



# THE URBAN ORCHARD TOOLKIT

A step-by step guide to transform your yard into a beautiful space to grow food and community.

Growing food close to home was part of communities for centuries. Today, many homeowners are looking to reinvigorate this tradition and transform their private yards into beautiful, food producing spaces for their personal security and enjoyment, as well as a place for neighbors to gather. Yard farming comes in many forms, and this toolkit provides a model to convert your yard into an Urban Orchard.



The Urban Orchard is a project of The Longspur Prairie Fund and Ugly Food of the North.

To learn more about The Longspur Prairie Fund, visit [longspurprairie.org](http://longspurprairie.org)

To learn more about Ugly Food of the North, visit [fmuglyfood.com](http://fmuglyfood.com)

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## WHAT'S AN URBAN ORCHARD?

An Urban Orchard is a fruit orchard located on a privately owned residential property, designed to be shared with the community. The plants and trees are owned and maintained by the homeowner (or tenant), and the food grown is to be harvested and enjoyed by anyone who wants it or needs it. An Urban Orchard exists to challenge norms and expectations about what private residential yards are to be used for, and to provide access to fresh, locally grown food for neighbors and strangers.

If you love the idea of reimagining and transforming your yard into an Urban Orchard, this step-by-step guide will walk you through all the decisions to determine if it's the right choice for you, and how to do create your own Urban Orchard.

## WHY SHOULD YOU CONVERT YOUR YARD INTO AN URBAN ORCHARD?

There are countless benefits to transforming basic turfgrass lawns into beautiful food producing gathering places. Here are a just few of the reasons:

**It Creates Healthy, Local, DELICIOUS Food:** Over 42 million Americans are food insecure while an estimated two-thirds of Americans are either overweight or obese. Our nation is plagued with an eating disorder where many do not have access to the right kinds of foods in order to live a healthy, active lifestyle. Growing delicious, locally-grown fruits that are free for the taking is a positive way to encourage people to eat more nutrient-dense fruit and less processed, unhealthy food.

**It's a WAY Better Use of Resources:** It's estimated that turfgrass lawns in the United States cover more acres of land than corn, alfalfa, soybeans, orchards, vineyards, cotton, pastures, wheat, and hay combined. Not only do turfgrass lawns use tremendous resources (water, chemicals, etc.), but they also take up space that could otherwise be used to grow food. Turfgrass serves no purpose beyond a pleasing aesthetic. Urban Orchards provide the aesthetic appeal and so much more!

**It Creates a Sense of Place in a Neighborhood:** Many neighborhoods lack nearby parks, or other spaces for neighbors to meet, gather and build community. Without these open spaces for connections and relationship building, neighbors might never have a chance to connect and become neighbors in the truer sense. The Urban Orchard allows homeowners to unlock their yard to become an asset for everyone in a community to come together, enjoy fresh food, learn and grow.

**It Creates an Outdoor Classroom for Food Skills Education:** What better place to teach people about food than the place it's grown? An Urban Orchards create an outdoor classroom right in the heart of neighborhoods for hands-on learning about food from tree to table.

Feeding America, 2015. Hunger Facts & Poverty Statistics. <http://www.feedingamerica.org/hunger-in-america/impact-of-hunger/hunger-and-poverty/hunger-and-poverty-fact-sheet.html?referrer=https://www.google.com/>

Flegal KM, Carroll MD, Kit BK, Ogden CL. Prevalence of obesity and trends in the distribution of body mass index among US adults, 1999-2010. *Journal of the American Medical Association*. 2012; 307(5):491-97.

