



Farmland Access

People interested in starting a small farm as a career face many obstacles, and one of the biggest is access to land. There are several factors that prevent many people from getting started in farming, including loss of farmland to development, acquisition of land by institutional investment funds, the high cost of land, the low purchasing power of new farmers, race-and gender-based discrimination, lack of access to credit for new farmers, and the lack of autonomy in land management for farmers who rent land (Figueroa and Penniman, 2020).

There are creative ways to overcome these barriers, whether alone or jointly with others. Each method has its own unique benefits and obstacles. Some of the barriers are structural and can only be addressed through policy reform. For these, Figueroa and Penniman (2020) outline several strategies to facilitate a transition toward a more equitable food and agricultural landscape. See *Land Access for Beginning and Disadvantaged Farmers* for their reform recommendations on land acquisition, training and technical assistance, and racial justice.

This tipsheet explains some of the considerations prospective farmers can think about when acquiring farmland, including the types of land-use arrangements, what to look for when seeking farmland, and resources for further study including transition tools, farm finance, cooperative farming, and land-access methods.

Types of Land-Use Arrangements

- Sole ownership: Farmer holds all interests as owner
- Whole shared ownership: Farmer co-holds all the interests with other(s)
- Partial ownership: Farmer holds some interests; others hold other interests
- Ownership in the future: Farmer gradually acquires ownership interests
- Lease: Farmer's only interest is as tenant
- Licensing or permitting: Farmer holds no legal interests in the property but has permission to use and/or occupation rights (Ruhf and Wagner, no date)

See:

Finding Land to Farm: Six Ways to Secure Farmland, ATTRA Farm Access Methods, Land for Good

Finding Farmland: Resources to Support Land Access, USDA



Photo: NCAT

Land Transition Tools, Land Stewardship Project
Affording Our Land: Greenhorns Guide to Financial Literacy, Greenhorns
Cooperative Farming: Frameworks for Farming Together, Greenhorns

Farmland Site Assessment

GENERAL SITE CONSIDERATIONS FOR SMALL FARMS (NCAT, NO DATE)

What does your farm need?

- Enough land
- The right climate
- Good soil
- Water
- Utilities
- Road access

Other considerations

- Prior land use
- Housing
- Zoning
- Neighbors

See:

Farmland Assessment Checklist, Penn State

SPECIFIC CONSIDERATIONS FOR ANNUAL CROPS (NCAT, NO DATE)

There are some land characteristics, environmental factors, and logistical considerations specific to land for crop production, whether the purpose is to grow vegetables or row crops. The following list identifies some details a prospective farmer should consider when evaluating a piece of land.

1. How much land?
 - 1-5 acres of productive land
 - 1 farmer = 1 acre of vegetables
2. Full sun
 - At least 8 hours of direct sun exposure
3. Soil
 - Sandy loam or silt loam is ideal, organic matter above 3%
 - Soil should have good drainage and be easily worked
 - Soil testing (local cooperative extension)
 - NRCS Soil Survey: websoilsurvey.sc.egov.usda.gov
 - Water
 - Rainfall patterns throughout the year
 - Irrigation water: 1 acre-inch per week = 27,000 gallons
 - Potable water for handwashing and washing produce
4. Weeds
 - What are the common weeds in your area?
 - Strategy for managing perennial weeds: tarping, cover crops, plastic mulch
5. Deer fencing
 - 8-10 ft. tall deer fence or two-layer electric fence
 - Other wildlife pests: raccoons, rabbits, moles, voles
6. Facilities
 - Propagation greenhouse
 - Equipment storage area
 - Produce washing station
 - Cold storage, walk-in cooler
 - Dry storage area
 - High tunnels
 - Restrooms for employees
7. Transportation to markets
 - Proximity to markets
 - Transportation vehicle: covered, possibly air conditioned

See:

Sustainable Vegetable Production from Start-Up to Market, Chapter 2: Finding a Place to Farm, by Vernon P. Grubinger

ATTRA Topic Page: Specialty Crops

ATTRA Topic Page: Cover Crops

IMPORTANT SITE CONSIDERATIONS FOR FRUIT TREES, GRAPES, AND BRAMBLES (NCAT, NO DATE)

A fruit, nut, and/or bramble planting plan must match the natural conditions of the site. The following list identifies the considerations a prospective grower should think about when evaluating an orchard site.

- These are perennials—they will be here for 10 to 25 years. Choose wisely! It's expensive to find out after the fact that your site is not amenable to fruit production.
- Drainage (air and water) is more important than fertility. Low spots collect frost in spring, and fruit plant roots are intolerant of poor water drainage— asphyxiation and disease follow.
- Related to drainage again, fruit plant roots can tolerate rocky soils better than heavy clays.
- Related to these plants' perennial nature, do any serious soil amending or preparation before planting, e.g., get rid of that bermudagrass (preferably) a year before planting.
- In mountainous regions, the best sites for fruit production will most likely be on ridgetops or the first bench off of the ridge.
- For most fruit trees, north- and east-facing slopes are preferable to south- and west-facing slopes. Grapes, however, like the heat, so south-facing sites are acceptable.
- Sandy loams are best, but some clay loams and even rocky soils can be okay as long as they drain well (if you have doubts, dig a test hole, fill it with water, and see how long it takes to drain).
- Avoid fragipans. Some soils look okay on the surface and even a foot down but can be underlain by a natural, nearly impenetrable compressed layer of clay (fragipan). This can severely limit root development, rendering the plants susceptible to drought as well as drowning.
- If you haven't yet bought your land, consult NRCS soil maps to find the best orchard soils.
- Proximity to woods can be problematic as they are the preferred overwintering sites for plum curculio, and the hardwood trees are alternate hosts for trunk borers, a serious pest, especially for apples.
- Very open and windy sites might require you to brace trees.

