds including but not limited to ostrich and emu, aquatic products as defined by RSMo § 277.024, llamas, alpaca, buffalo, elk documented as obtained from a legal source and not from the wild, goats, or rabbits raised in confinement for human consumption....

UAZ eligible area - any area located wholly within the corporate boundaries of the city.

Underutilized urban parcel. A parcel of land that has been:

Vacant or had less than 35 percent of the real property and improvements thereon, if any, utilized to their highest and best use for at least three continuous years; or

A lot owned by the city and which the city has identified as being available for urban agriculture use; or

An economically obsolescent, outdated or failing parcel of land, and which is either:

Located in a census tract or within one mile of a census tract having a poverty rate of 20 percent or greater or a median family income at or below 80 percent of the Kansas City Metropolitan Statistical Area's median family income as measured by the most recent American Community Survey; or

Located in a census tract in which at least 500 persons or 33 percent of the population live more than one mile from a supermarket or large grocery store as measured by the most recent American Community Survey.

Urban agricultural zone (UAZ) - an area containing one or more grower UAZs, processing UAZs, vending UAZs, or any combination thereof.

Value added agricultural products. Any product or products that are the result of:

Using an agricultural product grown in the state to produce a meat or dairy product, intended for human consumption, in the state;

A change in the physical state or form of the original agricultural product;

An agricultural product grown in the state which has had its value enhanced by special production methods such as organically grown products; or

A physical segregation of a commodity or agricultural product grown in the state that enhances its value such as identity preserved marketing systems.

Vending UAZ - a UAZ that:

Is able to accept food stamps under the provisions of the supplemental nutrition assistance program as a form of payment;

Is a qualifying small business approved by the state department of agriculture for a UAZ vendor license; and

Sells no less than 75 percent locally grown produce, locally grown value added agricultural products, or locally grown edible portion or part of any domesticated bird intended for human consumption, cattle, calves, sheep, swine, ratite birds including but not limited to ostrich and emu, aquatic products as defined by RSMo § 277.024, llamas, alpaca, buffalo, elk documented as obtained from a legal source and not from the wild, goats, or rabbits raised in confinement for human consumption.

Location of UAZ.

A UAZ shall fall, in whole or in part, within the UAZ eligible area and include one or more underutilized urban parcels within its boundaries.

Application.

The application to establish a UAZ shall be in such form as the director may elect to require, but shall include, at a minimum, the following:

An identification of the type(s) of UAZ the applicant is seeking to establish;

An identification of the specific agricultural products that the applicant seeks to grow, process or vend;

The number of jobs anticipated to be created;

The duration of the ad valorem tax abatement being requested;

Verification of state department of agriculture approval, if applicable;

Confirmation that the applicant currently possesses the ability to control the site through ownership or leasehold interest;

A business plan containing sufficient information to enable a meaningful consideration of the proposed UAZ's viability;

Such financial records as may be required for purposes of establishing that the applicant is a qualifying small business and has a viable plan of financing the implementation of the UAZ;

Identification of the site improvements the applicant proposes to make and a timeline for the same;

Identification of those factors that the applicant reasonably believes support a determination of blight and substantiating documentation demonstrating the presence of such factors;

Written consent of the owners of all the real property included within the proposed UAZ; and

If the applicant is proposing to establish a vendor UAZ, documentation that the applicant currently possesses a UAZ vendor license and the ability to accept food stamps under the provisions of the Supplemental Nutrition Assistance Program as a form of payment in selling products to consumers.

An identification of the objectives the proposed UAZ seeks to further, which shall include one or more of the following: redeveloping or reusing idle and/or blighted urban properties, promoting innovation in agriculture and sustainable land use practices, eliminating food deserts, creating urban agriculture employment opportunities, expanding local agriculture-related business, engaging in community outreach to promote healthier lifestyles and safe and organic

gardening practices, and improving access to locally grown, processed and marketed healthy foods.

The city or such entity as the city may elect to contract with for purposes of assisting it in matters of economic development shall review the application, determine its sufficiency and apprise the applicant of any changes that are required as a condition of its further processing or approval.

Joint applications permissible.
One or more businesses may submit a joint application to establish a UAZ that is proposed to include more than one specific type of UAZ. The application shall identify each business by reference to a specific type of UAZ. The sufficiency of the application shall be separately determined with regard to each specific type of UAZ.

Mixed-use UAZ.

A UAZ shall not be required to include more than one specific type of UAZ for approval. Notwithstanding the foregoing, a business may elect to apply for designation as more than one specific type of UAZ, and the requirements applicable to the specific type of UAZ shall be applied in determining which designations, if any, may be approved. The sufficiency of the application shall be separately determined with regard to each specific type of UAZ.

The non-existence or denial of status as a specific type of UAZ shall not impair a business in its lawful operation. For purposes of illustration only, and without limitation, a business approved as a grower UAZ but otherwise not seeking approval or qualified to be approved as a processing UAZ or vending UAZ shall not be precluded from lawfully processing or selling its agricultural products.

Prioritization of grower UAZs; excluded activities.

The city encourages the use of grower UAZs in a manner that primarily supports the expanded availability of healthy foods intended for human consumption. Uses which would result in the production of non-edible agricultural products may be permitted but shall be subjected to increased scrutiny consistent with the objectives of this article and may receive a shorter term of ad valorem property tax abatement, if approved.

The following uses shall be excluded within any grower UAZ:

The raising of fish or livestock not intended for human consumption.

Seventy-five percent locally grown; vending UAZs.

Not less than 75 percent of the agricultural products sold by a vending UAZ shall be locally grown.

Value added agricultural products shall be regarded as being locally grown only if not less than 75 percent of any components therein were locally grown.

For purposes of determining whether the 75 percent threshold has been satisfied, sales shall be measured by the volume or weight of the agricultural products sold consistent with industry standards.

Small business; department of agriculture approval.
Notwithstanding the provisions of the definition for "grower UAZ"... a grower UAZ shall not be required to be a small business approved by the department of agriculture provided the UAZ includes one or more processing UAZs or vending UAZs, each of which satisfies such requirements.

Blight required.

No UAZ shall be established unless the area included therein is a blighted area.

The existence of blighting factors shall be verifiable and substantiated by either a blight study provided by a third party or by other data sufficient for such purposes. Existing blight declarations under any other provision of law or blight studies related thereto may be utilized for such purposes to the extent a predominance of the blighting factors identified therein continue to exist.

The determination of blight may be made at any time prior to receipt of an application to establish a UAZ or contemporaneous with the ordinance establishing the urban agricultural zone board....

Establishment of UAZ board; hearing.

If an application is determined to be eligible for UAZ designation under the provision of this article and the UAZ Act, then the director shall introduce an ordinance to establish an urban agricultural zone board. If blight has not yet been determined, such ordinance shall also include provisions for making such determination.

Upon approval of the ordinance, the urban agricultural zone board shall be deemed established and its members shall be appointed in such manner and for such terms as provided by the UAZ Act.

The urban agricultural zone board shall fix a time and place for public hearing and notify each taxing jurisdiction located wholly or partially within the boundaries

of the proposed UAZ. The board shall send, by certified mail, a notice of such hearing to all taxing districts and political subdivisions in the area to be affected and shall publish notice of such hearing in a newspaper of general circulation in the area to be affected by the designation at least 20 days prior to the hearing but not more than 30 days prior to the hearing. Such notice shall state the time, location, date and purpose of the hearing. At the public hearing any interested person or affected taxing district may file with the board written objections to, or comments on, and may be heard orally in respect to, any issues embodied in the notice. The board shall hear and consider all protests, objections, comments, and other evidence presented at the hearing, The hearing may be continued to another date without further notice other than a motion to be entered upon the minutes fixing the time and place of the subsequent hearing.

Ordinance designating UAZ.

An ordinance designating a UAZ shall not be introduced or considered until the public hearing shall have concluded and the urban agricultural zone board shall have made its recommendation. The city council shall, if it deems designation of the UAZ advisable, adopt an ordinance providing for such designation. The ordinance shall specify the maximum duration of the tax abatement. If the real property upon which the UAZ will be located is leased, the term of the tax abatement shall not extend beyond the term of the lease as the same may be amended. In no event shall the period of tax abatement exceed 25 years.

The city council shall have the discretion to deny or approve such designation with such term of abatement as it shall deem proper notwithstanding the recommendation of the urban agricultural zone board.

Tax incentives.

The portion of real property used as a UAZ designated by the city council shall not be subject to assessment or payment of ad valorem taxes on real property for such period of time as was specified by the ordinance provided for by section 74-211, except to such extent and in such amount as may be imposed upon such real property during such period, as was determined by the assessor of the county in which such real property is located, in an amount not greater than the amount of taxes due and payable thereon during the calendar year preceding the calendar year during which the UAZ was designated.

Water incentives; grower UAZs.

A business within any grower UAZ shall pay such water rates and costs as would otherwise be applicable to such business, provided however that the director of water services may, subject to the availability of funds for such purposes, establish and

administer, or cause to be administered, a program whereby a business within a grower UAZ may apply for and, if approved, receive funds that may be applied by such business to offset any amounts otherwise due.