Diep, Francie. 2011. Lawn vs. Crops in the Continental US. *Science Line*. <http://scienceline.org/2011/07/lawns-vs-crops-in-the-continental-u-s/>

## IS THE URBAN ORCHARD PROJECT RIGHT FOR YOU?

Convinced? Want to be certain? Answer these questions to determine if an Urban Orchard is the right choice for you:

QUESTION	YES	NO
Do you own your home?		
Are you comfortable allowing people you do not know into your yard?		
Do you have a place in your yard with full access to sun? (Fruit trees and shrubs demand full sun (at least 8 hours per day) to flourish.)		
Does your yard have good drainage? (Plants that sit in water for extended periods may suffer from root rot.)		
Do you have access to funding to purchase plants, mulch and cover water costs? (An Urban Orchard does not have to cost much, and local plant nursery or non-profit may be interested in donating plants and/or money to support the project, but make sure that you have secured funding to keep your Urban Orchard dream alive.)		
Do you have an easy source of water? (Water is absolutely critical, especially the first two years. Young trees need approximately 5 to 10 gallons of water per week when the weather is dry.)		
Do you have time to maintain the orchard? Time commitment depends on the size of the orchards. We estimate approximately 1 hour per week for every 500 sq ft. of orchard. Time needs will increase at the beginning and end of season.		

If you answered yes to all these questions, congratulations - you are ready to become an owner and caretaker of an Urban Orchard.

Follow the Step-By-Step Guide on the next page to unlock and transform your yard to grow food and community.

## 10 STEPS TO CREATING YOUR URBAN ORCHARD

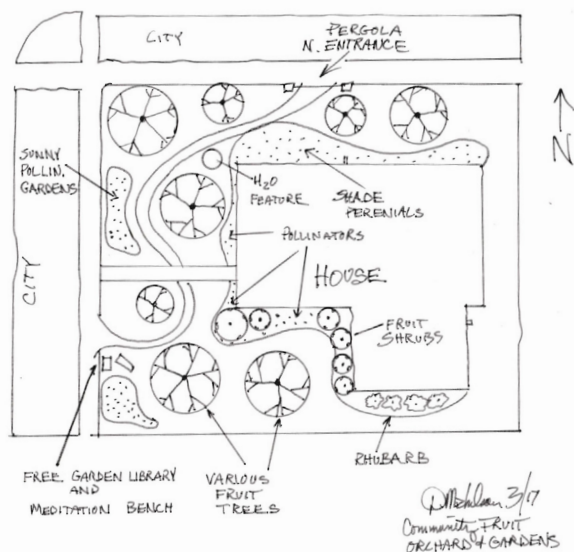
Follow these 10 steps to prepare, plant and maintain your Urban Orchard.

### STEP 1: SELECT YOUR SITE

Look for a sunny spot with well-drained soil and access to water. Consider which area of the yard is most easily accessible to the public. If the backyard is the best option, how will people know it's an open space? Will you put up a sign or walkway that leads people to the orchard? Choose a spot in your yard that's optimal for growth and accessibility.

### STEP 2: CREATE YOUR DESIGN

An Urban Orchard may be as simple as a few apple trees or as elaborate as providing amenities and offerings similar to a public park. There are no expectations on how much food or offerings an Urban Orchard provides. The general goal is encouraging food production in any amount and creating unique spaces for connections and learning. Every yard and project is unique, and therefore should be tailored to the individual. The design below is from the original Urban Orchard project planted in Moorhead, Minn., in April 2017. The variety of plants, trees and beddings put the project cost at approximately \$1,500.



Urban Orchard Riverside Edition, Moorhead, Minn.  
designed by Dwight Mickelson

### STEP 3: MAKE PLANT SELECTIONS

Little Free Orchards host a variety of plants that can be tailored to the homeowners wishes. Some suggested plants to include are:

1. Fruit trees (Apples, plums, pears, cherries, etc.)
2. Fruit bushes (raspberries, honeyberries, juneberries, etc.).
3. Strawberries
4. Rhubarb

**\*\***When reviewing plant options, select disease-resistant cultivars, if possible.

Since the Urban Orchard project was founded in Moorhead, Minn., the suggested plants are specific to this region. It is important to select plants that are zone appropriate. Use the USDA Zone Hardiness map ([planthardiness.ars.usda.gov/PHZMWeb/](http://planthardiness.ars.usda.gov/PHZMWeb/)) to determine what plants are suitable for your climate.