See:

Soils and Sites for Organic Orchards and Vineyards, ATTRA

ATTRA Topic Page: Fruit

Considerations for Urban Sites (SPIN Farming, no date)

Urban sites present growers with opportunities, and many obstacles, that are not experienced by rural growers. This list suggests some of the considerations prospective urban farmers should consider when evaluating a site in the city.

- Vehicle access and space for growing beds, a hoophouse, coolers, tool shed, processing shed – ½ to ¾ acre
- Long-term control of lot/land
- Flat terrain with good drainage
- Soil tests for metal or chemical contamination
- At least 8 hours of full sun per day
- Water and electrical access
- Support of neighbors, organizations, and municipal leaders
- Buffer from industrial uses
- Access to public transit
- Municipal policies for urban farming
- Stormwater surge runoff
- Food waste from restaurants
- Green waste from landscaping or municipal collection centers
- overgrown and neglected lots
- existing fencing
- Indications of squirrels, deer, and other animals

See:

ATTRA Topic Page: Urban Agriculture

Considerations for Raising Livestock (NCAT, no date)

As with crops and orchards, land for raising livestock should have good soils, water availability, and adequate fencing. In addition, the land should also be suited to the kind and type of livestock that will be raised regarding vegetation type, slope, and space for facilities. The following list identifies the land characteristics a prospective livestock farmer should think about when selecting land.

WHAT INFRASTRUCTURE DO YOU HAVE? WHAT ADDITIONAL INFRASTRUCTURE WILL YOU NEED?

- Fencing
 - A major expense.
 - Needed for all livestock.
 - Use temporary and electric fence.
 - Adapt existing fence to meet your needs.
- Access to water

- Pond
- Well
- City water
- How are you getting it to your animals?
- Buildings—shelter, feed storage
 - Use what you've got!
 - Shelters don't have to be fancy or expensive.
 - You do need to consider feed storage and handling.

WHAT LIVESTOCK DO YOU WANT TO RAISE?

- Poultry
 - A coop/shelter is needed.
 - Not a large land requirement but need to move them to protect land.
- Hogs
 - Electric wire is a good option.
 - Shade/place to make a wallow.
 - They require feed, so must have the ability to store/handle grain.
 - Not a large land requirement, but they will root and tear up the land they are on. Access to woods and larger areas is good. You will have to let land recover from hogs.
- Sheep/goats
 - Need more secure fencing than cattle (electric fence is a good option)—three strands of barbed wire will not keep them in!
 - They will need hay in the winter, so must have the ability to store/handle hay.
 - With good forage growth you can have approximately five to seven goats/sheep per acre (though it is recommended to start with less).
 - They don't require shelter but are much happier if they have cover from rain and cold wind (especially young animals).
 - They don't require much in terms of a handling facility, but you must have a small area to gather/catch them for healthcare needs.
- Cattle
 - Can be kept in with minimal fencing (barbed wire, a couple strands of electric).
 - They will need hay in the winter, so must have the ability to store/handle hay.
 - With good forage you can have a cow on about 1.5 acres. This is highly variable. See the ATTRA publication *Pasture, Rangeland, and Adaptive Grazing*.
 - They will need hay in the winter, so you must have the ability to store/handle hay.
 - They don't require shelter, but some shade is needed.
 - A headgate/chute is recommended for handling.

WHAT LIVESTOCK IS YOUR LAND SUITED FOR?

- Amount of land
- Forages available
 - Poultry and hogs will eat a little bit of forage but primarily will need grain. Hogs will root for acorns and other nuts in a wooded area.
- – Cows prefer grass, sheep prefer forbs (broadleaf weeds) and grass, and goats prefer browse (brush).
- Terrain
 - Hogs and goats do well in wooded areas. You must let those areas rest and recover.
 - Small ruminants do well in rocky/uneven terrain.

See:

ATTRA Topic Page: Livestock

Finding land to farm can be a daunting task for a new farmer. There are many land-use arrangements a farmer can enter into based on their goals and resources, and the resources listed above (under Types of Land-Use Arrangements) will help demystify these and help prospective farmers choose the type of farm ownership or land-use agreement that meets their needs. In addition to land-use agreements, knowing what to look for while walking a new piece of land is crucial to ensure the farmer starts their operation off with the best possible resource base. The lists in this publication will help farmers match the land to the kind of operation they are interested in. Finally, the organizations listed in Further Resources can provide information on legal arrangements such as land trusts and cooperative farming.

References

Figueroa, Meleiza and Leah Penniman. 2020. Land Access for Beginning and Disadvantaged Farmers. Green New Deal Policy Series: Food and Agriculture. Data for Progress.

NCAT. No date. Workshop: Putting Your Land to Work, June 13, 2019.

Ruhf, Kathryn and Bob Wagner. No date. Farm Access Methods, A Decision Guide. Land for Good.

SPIN Farming. No date. What to Look for in an Urban Farm Site.

FURTHER RESOURCES

Land in Common

landincommon.org

Agrarian Trust

agrariantrust.org

Farmer's Guide to Working with Land Trusts, National Young Farmers Coalition

youngfarmers.org/farmerlandtrustguide

New Communities Land Trust

newcommunitiesinc.com

Northeast Farmers of Color Land Trust

nefoclandtrust.org

Farmland Access Legal Toolkit

farmlandaccess.org

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