Sales taxes.
Local sales taxes received from the sale of any agricultural product within the boundaries of a UAZ or from a mobile unit associated with a vending UAZ and transacting the sale within the city's corporate limits shall be directed, deposited and utilized in accordance with the UAZ Act.

Annual reporting.

Those businesses within a UAZ shall submit an annual report to the director no later than May 1 of each calendar year. The report shall be in such form as the businesses within the UAZ may elect to submit, but shall contain sufficient information to enable the director to determine whether the businesses within the UAZ complied with the requirements imposed on them by this article and the UAZ Act and whether they continue to maintain eligibility under the standards applicable to their specific type of UAZ. The failure to submit an annual report within 60 calendar days of its due date shall constitute grounds to terminate a UAZ, in whole or in part.

The receipt and acceptance of an annual report shall not act as a waiver by city of any violation of this article or the UAZ Act nor shall it preclude the city from enforcing any clawback, terminating a UAZ, or taking any other action permitted under law with regard to a UAZ.

Clawback.
If the director determines that any business has violated the provisions of this article or the UAZ Act in such a manner as to render the real property ineligible for the ad valorem property tax abatement, the city shall be entitled to recoup from the business the entirety of the ad valorem property taxes that would have otherwise been due and payable but for their abatement. Any sums collected shall be distributed pro rata to the relevant taxing jurisdictions. This provision shall not be construed in manner that would limit any other lawful remedies otherwise available to the city

Ongoing review.

The director shall review the operations within a UAZ no less than once every five years commencing with the designation of a UAZ, or with such additional frequency as the director may elect to require. Those businesses within the UAZ shall make their records available within ten days of written notice.

The director shall have the right to conduct on-site inspections of any business within the UAZ during regular business hours for purposes of reviewing its compliance with this article and the UAZ Act.

Termination.
The designation as a UAZ and the benefits flowing therefrom shall expire at such time specified in the ordinance designating the UAZ, which period shall not exceed 25 years. Notwithstanding the foregoing, the city council may, by ordinance, dissolve the UAZ, in whole or in part, at any point in time if it determines that the UAZ, or any portion thereof, is not in compliance with the requirements of the UAZ Act or the provisions of this article, or is otherwise no longer in the city's best interests. The approval of a UAZ shall not create any legally cognizable interest in the continuation of a UAZ or any portion thereof.

Laws applicable.
A UAZ shall comply with all federal, state and local laws applicable to the business activities engaged in by the UAZ. Nothing in this article shall be construed as waiving or otherwise modifying any requirement imposed by any other provision of law

Severability.
If any portion of this article is held to be invalid, that portion is deemed severed from the other provisions and the remainder of this article shall be valid. (Kansas City, MO §74-200).

***Johnston, Iowa** (2020 population is 24,064)*
The regulations set forth in this Section, or elsewhere in this Ordinance when applicable, shall apply in the Animal Keeping (A-K) Overlay Zoning District.

Statement of Intent. The A-K District is intended to allow the continuation and development of new areas with a distinctive rural character where the keeping of animals, including livestock and poultry are allowed.

Applicability. The restrictions, regulations, and guidelines on development and construction set forth by this Section shall apply to the A-K Overlay Zoning District shown on the Official Zoning Map of the City. The A-K overlay may be used in combination with the R-E, R-1(100), and R-1(75) Districts.

Livestock keeping is a permitted accessory use to the principal use of a residence within the A-K Overlay Zone subject to the following standards:

Animals and poultry may be kept for personal use only and not for commercial use within the A-K District and as otherwise limited in this Section.

The maximum numbers of animals that may be permitted are subject to the limitations of [the following table]:

Table 8-2. Livestock and Poultry Keeping Standards

Animals Allowed	Area Requirements
Horses, bovine animals, sheep, goats and other similar large animals	One (1) or two (2) adult animals of any one kind or combination thereof may be kept on any one (1) lot with a minimum area of 43,560 square feet. One (1) additional adult animal may be added for each 43,560 additional square feet of lot area.
Poultry, rabbits, mink, chinchillas, pigeons, hamsters, and other fowl or small animals	No more than six (6) of any one (1) or combination of such adult animals may be kept on a lot of less than 21,780 square feet in size. Not more than six (6) of any one (1) kind of such adult animals or combination thereof may be added for each additional 21,780 square feet up to a maximum of 24 animals.

In determining the area of a lot for the purpose of determining the number of animals or fowl which may be kept, only usable land shall be considered. For the purposes of this Section, usable land is defined as that land which due to topography, soil type, drainage pattern, and vegetation coverage shall not cause drainage from animal or fowl waste onto any other property.

There is no limit on the permitted number of juvenile (less than 6 months old) animals permitted on the property provided they are offspring to the adults currently on the property.

All livestock and poultry must be placed in a structurally sound fence, pen or building. All accessory structures and enclosures for protection of the animals, including fences, are subject to the accessory use standards of CHAPTER 177 of this Ordinance.

Grazing of livestock or poultry shall be allowed as follows:

At least 50 feet from any structure either now or in the future used for dwelling purposes.

At least 100 feet from any well being used for potable water.

Animals shall not create or constitute a nuisance, including excessive noise, odor or dust.

All offensive odors created by the animals shall be prohibited. The area where the animals are permitted shall be kept clean and free from debris and animal waste.

Disposal of animal waste shall conform to the current Polk County Local Board of Health rules and regulations.

Any owner of animals shall comply with all statutes, ordinances and regulations regarding health and safety of the State of Iowa, Polk County, and the City of Johnston. (Johnston, IA §172.06).

DIRECT TO CONSUMER SALES

INTRODUCTION

Direct-to-consumer sales—when consumers buy agricultural products directly from farmers—have enjoyed explosive growth over the past twenty years. Direct-to-consumer sales activities can bring fresh produce into areas where access to nutritional food is not readily available, and more generally bring agricultural products to food deserts. In the 2022 Census of Agriculture, 116,617 farms reported more than $3.26B in direct-to-consumer sales, an increase of nearly $458 million from 2017. The number of American farms reporting direct sales was 60,332, roughly 6% of the total number of farms. These farms reported more than $14.2 billion in sales to retail markets. (USDA NASS, 2024).

THE REGULATORY DILEMMA

Naturally, growth of direct-to-consumer agricultural sales of the magnitude described above has created regulatory challenges in many communities. While municipal zoning codes often contain agricultural districts that permit growing crops and produce, and may allow some agricultural production in residential districts, many codes prohibit the commercial sale of such products from the land where they are grown. Direct-to-consumer sales are generally defined as commercial activities that are only allowed to take place in commercial zoning districts. Direct-to-consumer sales of many types of agricultural products are occasional or seasonal. Purchasing land in commercial zoning districts to carry out sporadic sales activities is cost prohibitive for most urban producers.

Three common areas where direct-to-consumer sales and municipal zoning intersect are Community Support Agriculture (CSA) drop-sites, farm stands, and farmers markets.

Community Supported Agriculture (CSA) Drop-Sites

CSAs have become a popular way for consumers to buy local, seasonal food directly from a farmer. In a CSA, a producer offers a certain number of “shares” to the public. The shares consist of a percentage of the farm products grown by the producer. Interested consumers purchase a share (aka a “membership” or a “subscription”) and in return receive seasonal produce each week throughout the farming season. The notion of shared risk is fundamental to the operation of CSAs: in most CSAs, shareholders pay up front for the whole season, and the farmers do their best to provide an abundant

share of produce each week, but without guarantees of specific amounts. For example, yearly variations in weather or other factors may affect harvests, and therefore shares of produce vary greatly from year to year.

Most CSA farms are located outside of city limits. The distribution of products to shareholders that take place on farms is not a concern of municipal zoning. The regulatory issues occur when CSA drop-sites—off-farm locations where shareholders meet producers to receive their shares of produce—are prohibited or severely restricted, either intentionally or unintentionally, by municipal zoning. Having CSA drop-sites that are easily accessible to shareholders are important for the viability and expansion of CSA operations. (Woods, Ernst, and Tropp, 2017).



Figure 8-1. Turtle Farm and CSA Residential Drop-Site; West Des Moines, IA. Photo courtesy of Ben Saunders

Farm Stands, a.k.a. Roadside Stands

Farm stands, also known as roadside stands, may be a common sight in rural areas, yet they are a newer feature in urban areas. Farm stands have historically been on-site structures where produce from the farm is sold. This is still the case for farm stands selling from urban farms. Increasingly, however, producers from rural areas are looking to bring their products closer to consumers via temporary, seasonal stands located off-site—away from the farm—in nearby cities.

Farm stands differ from CSA drop-sites in that sales transactions are not prearranged, but rather buyers and the producer conduct a traditional retail transaction at the stand. They differ from farmers' markets in that a farm stand is a single producer, not a collection of producers. Again, the regulatory problems occur when farm stands are prohibited or severely limited from operating within city limits.

Farmers' Markets

A farmers' market is "a common area where several farmers gather on a recurring basis to sell a variety of fresh fruits, vegetables, and other farm products directly to consumers." (Martinez, et al., 2010). These markets are often a festive affair, offering local musicians and other entertainment, food and drink for sale, and vendors selling crafts, jewelry, and other merchandise.