State Extension Services offer a variety of resources to help determine tree and plant varieties that are tested and appropriate for specific region. The University of Minnesota Extension Service offers a variety of guidelines to growing fruits that are well-suited to the Minnesota climate. Find out more at [www.extension.umn.edu/garden/yard-garden/fruit/](http://www.extension.umn.edu/garden/yard-garden/fruit/). A full list of apple cultivars from the University of Minnesota (tested and suited for northern climates) can be found at [www.extension.umn.edu/garden/yard-garden/fruit/apples-in-home-garden/index.html#cultivars](http://www.extension.umn.edu/garden/yard-garden/fruit/apples-in-home-garden/index.html#cultivars).

In addition to the fruit-producing plants/trees, you may wish to plant some native landscapes and pollinator-friendly habitats. The Pollinator Partnership (<http://www.pollinator.org/guides.htm>) offers ecoregional planting guides tailored to specific areas of the United States. Simply enter your zip code for a list of recommended pollinator friendly plants for your region.

### Where to Purchase

When determining where to purchase your plants, look for a local nursery with a good reputation. You may also be able to purchase plants from your local Soil Conservation District, but if you have certain cultivars you wish to purchase, a nursery will likely have a better selection.

Bare-root plants are less expensive than containerized plants, but are available only in the spring and must be planted soon after purchase. Bare-root plants are highly recommended for strawberries, raspberries and other small fruits due to affordability and ease of planting.

## STEP 4: PREP THE LAND

If possible, prepare the orchard land the year before planting. A soil test is key to determining soil pH, nutrient balance and presence of organic matter. Preparing the soil a year before planting allows any issues to be corrected before planting.

## STEP 5: PLANT

Once the soil becomes dry enough in the spring to work, you can begin planting trees. Before you plant, be sure to call the Diggers Hotline (Call 811) to avoid damaging underground utility lines.

### Trees

When planting a tree, dig a hole wide enough that will allow the roots to spread out evenly without cramping or coiling within the hole. Roots can be lightly trimmed, if needed.

Tree depth is important. We generally plant trees and shrubs at a depth so the soil surface is about 1 inch above where the uppermost major roots (crown roots) appear on the trunk. Don't plant too shallowly: Crown roots should not be exposed. Don't plant too deeply: The tissue above the crown roots is stem tissue and is not meant to be below ground, where it can suffer from stem rot. Do not add compost, manure, or other soil amendments in the planting hole. The tree needs to get used to the native soil. As you fill the planting hole with soil, gently but firmly tamp the soil over the roots. When the hole is about three-fourths full, pour a bucket or two of water into the hole to help the soil settle and to remove large air pockets. Then fill the remainder of the hole and water again. Mulch after planting. Grass is a very aggressive competitor with trees, absorbing water and nutrients out of the soil.



Urban Orchard Riverside Edition, Photo from planting day.  
From Left to Right: Peter Schultz, Longspur Prairie Fund,  
Del Rae Williams, Mayor of Moorhead,  
Megan Myrdal, Ugly Food of the North

Planting is the perfect time to engage neighbors and other community members to become aware of your Urban Orchard. Getting the community involved and invested from the start is essential so the Orchard is embraced and enjoyed by the neighborhood. Simply inviting neighbors to join you in the planting process is an easy and helpful first step to build understanding of the Urban Orchard and what it hopes to be for a community.

### **Strawberries & Raspberries**

For strawberries and raspberries, add a couple inches of compost or rotted manure into the row before planting. Mix it thoroughly into the native soil to make a rich, well-drained bed. Just as in the case of trees and shrubs, plant berries so the crown roots are just below the soil surface.

### **STEP 6: PRUNE (maybe)**

If you purchased a tree with branches, minimal pruning is required at planting time. If two branches are rubbing against each other, trim out the least desirable branch, and remove any broken branches. If you plant a larger tree, remove any limbs originating from the base of the tree and any branches lower than 24 inches. More pruning will be required in the spring of the second year. .

If you purchased unbranched “whip” trees, cut the stem 30 inches from the ground. This will stimulate the first flush of branches.

### **STEP 8: WATERING**

Watering is critical at the time of planting. Thoroughly soak the root area before placing your trees. Check on the plants every few days after planting and make sure the soil below the surface never dries completely.

For at least two years, the orchard will need to be watered regularly (about weekly) until the plants have recuperated from their transplanting shock.



#### **Watering Tips:**

1. Water deeply. Roots will grow where the water is. If you water deeply, the roots will grow deeper.
2. Keep the foliage dry when watering to prevent foliar diseases.
3. Watering in the morning is best; watering at night is worst because you encourage a humid environment that favors disease.

## STEP 9: MULCHING

Mulch is an essential piece of an orchard. Set mulch in a ring pattern at least 3 feet in diameter. Arrange the mulch so it is at a minimal depth near the trunk and then steadily gets deeper, up to 4 inches along the perimeter of the mulch ring. In this way, the mulch will serve as a reservoir and bring applied water toward the trunk. For fruiting shrubs, keep the mulch minimal at the trunk and extend it out at least 18 inches to either side of the shrub.

## STEP 10: SUPPORT

**Stake Trees:** It's a good idea to stake the tree for the first few years. Either a wooden or metal stake will work. A stake should be placed a few inches away from the trunk of the tree and should be about the height of the tree after being pounded two feet into the ground. Use a wide piece non-abrasive material to fasten the tree to the stake. Avoid narrow fastenings such as wire or twine, as they may cut into the bark.

**Trellis Fruit Bushes:** A trellis can be as simple as a couple of posts and twine for a row of plants, or a decorative obelisk, teepee or arbor for individual or mass plantings. Supporting the plants will not only keep them healthier and more productive, it will also keep them looking nice. Raspberries and gooseberries require support to prevent the canes from wind damage, bending over, cracking, and getting out of control.

## ONGOING MAINTENANCE

To maintain a healthy Urban Orchard, ongoing maintenance is essential. Here are some general guidelines to keep healthy plants, manage orchard foes and keep visitors safe in your orchard.

### Pest/Disease Management:

- Monitor your plants closely to detect the first signs of problems and then take actions quickly.
- Prune on a regular basis to open the plants to good air circulation and sunlight. The best time to prune is late winter
- Sterilize pruning shears between trees if bacterial diseases, such as fire blight or black knot, are in the orchard.
- Remove any rotting or fallen fruits in the orchard.
- Remove weeds, which harbor insect pests.
- Avoid overhead watering, which creates a humid environment for diseases.
- Insect traps are available. Apple maggot traps, for example, can be hung in apple trees to monitor for the presence of the pest. If the pest is not there, you don't need to spray. Monitor weather. Foliar diseases, such as apple scab, are most likely to occur when the spring season is wet.

If pests become pervasive, contact your local Extension Office to learn various methods for pest/disease management.

### Mulching Tips:

1. Organic mulch (wood chips or shredded bark) is preferred. It helps to conserve moisture, moderate soil temperatures, reduces weeds and serves as a barrier between grass and the tree.
2. Rock mulches should not be used. They trap heat and can accelerate bud break.
3. Avoid building mulch up against tree trunks because this could serve as nesting habitat for voles.
4. Organic mulches will need to be replaced periodically as they settle and decompose.

**Wildlife Management:**

Wildlife management depends on what wildlife is in your area. In the Northwest part of Minnesota, we are most worried about voles, rabbits, deer and birds.

- **Voles and Rabbits:** The trunks of the trees can be protected with a ring of hardware cloth wrapped around them. The cloth should be at least 2 feet tall with a mesh of 1/4 inch. Bury it an inch in the ground. Ideally, we should protect the trees up to at least the first branch.
- **Birds:** Nylon netting is the preferred method for bird control. Place the netting before the fruit begins to change color. This is especially important for cherries and junberries. Scare devices such as one-eye plastic balls and plastic owls may work for a day or two, but the birds soon will learn these devices are harmless.
- **Deer:** An 8-foot-tall fence or higher is recommended. Fencing made with nylon is relatively affordable and will work for several years. Metal fencing will last longer but is more costly. The first few years are most critical to help the orchard get established. Electrical fences are most reliable but usually not appropriate for a public orchard. For rabbits, a 2-foot-high fence, buried a few inches in the ground, is recommended. The mesh should be 1/4 inch.