These markets are unique from most other forms of direct-to-consumer sales in that SNAP benefits, coupons, and vouchers are allowed as forms of payment for produce in participating markets, thus increasing access to fresh food for those who need it most (Wooten and Ackerman, 2013).



Figure 8-2. Des Moines Farmers Market; Des Moines, IA. Photo courtesy of Downtown Community Alliance

Farmers' markets are usually operated by either municipalities or not-for-profit organizations and overseen by a manager and possibly a Board of Directors. These markets typically adopt a set of bylaws or regulations and are funded by assessing rental fees to each vendor (Wooten and Ackerman, 2013).

Farmers' markets can also be operated on different types of land. Common sites for them include public parks, institutions such as schools or churches, and in downtown areas where streets can be blocked off during the market. Some communities will specify which lots or locations a farmers' market is allowed, while others simply will allow the market in certain zoning districts. (PHLP, 2009).

Farmers' markets operate periodically—typically once or twice per week—for a limited number of hours. They are usually operated during the local growing season but can run year-round.

The operators of early farmers' markets found that their activities did not fit neatly into existing zoning regulations for the same reasons as described above for CSA drop-sites and farm stands. As their popularity has increased around the country, however, many municipalities have created code language to accommodate farmers' markets and the land use characteristics they bring to a location.

LAND-USE CONCERNS

Direct-to-consumer sales via CSA drop-sites, farm stands, and farmers' markets frequently trigger common land use concerns regarding traffic, noise, and parking. For instance, drop-sites in residential neighborhoods can spark disputes between neighbors if local traffic is disrupted. Similarly, because farmers' markets are often held on public streets, vehicles must be entirely diverted during market hours.

As with food trucks and pushcarts, temporary vendors such as farm stands and farmers' markets were at one time perceived to have an unfair competitive advantage over brick-and-mortar grocers and other food retailers. This perception has been largely dispelled, with stationary retailers recognizing the best way to get shoppers to a retail area is to offer attractions in that area. The competition offered by a farmers' market that is open 20 to 30 days a year is minimal compared to a retail store that is open 365 days a year.

EXISTING REGULATIONS SURVEY

To address the most common land use concerns, most controls over direct-to-consumer sales operations address hours of operation, days of operation, and parking requirements. Farm stand controls often identify the number of structures permitted and specific setback distances from road rights of way. Off-site farm stands are often treated as temporary uses and regulated through those provisions of the zoning code.

The regulation of farmers' markets is more extensive. These ordinances not only include licensing requirements and restrictions on hours, days, and months of operation, but also usually identify the specific location of the market or the specific zoning districts in which markets can operate. It is often stipulated, either through the licensing process or the zoning ordinance itself, that a certain percentage of vendors must sell produce or other agricultural products, including meat and dairy, to qualify as a farmer's market. Other guidelines may include giving priority to vendors that are local and are producers of the products they are selling. Many require the market to identify a contact person that will be on-site during the market's open hours.

CODE LANGUAGE

CSA DROP-SITES

DEFINITIONS

Kansas City, Missouri *(2020 population is 508,090)*

Community Supported Agriculture (CSA) - an area of land managed and maintained by an individual or group of individuals to grow and harvest food and/or horticultural products for shareholder consumption or for sale or donation. Under the CSA model, shareholders arrange to work on the farm in exchange for a share of the food and/or horticultural products grown on the CSA property and/or pay for a portion of the food and/or horticultural products in advance.... (Kansas City, MO §88-312-02-C).

Minneapolis, Minnesota *(2020 population is 429,954)*

Community supported agriculture drop-off/pick up - location where a farmer delivers or distributes farm shares and individuals pick up their shares at a set time weekly, biweekly or monthly. (Minneapolis, MN §565.40).

GENERAL REGULATIONS

Kansas City, Missouri *(2020 population is 508,090)*

Community Supported Agriculture...A CSA may be a principal or accessory use. A CSA located in a residential zoning district, except R-80 [Residential District 80 which once was the Agricultural and Agriculture zoning districts], requires a special use permit issued in accordance with the special use permit procedures of [special use permits section]. A special use permit shall not be issued unless all of the approval criteria in [special use permits approval criteria section] are satisfied. The permit is also subject to the following additional standards....

> ….Shareholders may pick up food and/or horticultural products grown on the CSA property at the site and may work at the site.
>
> ….Sales and donation of only whole, uncut, fresh food and/or horticultural products grown on the CSA property may be allowed. (Kansas City, MO §88-312-02-C).

Minneapolis, Minnesota *(2020 population is 429,954)*

Allowed accessory uses and structures.

The following accessory uses and structures shall be allowed, subject to the following development standards:…

Community supported agriculture drop-off/pick up. Community supported agriculture drop-off/pick up sites shall be allowed as an accessory use. (Minneapolis, MN §537.110).

***Portland, Oregon** (2020 population is 652,503)*

Delivery Days. Delivery Days are days when deliveries of food or other goods are made to Food Membership Distribution Sites for later pick-up by members of Food Buying Clubs or Community Supported Agriculture Organizations.

Food Membership Distribution Site. A site where items ordered through a Food Buying Club or Community Supported Agriculture Organization are picked up by the members.

Food Buying Clubs are membership organizations. The members, as a group, buy food and related products from wholesalers, distributors, growers, and others. All products are pre-ordered and pre-paid, and at least 70 percent of the products are food.

Community Supported Agriculture Organizations are membership organizations. Individuals or households become members by purchasing a share or a specified amount of an agricultural producer's output in advance. Members receive food items from the producer on a regular schedule.

Use. Food Membership Distribution is accessory to most use categories, but not a primary use on a site.

Residential zones. The regulations of this subsection apply to sites in residential zones that are not in Institutional use.

1. The maximum number of members who may come to the site to pick up items delivered on one delivery day, and the number of delivery days that are allowed in a calendar year are specified in Table 237-2. If a site fits into more than one cell, the more restrictive requirement applies.
2. The operator of a site must select a maximum number of delivery days and maximum number of members who may come to the site, and is responsible for compliance with the regulations that apply to the combination of delivery days and maximum number of members who may come to the site. This may require limiting the number of members who may participate in each order, or moving some deliveries to other locations.

3. Members may pick up items at the site only between 7 AM and 9 PM.
4. Truck deliveries are allowed between 8 AM and 5 PM.
5. Exterior activities, except delivery and pick up, may not occur in the area between the primary building and any street lot line. (Portland, OR §33.237.200, §33.910).

Table 237-2 (edited)

Maximum Members Visiting Site Per Delivery Day	Delivery Days per Calendar ear	Status
Up to 12	Up to 5	Allowed
Up to 12	6–26	Allowed
Up to 12	27–52	Allowed
Up to 12	53–104	Allowed with neighbor notification
Up to 12	More than 104	Not allowed
13–56	Up to 5	Allowed
13–56	6–26	Allowed with neighbor notification
13–56	27–52	Allowed with neighbor notification
13–56	53–104	Allowed with neighbor notification
13–56	More than 104	Not allowed
57–100	Up to 5	Allowed
57–100	6–26	Allowed with neighbor notification
57–100	27–52	Allowed with neighbor notification
57–100	53–104	Not allowed
57–100	More than 104	Not allowed
More than 100	Up to 5	Not allowed
More than 100	6–26	Not allowed
More than 100	27–52	Not allowed
More than 100	53–104	Not allowed
More than 100	More than 104	Not allowed



Figure 8-3. Des Moines Farmers Market; Des Moines, IA. Photo courtesy of Downtown Community Alliance

FARM STANDS

DEFINITIONS

Minneapolis, Minnesota *(2020 population is 429,954)*

Farmstand - a temporary structure for the display and sale of food or ornamental crops grown at a community garden, market garden or urban farm (Minneapolis, MN §565.70).

GENERAL REGULATIONS

Minneapolis, Minnesota *(2020 population is 429,954)*

Farmstands shall be allowed accessory to a community garden, market garden or urban farm, subject to the following:

> The farmstand shall only sell products of the farm or garden occupied and cultivated by the same producer within the City of Minneapolis.
>
> The farmstand shall not exceed a duration of seventy-five (75) days in one (1) calendar year
>
> Sales shall be limited to between 7:00 a.m. and sunset.

Farmstands must be removed from the premises or stored inside a structure when not in operation.

Only one (1) farmstand is permitted per zoning lot.

One (1) sign may be displayed during the growing season but must be removed from the premises or stored inside a structure at other times of the year. The growing season is considered to be the months of April through October.

Farmstands shall not be located in the I3 [General Industrial] zoning district. (Minneapolis, MN §545.480).

South Windsor, Connecticut *(2020 population is 26,918)*

Roadside stands of a temporary and removable nature on a farm for the sale and display of crops grown on the premises shall be allowed, provided that such stand is removed after no more than 120 days of use in each calendar year.

Roadside stands of a temporary and removable nature other than on a farm, for the display and sale of farm produce grown in South Windsor shall be allowed provided the following conditions are met:

a. These roadside stands shall be allowed only during the growing season, and for not more than 120 days of use in each calendar year.
b. They shall be located not less than 20 feet from a street line and not less than 50 feet from any street intersection.