**What if someone gets hurt in my Urban Orchard?**

When someone enters your Urban Orchard, they have a reasonable expectation of not getting injured. As the Urban Orchard owner, you have a responsibility for maintaining a relatively safe environment. Of course, accidents happen even when all the care is taken. When you invite strangers your property (similar to hosting a garage sale) most homeowners insurance companies recommend placing a sign that protects you from injuries. This sign can simply say “Not responsible for accidents or injuries.” This sign should be prominently displayed in a space where anyone who enters the orchards sees it.

**ADDITIONAL RESOURCES**

University of Minnesota Extension Service: Yard and Garden: Fruit. [extension.umn.edu/garden/yard-garden/fruit/#berries](https://extension.umn.edu/garden/yard-garden/fruit/#berries)

Kalb, T. 2011. Starting a Community Orchard in North Dakota, North Dakota State University Extension Service. [nd.gov/ndda/files/Marketing/OrchardManuaFinal.pdf](https://nd.gov/ndda/files/Marketing/OrchardManuaFinal.pdf)

## 10 TIPS TO CREATING COMMUNITY AROUND YOUR URBAN ORCHARD

In addition to the delicious fruit offered in your Urban Orchard, there are many other amenities to consider adding to enhance your garden's community building assets. Consider these 10 tips to create a strong community around your Urban Orchard:

### 1. Share Your Story!

Do you want to be more sustainable? Why do you think urban agriculture is important? Why share your front yard with strangers? Use your social network to tell your Urban Orchard story through photos, video and posts about why this project matters to you -- and eventually, you'll find a community of others who feel the same.

### 2. Provide benches and tables:

Adding a comfortable place for sitting and relaxation will continue to open your orchard for gathering and community building. A picnic table for eating, a bench for reading or a hammock for a casual nap are all lovely offerings to provide Urban Orchard guests.

### 3. Host an Orchard Warming Party:

Some neighborhoods have block parties. You have orchard parties! Invite your surrounding neighbors (maybe 1-2 blocks out) to join you for an evening in the orchard. BYO (food, chair, blanket, beverage, etc.) and allow the community to gather and enjoy. Make sure everyone knows that this space is open for their future enjoyment!



### 4. Engage with Likeminded Organization:

Birds of a feather flock together! The people who will love your Urban Orchard are likely the same people who are members of your local food co-op, regularly attend the farmers market, or support other sustainable food projects in your community. Connect with these food allies and see if they're willing to share with their networks, and/or possibly host an event in your orchard.

### 5. Get a Little Free Garden ([www.littlefreegarden.com](http://www.littlefreegarden.com)):

Little Free Gardens are small-raised bed garden boxes designed to be placed in a households front yard, and the food grown inside is meant to be shared with anyone who wants it or needs it. A Little Free Garden is a great addition to the offerings of an Urban Orchard.



### 6. Host a Little Free Library ([www.littlefreelibrary.org](http://www.littlefreelibrary.org)):

A Little Free Library is a "take a book, return a book" free book exchange. They come in many shapes and sizes, but the most common version is a small wooden box of books. Anyone may take a book or bring a book to share. To start your own Little Free Library, visit [littlefreelibrary.org/start](http://littlefreelibrary.org/start).

## 7. Chalk!

You'd be amazed by the power of good chalking. If there is a sidewalk near your orchard, use this to share information and direct people to the orchard. Simple arrows that say "This way to fresh apples!" or "Check out your Urban Orchard" are easy ways to let people know that the orchard is now a part of the community.



## 8. Maximize signage potential:

Assume people are not familiar with the concept --- what signage do you need to share the story (and purpose) of your Urban Orchard?

## 9. Create a GeoTag

A geotag assigns a geographic location for your Urban Orchard so people can check in + add photos!