An applicant shall apply to the Zoning Enforcement Officer for a Zoning Permit for uses permissible under this section. (South Windsor, CT §3.2.1(D)).

Nolensville, Tennessee *(2020 population is 13,829)*

Produce or Farm Stand. Permitted in the ER [Estate Residential], V [Village], CS [Commercial Services], and PI [Public Institutional] zoning districts. Farm stands operating as a temporary use shall be open for no more than six (6) months per year. All temporary signs shall be affixed to the stand and, when added together, shall not exceed 35 square feet in area. The sign(s) may contain the name of the stand but shall only contain advertising that pertains to the produce sold at the stand. This type of sign will not require the issuance of a sign permit.

The stand shall neither block nor be located within any right-of-way and shall be a minimum of ten (10) feet from the paved surface of the road. When located at intersecting roads, the stand shall conform to clear-view distance requirements [found elsewhere in the code]. (Nolensville, TN §4.1.3(E)).



Figure 8-4. Des Moines Farmers Market; Des Moines, IA. Photo courtesy of Downtown Community Alliance

***Cleveland, Ohio** (2020 population is 372,624)*

Agricultural uses in Residential Districts shall be subject to the following regulations ....

Farm Stands and Sale of Produce. The sale of produce and the placement of farm stands shall be permitted only in accordance with the following regulations:

> *Sale of Produce.* Where such sales have been permitted by the Board of Zoning Appeals, agricultural products, plants, eggs and honey grown or produced on a property or within one thousand (1,000) feet of the subject property may be sold on the premises of an agricultural use in a Residential District if the agricultural use is the only use of the subject property or occupies at least seventy-five percent (75%) of the property or at least four thousand (4,000) square feet. In addition, foods prepared on site or off site may be sold if the principal ingredients are grown or produced on the subject property or within one thousand (1,000) feet of the subject property. No sales shall be made before 8:00 a.m. or after dusk. Food sales shall be licensed by the Cleveland Department of Public Health if such licensing is required in the City's Codified Ordinances.
>
> *Farm Stands.* Where a farm stand has been permitted by the Board of Zoning Appeals, any such farm stand located in a required front yard area in a One-

Family or Two-Family District shall be removed from the front yard or stored inside a building on the premises during that time of the year when the garden or farm is not open for public use. Farm stands shall not occupy more than two percent (2%) of the subject property's land area and, in One-Family and Two-Family Districts, farm stands also shall not exceed two hundred (200) square feet in area on the subject property. A farm stand shall be set back at least eighteen (18) inches from any lot line.

Board of Zoning Appeals Approval. No agricultural produce or related products may be sold from the property of an agricultural use and no farm stand for the sale of such products may be located on the property unless the Board of Zoning Appeals determines, after public notice and pubic hearing, that the farm stand and sales will meet a community need without adversely affecting the neighborhood. In making this determination, the Board shall consider, among others, the following factors:

a. The nature of nearby uses of land with respect to their sensitivity to the activity associated with farm stand sales;
b. The proximity of the farm stand to one (1) family and two (2) family houses;
c. Traffic volumes on the street on which the subject property is located;
d. The availability of off-street or on- street parking to serve the farm stand use;
e. The proximity of other farm stands serving the immediate area; and
f. The maintenance of a substantially unobstructed view in the setback area which shall include a clear view through the farm stand above a height of three (3) feet. (Cleveland, OH §337.25).



Figure 8-5. Des Moines Farmers Market; Des Moines, IA. Photo courtesy of Downtown Community Alliance

PUBLIC MARKETS

GENERAL REGULATIONS

Missoula, Montana *(2020 population is 73,489)*

Public markets may be established in the city limits, within the following zoning districts: CBD-4, C1-4, C1-4, C2-4, M1R-2, M1-2, and M2-4 or in a specifically designed or designated city park as authorized by the city council.

A public market may not be established in any manner that impedes or impairs emergency response service ingress and egress, or impedes or impairs any emergency response service access to any fire hydrant or building. No public market vendor or any vehicle shall be located within fifteen feet (15') of any fire hydrant.

A public market may not be established or allowed to operate on or within the public right-of-way of any federal or state highway route or any main arterial streets within the City limits.

The commodities sold at a public market established pursuant to this chapter shall include, but are not limited to, farm and garden produce, meat, poultry, fish, dairy products, baked goods, preserves, arts, crafts, handcrafted, or sewn products. Any commodity offered for sale at any public market must be approved for sale at any table,

booth or stall pursuant to the adopted by-laws for the specific public market and also must comply with state and local laws.

A public market may only be established and authorized by Resolution. Any person or entity desiring to establish a public market shall request an enabling resolution from the city council stipulating the purpose, boundary, type, days and hours of operation of the public market, and whether the public market shall be designated as an authorized farmers market.

All public markets properly adopted by Resolution of the City Council prior to October 1, 2012 shall be deemed and recognized as authorized public markets.

Public markets shall be open only on the days designated by the city council.

...[D]uring the hours of operation of any city approved public market, no street vending operations on public property or public right-of-way may conduct business within a minimum of three hundred feet (300') of a public market boundary, and as specified in the resolution creating the public market unless operating as part of another city approved public market. Participating members of any public market must keep their vending operations within the city council approved boundaries of the public market during the operating hours of the public market.

Public markets located on public open space or public right-of-way may only operate within the hours designated by the City Council. Public markets located in a building shall operate for a maximum of 4 hours three days a week during any months of the year, or as designated by City Council.

All public markets located on public open space or public right-of-way shall operate only during the months of May, June, July, August, September and October of each year. Public markets located in a building shall operate only in the months as designated by City Council.

Each public market and each individual stand or booth selling produce, baked goods, preserves, meat, poultry, fish, dairy products or any other commodity that may be a health concern shall operate according to the rules and regulations of the City of Missoula, the Missoula City-County Health Code, Missoula City-County Health Department and the State of Montana, specifically including, but not limited to, Title 50, Section 50, Parts 1 and 2 of the Montana Code Annotated. Each individual stand or booth selling food or drink shall be required to obtain any permit or approval from the city-county health department which is required by State law, the Missoula City-County Health Code or City Ordinance. The operation of any individual stand or booth shall be

subject to regulatory compliance or closure by the city-county health department in the event of a violation, and the health department shall be empowered to suspend any of its permits already issued until the violation is corrected.

All food and beverage products must be properly handled and stored. No food or beverage products shall be left in an individual stand or booth overnight.

Each public market and each individual stand or booth selling any commodity shall comply with all applicable Business Licensing provisions set forth in the Missoula Municipal Code including, but not limited to, Chapter 5.08 and 5.56.

Cats, dogs and other animals shall not be permitted within the boundaries of any public market, unless the animal is a service animal as defined by §6.07.020(E) of the Missoula Municipal Code. All animals, except a service animal, should be prohibited from coming within 15 feet of the boundaries of a public market.

Exclusions.

This ordinance shall not apply to any temporary church, civic, fraternal organization or school fund-raising event.

This ordinance shall not apply to a market or activity located within the boundaries of the University of Montana and Southgate Mall unless market or activity constitutes a farmers market as defined herein.

Farmer's markets proposed on County owned land shall obtain the local government approval required by Title 50, Chapter 50 MCA) from the Missoula County Commissioners.

A current copy of the by-laws or other operational documents pertaining to the operation of any public market shall be placed on file with the city clerk's office and shall be available for public review and inspection. By-Laws must be filed with the city clerk's office no later than 5 business days after approval of a Resolution authorizing and establishing the public market.

Whenever the city council deems it in the public interest to do so, it may, by resolution adopted by two-thirds vote of all the members of the council, revoke any resolution authorizing and establishing a public market under this chapter. (Missoula, MT §8.18).

Salem, Ohio *(2020 population is 11,915)*

"Farmers Market" means a location where producers congregate in a temporary open air market to offer one or more of the following food items for sale:

Fresh unprocessed fruits or vegetables, and/or
Products of a cottage food production operation as defined by [Ohio statutes].

“Producer,” for purposes of this chapter, means a person who raises agricultural products on land owned or leased by themselves.

A “temporary open air market” shall be defined as any retail or wholesale vendor or vendors set up on a one time or recurring basis in any space or location on City property not specifically under the control of any City board or commission, that does not otherwise have a permanent structure designed or permanently modified for retail or wholesale marketing purposes.

A special event Farmers Market shall be established for the sale of seasonal produce, related products and plants. Said Market shall be open only to producers of their own farm produce, plants and products. Organizations may contract with the City of Salem for the purposes of coordinating a Farmers Market subject to all rules and regulations of the Service and Safety Director, City ordinances and applicable state laws.

The location of a Farmers Market shall be at 568-600 East State Street subject to the approval of the City Service and Safety Director in accordance with all local, state and federal laws.

A Farmers Market may be held weekly at 9:00 a.m. to 5:00 p.m. from April 1 through October 30 of each calendar year subject to the approval of the City Service and Safety Director.

An organization responsible for coordinating a Farmers Market shall provide to the City Service and Safety Director a list of vendors who will be participating in a Farmers Market. The list shall contain the name, address, and contact number of each producer or other vendor, products to be sold, dates of participation in a Farmers Market and any other information required by the City Service and Safety Director. Along with the above referenced list, the City Service and Safety Director must be provided a copy of any required food service licenses or other applicable licenses for each producer or other vendor.

Rules and regulations governing the operation of and participation in a Farmers Market shall be established by the City Service and Safety Director and shall be provided to vendors participating in a Farmers Market.

A Farmers Market is limited to the sale of food and food products with the exception of plants and flowers. Incidental services may be offered where the vendor is participating as a “producer” as defined in this Chapter.

Any item sold must meet all federal, state, county and local health codes.

No person shall purchase in a Farmers Market any produce or items for the purpose of reselling the same again in the market or elsewhere in the City during market hours.

The City Service and Safety Director, or his or her designee may prohibit the participation of any producer or other vendor if there is an infraction of the City Health Code, if there is any health, safety or welfare issue as determined by the City Service and Safety Director or his or her designee, if the vendor is selling products or articles expressly prohibited in this Chapter or by regulation, or if the documentation required by this Chapter have not been properly filed with the City Service and Safety Director.

No person shall bring onto or place into any trash receptacle of the City, any garbage, litter or filth not associated with the immediate operation of an authorized vendor's booth, stall or space at the Farmers Market. Failure to remove the same to the extent that it accumulates at any market space assigned to an authorized vendor may result in the immediate or future revocation of authority to participate in the Farmers Market. (Salem, OH §727).

Portland, Oregon *(2020 population is 652,503)*

Farmers Market. Farmers Markets are events where farmers, ranchers, and other agricultural producers sell food, plants, flowers, and added-value products, such as jams and jellies, they have grown, raised, or produced from products they have grown or raised. In addition, some vendors sell food that is available for immediate consumption on site, and some may be community groups, services, or other vendors or organizations. Farmers Markets occur on a regular basis in the same location. They are free and open to the public. Some markets are seasonal, while others occur year round (Portland, OR §33.910).

Farmers Markets are allowed ... on a site with an institutional use, and on sites in the IR [Institutional Residential], RM1 – RM4 [Residential Multi-Dwelling], RX [Central Residential], C [Commercial/Mixed Use], E [Employment], I [Industrial], CI [Campus Institutional], and OS [Open Space] zones.

The market may be open up to 70 days per calendar year.

Vendors. [The following] calculations are based on the number of vendors, rather than linear or square footage. Those who do not sell any products or services, such as community groups and music areas, are not included in these calculations.

> *Category One:* Agricultural Producers. At least 50 percent of vendors must be farmers, ranchers, and other agricultural producers who sell food, plants, flowers,

and added-value products, such as jams and jellies, they have grown, raised, or produced from products they have grown or raised.

Category Two: Other Food. Up to 50 percent of market vendors may be those who sell food, but do not fit into the first category. This includes sales of wild-caught fish, freshly made food available for immediate consumption on site, cheesemakers who do not raise their own animals, and the like.

Category Three: All Other. Up to 20 percent of market vendors are not required to be related to agriculture or food. For example, a market may have 50 percent of vendors in Category One, 30 percent in Category Two, and 20 percent in Category Three. Another market may have 70 percent of vendors in Category One, 10 percent in Category Two, and 20 percent in Category Three. A third may have 60 percent of vendors in Category One, 35 percent in Category Two, and 5 percent in Category Three.

The market cannot obstruct a path that is part of a required pedestrian circulation system.

The market manager must retain organic certification information on site and must post a sign in a prominent location that reads “Questions about organic certification? Contact market manager,” and that also includes a phone number for the market manager. (Portland, OR §33.296.030(D)).

FOOD TRUCKS AND PUSHCARTS

INTRODUCTION

Over the past decade, mobile food vending has emerged as a form of urban agriculture, presenting numerous economic opportunities, diverse culinary experiences, and contributing to a sense of community. Historically speaking, like most other forms of urban agriculture, mobile food vending often faces barriers in the form of municipal zoning regulations. However, more municipalities are reducing such barriers, especially after the COVID-19 pandemic highlighted the importance of local food businesses.

Both food trucks and push carts are seen as part of a rapidly emerging culinary scene in many of America's largest cities and contribute to the image of these cities as vibrant urban environments. Food trucks and pushcarts can bring food options to areas lacking restaurants, including business parks, apartment complexes, and some retail areas. Such retail areas receive the added benefit of drawing new customers to the stores. They can also bring fresh produce and other grocery-type items to areas that are considered "food deserts." They also provide opportunities for entrepreneurs who may not be able to afford the start-up costs of a traditional restaurant. Contrary to the myth that mobile vending poses a threat to public health, modern street vendors generally must meet the same public health standards as brick-and-mortar establishments. (Morales and Kettles, 2009).

LAND USE ACTIVITIES

Both food trucks and pushcarts may sell prepackaged food or food cooked in a commercial kitchen, while some food trucks offer fare cooked from scratch in an on-board kitchen. However, these food trucks are not your father's hot dog wagons. The latest styles of food trucks, for example, include large vehicles with restaurant-grade cooking equipment and sanitation systems for preparing gourmet selections.

There also has been a recent trend towards food truck parks where customers can choose from a variety of mobile vendors in one location.

LAND-USE CONCERNS



Figure 9-1. Powered by Fries Food Truck; Des Moines, IA. Photo courtesy of Zachary Mannheimer

Several criticisms are often leveled at food trucks and pushcarts. One common criticism is that they cause congestion on sidewalks and in parking areas where trucks are located. While it is true that it is usually necessary for customers of mobile vendors to line up on sidewalks and in other public areas, anyone who has watched customers of food trucks queue to place their order will notice that they almost always form a single-file line along the edge of the sidewalk or in other areas to allow pedestrians to pass. It is also in the interest of mobile vendors to see that sidewalks don't become congested, in order to maintain good relations with businesses and customers. In this case, common sense trumps the need for regulation.

Another common concern is that mobile vending results in litter problems as customers discard wrappers and napkins after consuming their food. Most municipalities, however, require mobile vendors to provide trash receptacles. Moreover, it is again in the interest of the vendor to maintain good relationships in neighborhoods they frequent, and so most make special efforts to leave an area at least as clean as it was when they arrived.

Perhaps the most often cited reason for restrictive regulations is that mobile vendors are perceived to have an unfair competitive advantage over brick-and-mortar restaurants and grocers, resulting in long-term harm to those businesses. In *Seven Myths and*

Realities About Food Trucks, Gall and Kurcab (2012) list several disadvantages that mobile vendors face that offset their perceived advantages. They include:

- Mobile vendors are at the mercy of the weather;
- Seating cannot be provided by mobile vendors;
- With no fixed location, customer loyalty is more difficult to build;
- By necessity, mobile vendors must offer a much smaller selection;
- Mobile vendors can serve only a fraction of the customers of a restaurant.

Comparing mobile vendors to brick-and-mortar restaurants is an apples-to-oranges comparison. They appeal to different clientele, generally in different locations, with different offerings. In fact, restaurateurs in many cities have started their own food truck businesses in order to market their restaurants, or to experiment with new offerings to reach different customers.

EXISTING REGULATIONS SURVEY

Nowadays, numerous municipal codes have been updated to reflect the current realities of mobile food vending. These laws are no longer specifically aimed at ice cream trucks and hot dog carts, they are very broad. For example, several cities' existing regulations prohibit food trucks from operating from certain times of the day and in certain proximity to other businesses and/or pedestrian pathways. All regulations surveyed subject food trucks and pushcarts to a licensing scheme. Common provisions include:

- Mobile food vendors are often limited to doing business on specific streets or in defined geographic areas of the city.
- Some cities require the mobile vendor to locate on a lot that has a principle use in place (if locating on private property); in other words, the mobile vendor cannot be the only existing use of the lot.
- Permissible hours of operation are generally specified, and mobile food vendors are often allowed to remain in a single location only for a specified period of time.
- Mobile food vendors are generally required to locate a specified distance away from restaurant entrances and driveways.
- Mobile vendors must not impede either pedestrian or vehicular traffic.
- Use of signage separate from what may appear on the side of the cart or truck itself is generally prohibited.
- Use of sound systems for any purpose is generally prohibited.
- Trash receptacles must be provided by the vendor.
- Liability insurance is generally required as part of the licensing scheme.

CODE LANGUAGE

FOOD TRUCKS

DEFINITIONS

Raleigh, North Carolina *(2020 population is 467,665)*

Mobile Retail - The short-term sale of permitted items or services, including prepared food and beverages, from one or more temporarily stored and licensed motorized vehicles, travel trailers transported by a licensed motor vehicle, or food truck, collectively referred to within this section as 'mobile retail vehicles'. In no instance shall alcoholic beverages exceed 70% of the total annual sales of each temporary mobile retail vehicle. (Raleigh, NC §6.4.11(C))

Oakland, California *(2020 population is 440,646)*

"Food vending" means the business of selling, or causing to be sold from a food vending facility, raw or cut fruit, produce, prepared foods and non-alcoholic beverages, and/or prepackaged foods and beverages, where:

> Food is prepared off-site in a commercial commissary and/or prepared on-site within the food vending facility, per Alameda County Heath Regulations;
>
> Food is ordered and served from the truck, trailer, pushcart, or other equipment or vehicle as permitted by Alameda County Environmental Health;
>
> Fruit and produce is sold to customers without preparation or cooking by a vendor;
>
> Food is served outdoors or under a non-permanent structure;
>
> Food is paid for prior to consumption; and
>
> Food and beverages are prepared and sold for on-site or off-site consumption.