**9.1** Login to Facebook on your mobile device. Tap "check in," and type in the name of your Urban Orchard (make sure to spell it correctly!). If your place has not yet been created, you'll be prompted to add it by tapping the name you just typed.

**9.2** When you see a screen with a map of your location and an "Add" button in the right corner, tap the add button.

**9.3** You have a location! Encourage others to tag the location when posting photos from your Urban Orchard or attending an event.

## 10. Send out a press release:

A press release to local media is a key way to spread the word about your orchard to the broader community. A quick interview with a local news anchor in the orchard, or a photo in the local newspaper continues to build the audience who is interested and engaged with your orchard. It's also a valuable way to continue to spread the mission of rethinking private yards as places for food production and community building. A suggested press release is available in the back of the toolkit for use.

## 11. Hide a Geocache:

Geocaching is the recreational activity of hunting for and finding a hidden object by means of GPS coordinates posted on a website. Hiding a geocaching in or near your Urban Orchard will help bring new people to your community space who already have an affinity towards sustainability and protecting the environment.

## 12. Reach out to your local extension office:

Most counties or region in the United States have an extension office which is an incredible resource for gardening enthusiasts. Contact your local office to make them aware of your orchard and see if there are educational opportunities to collaborate or host events.

## FOR IMMEDIATE RELEASE

### CONTACT INFORMATION

[First Name, Last Name]

Email address

Phone Number

### New Urban Orchard Welcomes Community to Enjoy Fresh Food In Front Yard

[DATE] - City/State - The Urban Orchard [Neighborhood Name Edition] is a new community orchard in [City] that welcomes neighbors and strangers to enjoy fresh, locally grown food in a front yard. The orchard is located at [insert address, city] and owned by [insert name of homeowners].

[Insert name of homeowners] decided to plant an Urban Orchard because they believe everyone deserves fresh, healthful foods and wanted to create a space in their neighborhood to gather.

"Food is at the heart of community," says [Insert name of homeowner], owner of Urban Orchard [Neighborhood Name Edition]. "And what better way to

An Urban Orchard is a community fruit orchard located on a privately owned residential property. The plants and trees are owned and maintained by the homeowner, and the food grown is to be harvested and enjoyed by anyone who wants it or needs it. An Urban Orchard exists to challenge norms and expectations about what private residential yards are to be used for, and to provide access to fresh, locally grown food for neighbors and strangers.

Urban Orchards serve a variety of purposes, including:

- **Creates Healthy, Local Food For All:** Nearly 49 million Americans are food insecure while an estimated two-thirds of Americans are either overweight or obese. Growing delicious, locally-grown fruits that are free for the taking is a great way to encourage people to eat more nutrient-dense fruit and less processed, unhealthy food.
- **A Better Use of Resources:** Turfgrass lawns in the United States cover more acres of land than corn, alfalfa, soybeans, orchards, vineyards, cotton, pastures, wheat, and hay combined. Not only do turfgrass lawns use tremendous resources (water, chemicals, etc.), but they also take up space that could otherwise be used to grow food. Urban Orchards provide the aesthetic appeal and so much more!
- **Creates a Sense of Place in a Neighborhood:** Many neighborhoods lack a nearby parks, or other places for neighbors to gather and create connections. Without these open spaces for connections and relationship building, neighbors might never have a chance to connect and become neighbors in the truer sense. The Urban Orchard allows homeowners to unlock their yard to become an asset for everyone in a community to come together, enjoy fresh food, learn and grown.

The Urban Orchard [Neighborhood Name Edition] was planted on [insert date] and includes [what trees, plants, Little Free Library, benches, etc.]. The community is invited to visit the orchard any between [what hours is your orchard open].

###

About: The Urban Orchard was a project started in Moorhead, Minn. by Ugly Food of the North and The Longspur Prairie Fund. Visit their website ([www.fmuglyfood.com](http://www.fmuglyfood.com) and [www.longspurprairie.org](http://www.longspurprairie.org)) to learn more.