"Food vending facility" means a truck, trailer, pushcart, stationary cart or other equipment or vehicle from which food vending services are provided, as permitted by the Alameda County Environmental Health Department. Food vending trucks and trailers must be less than eighteen feet, six inches (18' 6") in length, eight feet (8' 0") in width, and ten feet, six inches (10' 6") in height, measured from bottom of tire. Not included in this definition is the preparation of food and serving of food outside of a vehicle, typically under a tent, canopy, or from a booth. (Oakland, CA §5.51.020).

Greensboro, North Carolina *(2020 population is 299,035)*

Mobile food unit shall mean a vehicle-mounted, vehicle-towed, or vehicle-carried, food service establishment designed to be readily moved and which is defined in [North Carolina Administrative Code].

Mobile food vendor shall mean a person or persons that prepare or serve food and/or beverages for sale to the general public on a recurring basis from a vehicle-mounted, vehicle-towed or vehicle-carried food service establishment designed to be readily moved and shall be either a motorized mobile food vendor, pushcart mobile food vendor, nonprofit on-premises mobile food vendor, or a nonprofit off-premises mobile food vendor.

Motorized mobile food vendor shall mean a person or persons that prepare or serve food and/or beverages for sale to the general public on a recurring basis from a "mobile food unit" as defined in [North Carolina Administrative Code].

Nonprofit on-premises mobile food vendor shall mean a nonprofit organization, as defined in the Greensboro Code of Ordinances section 13-194, which conducts or permits mobile food vendor sales within the real estate owned by their not-for-profit organization or conducts or permits sales within the principal place of business of their nonprofit organization.

Nonprofit off-premises mobile food vendor shall mean a nonprofit organization, as defined in the Greensboro Code of Ordinances section 13-194, which conducts or permits mobile food vendor sales outside the real estate owned by their not-for-profit organization or conducts or permits sales outside the principal place of business of their nonprofit organization.

Pushcart shall mean any mobile piece of equipment or vehicle from which a pushcart mobile food vendor conducts sales and is defined in [North Carolina Administrative Code].

Pushcart mobile food vendor shall mean a person or persons that prepare or serve food and/or beverages for sale to the general public on a recurring basis from a mobile piece of equipment or vehicle which serves hot dogs or foods which have been prepared, preportioned, and individually prewrapped at a restaurant or commissary, or which serve foods and/or beverages exempt from health department regulations.

Vendor shall mean a person who hawks, peddles, sells or offers for sale food. (Greensboro, NC §26-232).

LICENSING

Greensboro, North Carolina *(2020 population is 299,035)*

The permit required shall be issued only after the issuance of an appropriate license in accordance with... this Code. Application shall be accompanied by payment of a fifty-dollar permit fee annually for each mobile food vendor, motorized or mobile food vendor, pushcart for which the permit is sought.

The application for a permit shall include:

> The name, home and business address of the applicant, the name and address of the owner of the vending business, or of the pushcart to be used in the operation of the vending business if other than the applicant;
>
> A description of the types of food and beverages to be sold;
>
> A description (including the size) and a photograph of any pushcart, trailer, or vehicle to be used in the operation of the business, including, if applicable, the license and registration number of any vehicle used in the operation of the business to restock or transport a pushcart;
>
> Two (2) prints of a full-face photograph, taken not more than thirty (30) days prior to the date of the application of any person who will sell or offer for sale any food or beverage within the city;
>
> A copy of any approval required by the Guilford County Health Department pursuant to the rules governing the sanitation of restaurants and other food handling establishments... and any other approval required by a governmental unit for the preparation and service of food;
>
> Proof of an insurance policy, issued by an insurance company licensed to do business in the State of North Carolina, protecting the permittee and the city from all claims for damages to property and bodily injury, including death, which may arise from operations under or in connection with the permit. Such insurance shall name the city as additional insured and shall provide that the policy shall not terminate or be canceled prior to the expiration date without thirty (30) days' advance written notice to the city. Such insurance shall afford minimum limits of one hundred thousand dollars ($100,000.00) per person bodily injury, three hundred thousand dollars ($300,000.00) per occurrence bodily injury, and twenty-five thousand dollars ($25,000.00) per occurrence property damage.

All items listed in the permit application are required annually for renewal of permit. (Greensboro, NC §26-231 -§26-243).

LOCATIONAL RESTRICTIONS

Oakland, California *(2020 population is 440,646)*

The permitted location of individual mobile vending facilities is hereby regulated by this Section. This Section suspends O.M.C. Section 5.51.040, "Conflicting Provisions," and O.M.C. Section 5.51.50 A., B. and C., "Mobile Vending Program Permitted Area" for mobile vending facilities and replaces O.M.C. 5.51.50 A., B., and C. with the following location requirements:

> Mobile vending may be located on publicly-owned property or in the public right-of-way in any commercial or industrial zoning district, subject to the requirements of Chapter 5.51 and its implementing Administrative Guidelines, with the exception of Section 5.51.50 A., B., and C. Additionally, individual mobile vending facilities are permitted on private property (such as a vacant lot) in the City wherever a limited service or full service restaurant is permitted under the Oakland Planning Code. Sidewalk vendors (as defined in the Administrative Guidelines) may further operate as follows:
>
> > Roaming sidewalk vendors may operate in any zoning district in the City, provided that during a transaction, they comply with applicable buffer distances.
> >
> > Stationary sidewalk vendors may operate in any zoning district not exclusively zoned residential, subject to the applicable buffer distances.
> >
> > A location for an individual food vending facility shall be permitted if it complies with the distances specified below:
> >
> > > Mobile food vending facilities may be located in a parking lane and may vend from multiple locations, without limitation, as long there is a three hundred (300) foot buffer from another vendor or limited or full service restaurant, unless the vendor or limited or full service restaurant provides a written waiver, in which case the food vending facility may be permitted.
> > >
> > > Sidewalk mobile food vendors (as defined in the Administrative Guidelines) operate on sidewalks and may vend from multiple

locations, without limitation, provided they allow a one hundred (100)-foot buffer from another vendor or limited service or full service restaurant unless the City Administrator determines that the buffer is not necessary to protect public health and safety in a particular location, in which case the sidewalk vendor may be permitted.

All mobile food vending facilities must still maintain a three hundred-foot buffer from a school serving children in kindergarten through high school between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday, unless the food vending facility sells "healthy foods," as defined in Administrative Guidelines authorized pursuant to O.M.C. Chapter 5.51, and receives written permission from supervising entity of the school.

Individual mobile food or retail vending facilities cannot block or impede access to:

1. Required parking or driveways;
2. Bicycle racks;
3. Signal crossings;
4. Pedestrian or bicycle routes;
5. Emergency vehicle routes;
6. Building entrances and exits;
7. Required accessibility routes and curb cuts;
8. Trash enclosure areas or access to trash bins/trash enclosures; or
9. Other City facilities, as determined by the City Administrator.

All other location requirements set forth in O.M.C. Section 5.51.050 D through F., (as further clarified in the Administrative Guidelines), shall still apply. (Oakland, CA §8.62.090).



Figure 9-2. The Spot Food Truck at Des Moines Social Club; Des Moines, IA. Photo courtesy of Ben Norris

***Raleigh, North Carolina** (2020 population is 467,665)*

Mobile Retail - Short Term shall be permitted in the following zoning districts: OX, OP, NX, CX, IX, DX, RX, IH

The maximum number of mobile retail vehicles per lot is limited as follows:

> Maximum of 2 mobile retail vehicles on lots of one-half acre or less;
>
> Maximum of 3 mobile retail vehicles on lots between one-half acre and 1 acre; and
>
> Maximum of 4 mobile retail vehicles on lots greater than 1 acre

Food trucks must be located at least 50 feet from the main entrance of any offsite eating establishment or similar food service business, any offsite outdoor dining area, and any offsite permitted food vending cart location, as measured from the designated location on the lot accommodating the mobile retail operation. In the event that one or more of the aforementioned uses locates within the minimum separation requirement subsequent to the food truck location being approved, nothing shall prohibit the food truck from continuing to operate at the approved location unless the long-term mobile retail use is discontinued

Mobile retail vehicles must be located at least 5 feet from the edge of any driveway or public sidewalk, utility boxes and vaults, handicapped ramp, building entrance, exit or emergency access/exit way, or emergency call box and must not locate within any area of the lot that impedes, endangers, or interferes with pedestrian or vehicular traffic. Mobile retail vehicles must be located a minimum distance of 15 feet in all directions of a fire hydrant. Raleigh, NC §6.4.11(C))

Greensboro, North Carolina *(2020 population is 299,035)*

No mobile food vendor shall:

1. Vend within three hundred (300) feet of any church, while such church is holding a religious service.
2. Vend on any paved or traveled portion of a street or on any sidewalk where vending is otherwise prohibited or located in any city-owned parking space, or any handicapped space, fire lane, or loading area; or any grass or landscaped area, except that pushcart mobile food vendors shall be permitted on sidewalks adjacent to and upon property zoned central business, "CB".
3. Vend between the hours of 3:00 a.m. and 7:00 a.m.
4. Leave any pushcart or mobile food unit unattended on a city right-of-way or street.
5. Store, park or leave any pushcart or mobile food unit overnight on any right-of-way or sidewalk.
6. Sell food or beverages for immediate consumption unless the vendor has available for public use their own, or a public, litter receptacle which is adequate and available for the vendor's patron's use and being no more than ten (10) feet distant from the pushcart or mobile food unit.
7. Leave any location without first picking up, removing and disposing of all trash or refuse including products spilled on the sidewalk within twenty (20) feet of the push cart location.
8. Allow any items relating to the operation of the vending business to be placed anywhere other than in, on or under the pushcart except that pushcart mobile food vendors may place hand-squeezed lemonade/orangeade manufacture and sales on the top surface of a single cooler.
9. Set up, maintain or permit the use of any table, crate, carton, rack, or any other device to increase the selling or display capacity of the pushcart.
10. Solicit or conduct business with persons other than pedestrians.
11. Sell anything other than that which the vendor is permitted to vend.

12. Sound or permit the sounding of any device which produces noise, or use or operate any loudspeaker, public address system, radio, sound amplifier or similar device to attract the attention of the public. All mobile food vendors shall be subject to and comply with the standards of the City of Greensboro Noise Ordinance, "Offenses of Unreasonable or Disturbing Sound", the City of Greensboro Outdoor Lighting Ordinance and other applicable City of Greensboro rules and regulations.
13. Vend without the insurance coverage specified in this article.
14. Violate any federal, state, county or city law or regulation that pertains to food, beverages or the preparation or selling thereof.
15. No vendor selling from a pushcart shall:
    a. Vend within ten (10) feet of an entranceway to any building or fifty (50) feet from an open business.
    b. Vend within fifty (50) feet of any driveway entrance to a police or fire station, or within ten (10) feet of any other driveway or of any alley.
    c. Vend within ten (10) feet of the crosswalk at any intersection.
    d. Vend within twenty (20) feet of any bus stop sign.
    e. Vend within ten (10) feet of any fire hydrant or fire escape.
    f. Allow the pushcart or any other item to rest upon, against or hang from any building or structure lawfully placed on public property, without the owner's permission.
    g. Vend within one hundred (100) feet of any other pushcart.
    h. Vend within fifty (50) feet of a sidewalk café that is open.
    i. Pour waste products, (including hot water and drainage from coolers) down a storm drain.
16. Provided further, it shall be unlawful for any person to maintain any pushcart upon any right-of-way or sidewalk which impedes, endangers, or interferes with the travel upon or use of the right-of-way or sidewalk. In the event it becomes necessary for the regulation of traffic or the safety or convenience of pedestrians, any law enforcement officer of the city may direct vendors to move to another location. No person may refuse to comply with a lawful order of a law enforcement officer when the order is given under the authority of this section.
17. No vendor selling from a mobile food unit shall:
    a. Vend within fifty (50) feet of the main entrance of a restaurant during the restaurant's business hours, unless the restaurant gives written permission to the vendor.

b. Vend within five (5) feet from any driveway, sidewalk, utility box or vault, handicapped ramp, building entrance or exit or emergency call box.
c. Vend within ten (10) feet of any fire hydrant or fire escape.
d. Pour waste products, (including hot water and drainage from coolers) down a storm drain.

(Greensboro, NC §26-236).

GENERAL RESTRICTIONS

Raleigh, North Carolina *(2020 population is 467,665)*

Mobile retail vehicles must not occupy any handicap accessible parking space as specified in N.C. Gen. Stat. §20-37.6.

No audio amplification is allowed as part of the mobile retail operation.

Mobile retail vehicles are limited to one (1) A-frame sign per vehicle in accordance with Sec. 7.3.12 and may be displayed during business hours but must be removed daily when the mobile retail vehicle is closed. Signage shall not be illuminated, internally or externally. Signs attached to, painted on or otherwise positioned in or on a mobile retail vehicle shall be exempt from 7.3.15.N.

Hours of operation are limited to the hours between 6 AM and 3 AM. If the mobile retail vehicle(s) is located within 150 feet of a residential zoning district or a building used for single or two-unit living, the hours of operation are limited to the hours between 7 AM and 10 PM.

Any mobile retail vehicle or outdoor seating area shall be a minimum distance of 100 feet from any dwelling in a residential district; however the minimum distance may be reduced to 40 feet provided the standards pursuant to Sec. 7.2.4.E.17.

Restrooms must be provided in accordance with the North Carolina Plumbing code. On-site restrooms shared with an associated principal use may be used to fulfill this requirement.

When in operation, the mobile retail vehicle operator or their designee must be present except in cases of an emergency.

Mobile Retail-Long Term uses must comply with all applicable City ordinances and regulations regarding waste disposal. All waste and trash must be disposed of properly and removed at the end of each day or as needed to maintain the health and safety of the public. City trash receptacles are not to be used for this purpose. All areas within 5 feet of the truck and any associated seating area must be kept clean of grease, trash, paper, cups or cans associated with the vending operation. No liquid waste or grease is to be disposed in tree pits, storm drains or onto the sidewalks, streets, or other public space. Under no circumstances can grease be released or disposed of in the City's stormwater or sanitary sewer system.

With the exception of allowable outdoor seating areas, all equipment required for the mobile retail operation must be contained within, attached to or within 10 feet of the mobile retail vehicle and all food preparation, storage, and sales/distribution must be in compliance with all applicable County, State and Federal Health Department sanitary regulations. (Raleigh, NC §6.4.11(C))

ZONING FOR URBAN AGRICUTLTURE REFERENCES

INTRODUCTION

USDA Economic Research Service. (2024). 2022 Census of Agriculture: Agricultural Census shows strong growth in direct sales from farm and ranchers. U.S. Department of Agriculture. Accessed June 15, 2026, from https://www.ers.usda.gov/data-products/charts-of-note/108821

CHAPTER 1: AQUAPONICS, AQUACULTURE, AND HYDROPONICS

Backyard Aquaponics. (2012). The nitrogen cycle. Accessed June 14, 2026, from https://www.scribd.com/document/717989725/Backyard-Aquaponics-Made-Easy

Diver, S. (2006). Aquaponics: Integration of hydroponics with aquaculture. ATTRA Sustainable Agriculture Program, National Center for Appropriate Technology (NCAT). Accessed June 14, 2026, from https://share.google/AY7jKkmgkaQChWcJl

Morris, J. E. (1991). Managing Iowa fisheries: tilapia culture in Iowa. *Pm (Series)(Ames, Iowa)*.

Rakocy, J. E. (1989). Vegetable hydroponics and fish culture, a productive interface. World Aquaculture, 20(3), 42-47.

Sorenson, R., & Relf, D. (2009). Home hydroponics (Publication No. 426-084). Virginia Cooperative Extension, Virginia Tech. Accessed June 14, 2026, from https://vtechworks.lib.vt.edu/bitstreams/b908486a-6705-4ba5-85f7-231920dbca3a/download

CHAPTER 2: BEES

Chandler, P. J. (2009). A Simple, Sustainable Approach to Small-scale Beekeeping Using Top Bar Hives (3rd ed.). England: PJ Chandler.

Collison, C., & Frazier, M. (2004) Beekeeping Basics. MAAREC. Accessed June 15, 2026, https://portal.ct.gov/-/media/caes/documents/bee/penn_state_beekeeping_basics_agrs93.pdf

Cornell University College of Agriculture and Life Sciences. (n.d.). Overwintering. Pollinator Network. Accessed June 14, 2026, from https://cals.cornell.edu/pollinator-network/beekeeping/overwintering

DK12. (2026). The honeybee. Accessed June 14, 2026, from https://discoveryk12.com/the-honeybee/

Moore, L. J., & Kosut, M. (2013). Buzz: Urban Beekeeping and the Power of the Bee. New York: New York University Press.

New Jersey Department of Agriculture. (n.d.). Best Management Practices for Beekeepers in Populated Areas. Accessed June 15, 2026, chrome-https://www.nj.gov/agriculture/divisions/pi/pdf/guidelines%20for%20keeping%20bees%20in%20populated%20areas.pdf

Tew, J. (2004). Backyard Beekeeping. Alabama Cooperative Extension System.

Virginia Farm Bureau. (n.d.). We would go hungry without our busy honeybees. Accessed June 14, 2026, from https://www.vafb.com/membershipwork/news-resources/honeybees

CHAPTER 3: CHICKENS

Akers, D., Akers, P., & Latour, M. (2002). *Choosing a Chicken Breed: Eggs, Meat, or Exhibition*. Purdue University Extension Services, AS-518-W. Accessed June 15, 2026, https://www.extension.purdue.edu/extmedia/as/as-518.pdf

Hady, A., & Kean, R. (2011). *Poultry in Urban Areas.* UW Extension, A3908-03. Accessed June 15, 2026, https://learningstore.extension.wisc.edu/products/poultry-in-urban-areas-p1463

Murillo, A. C., & Mullens, B. A. (2016). Timing diatomaceous earth-filled dustbox use for management of northern fowl mites (Acari: Macronyssidae) in cage-free poultry systems.

Journal of Economic Entomology, 109(6), 2572–2579. Accessed June 14, 2026, from https://pubmed.ncbi.nlm.nih.gov/27630041/

National Pesticide Information Center. (2013). Diatomaceous earth general fact sheet. Oregon State University Extension Services. Accessed June 14, 2026, from https://npic.orst.edu/factsheets/degen.html.

Oklahoma Department of Health. (2022). OSDH Shares Tips on Safely Raising Backyard Poultry. Accessed June 15, 2026, https://oklahoma.gov/health/news---events/newsroom/2022/april/osdh-shares-tips-on-safely-raising-backyard-poultry.html

University of Maryland Extension. (2013). Raising your home chicken flock (Extension Bulletin EB-409). Accessed June 14, 2026, from https://extension.umd.edu/sites/extension.umd.edu/files/publications/EB-409%202013%20Raising%20Your%20Home%20Chicken%20Flock.pdf

University of Minnesota Extension. (2026). Avian influenza basics for urban and backyard poultry owners. Accessed June 14, 2026, from https://extension.umn.edu/poultry-health/avian-influenza-basics-noncommercial-poultry-flock-owners

Wieland, B & Nolden, N. (2025). *Raising Chickens for Eggs*. University of Minnesota Extension. Accessed June 15, 2026, https://extension.umn.edu/small-scale-poultry/raising-chickens-eggs

CHAPTER 4: GOATS

Adams, R., & Van Metre, D. (2013). Healthy living with goats: An overview of health issues for the backyard farmer. Colorado State University. Accessed June 14, 2026, from https://mountainscholar.org/items/ab1c6225-6753-4ca0-bdfd-e310741e16e5

Bleyer, J. (2011, February 22). Fresh goat milk, dead wood and dubious neighbors. The New York Times. Accessed June 14, 2026, from https://www.nytimes.com/2011/02/23/dining/23goats.html

Duffy, M., & Calvert, J. (2010). *Dairy Goats*. Leopold Center for Sustainable Agriculture, 21. Accessed June 15, 2026, https://lib.dr.iastate.edu/extension_pubs/45/

McLeod, L. (2003, November 29). Goats as Pets. The Spruce Pets; The Spruce Pets. Accessed June 14, 2026 https://www.thesprucepets.com/goats-as-pets-1236834

National Goat Consortium. (2021, December 6). Small goat breeds. Goat Journal. Accessed June 14, 2026, from https://goatjournal.iamcountryside.com/goat-breeds/small-goat-breeds/

Ohio State University Extension. (2017). Goat resource handbook (4-H Publication No. 135R). The Ohio State University, College of Food, Agricultural, and Environmental

Sciences. Accessed June 15, 2026, from https://extensionpubs.osu.edu/goat-resource-handbook/

Oklahoma State University. (1995, February 22). *Goats: (Capra hircus). Breeds of Livestock.* Accessed June 15, 2026, http://www.ansi.okstate.edu/breeds/goats/

Purina Animal Nutrition. (2026). How to get started raising backyard goats. Accessed June 14, 2026, from https://www.purinamills.com/goat-feed/education/detail/how-to-get-started-raising-backyard-goats

Steevens, B., Ricketts, R., & Ace, D. (1993). Feeding and housing dairy goats (Guide G3990). University of Missouri Extension. Accessed June 14, 2026, from https://extension.missouri.edu/publications/g3990

CHAPTER 5: CROP AGRICULTURE IN THE URBAN ENVIRONMENT

Kurutz, S. (2012, December 19). *The Battlefront in the Front Yard.* NY times. Accessed June 15, 2026 at http://www.nytimes.com/2012/12/20/garden/gardeners-fight-with-neighbors-and-city-hall-over-their-lawns. html?pagewanted=all&_r=0

Pingree's Potato Patches," Community of Gardens Story Collection, December 4, 2013. Smithsonian Gardens. Retrieved February 12, 2026, from https://gardens.si.edu/collections/community-of-gardens/

CHAPTER 6: SEASON EXTENDERS

DeLong, E. (2001). Cold frames & hot beds. Cornell Cooperative Extension, Chemung County. Accessed June 14, 2026 athttp://cceschuyler.org/resources/cold-frames-hot-beds-chemung-county

CHAPTER 7: COMPOST

Environmental Protection Agency. (2026). Composting. Accessed June 15, 2026 at https://www.epa.gov/sustainable-management-food/composting.

Environmental Protection Agency. (2025). Composting at Home. Accessed June 15, 2026 at https://www.epa.gov/recycle/composting-home.

Jauron, R. (2013). *Composting Yard Waste.* Iowa State University Extension and Outreach Publication PM 683.

Rosen, C., Shumacher, N., Mugaas, R., and Proudfoot, S. (1988). *Composting and Mulching: a Guide to Managing Organic Yard Wastes: Yard and Garden.* University of Minnesota Extension. Accessed June 15, 2026 https://conservancy.umn.edu/server/api/core/bitstreams/a3f1c2f1-51e6-49b4-bde8-a6b611420f63/content

Cornell Waste Management Institute. (1995). Temperature. Cornell University Cornell Cooperative Extension. Accessed June 15, 2026 https://compost.css.cornell.edu/Factsheets/FS5.html

Starbuck, C. (original author) (2026). *Making and Using Compost.* Missouri Extension. Accessed June 15, 2026 at http://extension.missouri.edu/p/g6956

Texas A&M AgriLife Extension Service. (2009). Chapter 3, composting structures. Earth-Kind® Landscaping; Aggie Horticulture. https://aggie-horticulture.tamu.edu/earthkind/landscape/dont-bag-it/chapter-3-composting-structures/

CHAPTER 8: URBAN AGRICULTURE DISTRICTS

American Planning Association. (n.d.). Knowledgebase Collection – Urban Agriculture. Accessed June 15, 2026 at https://www.planning.org/knowledgebase/urbanagriculture/.

Coffey, J. (n.d.). Agricultural Overlay Zoning. Sustainable City Codes. Accessed June 15, 2026 at https://sustainablecitycode.org/brief/agricultural-overlay-zoning/.

Haywood, K. (2017). *Urban Agriculture: A Guide for Municipalities*. University of Pittsburgh Institute of Politics. Accessed June 15, 2016 at https://iop.pitt.edu/sites/default/files/Reports/Status_Reports/Urban%20Agriculture%20-%20A%20Guide%20for%20Municipalities.pdf.

Healthy Food Policy Project. (2024). Zoning for Urban Agriculture: A Guide for Updating Your Community's Laws to Support Healthy Food Production and Access. Accessed June 15, 2026 at https://healthyfoodpolicyproject.org/key-issues/zoning-for-urban-agriculture.

Hodgson, K. & Campbell, M.C. & Bailkey, M. (2011). *Urban Agriculture: Growing Healthy, Sustainable Places.* APA Planning Advisory Service Report 563. American Planning Association.

CHAPTER 9: DIRECT-TO-CONSUMER SALES

Martinez, S. and 10 others. (2010). *Local Food Systems: Concepts, Impacts, and Issues.* Economic Research Report Number 97. United States Department of Agriculture. Accessed June 15, 2026 at https://www.ers.usda.gov/media/8520/err-97.pdf?v=73685.

Public Health Law & Policy (PHLP). (2009). *Establishing Land Use Protections for Farmers' Markets*. Public Health Law & Policy. Accessed June 15, 2026 at https://farmlandinfo.org/wp-content/uploads/sites/2/2019/09/Establishing_Land_Use_Protections_1.pdf.

U.S. Department of Agriculture National Agricultural Statistics Service (NASS). (2024). *2022 Census of Agriculture: Table 2 – Market Value of Agricultural Products Sold Including Landlord's Share, Food Marketing Practices, and Value-Added Products: 2022 and 2017*. *2022 Census of Agriculture*. Accessed June 15, 2026 at https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_US/st99_1_002_002.pdf.

Woods, T., Ernst, M. and Tropp, D. (2017). *Community Supported Agriculture – New Models for Changing Markets.* U.S. Department of Agriculture, Agricultural Marketing Service. Accessed June 15, 2026 at https://www.ams.usda.gov/sites/default/files/media/CSANewModelsforChangingMarketsb.pdf.

Wooten, H., & Ackerman, A. (2013). *From the Ground Up: Land Use Policies to Protect and Promote Farmers' Markets.* Change Lab Solutions. Accessed June 15, 2026 https://changelabsolutions.org/sites/default/files/From_the_Ground_Up-Farmers_Markets_FINAL_20130415.pdf

CHAPTER 10: FOOD TRUCKS AND PUSHCARTS

Morales, A., & Kettles, G. (2009). *Healthy Food Outside: Farmer's Markets, Taco Trucks, and Sidewalk Fruit Vendors.* Journal of Contemporary Health Law & Policy, 26(20), 1-29.

Gall, B. and Kurcab, L. (2012). *Seven Myths and Realities about Food Trucks: Why the Facts Support Food Truck Freedom.* Institute for Justice.



LEOPOLD CENTER

AgMRC agricultural marketing resource center

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IOWA STATE UNIVERSITY
Extension and Outreach

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