

Site Assessment Guide

Complete an assessment of above & below ground site conditions: these are the site details you will need to make when considering where to plant and which fruit & nut tree varieties to choose.

Access

- The site should be easily accessible by foot and ideally by vehicle in case greater maintenance is required (i.e. future tree removal)
- Consider ADA accessibility guidelines.
- Pick a spot (other conditions permitting-see below for more conditions) that makes it easy to check daily or at least weekly.

Soil conditions

- Drainage: Most tree fruits do well in sandy loam to loam soils with good drainage at least 8 inches deep. Heavy clay soils are usually a problem, unless drainage is improved by installing drain tiling, planting on berms or planting in raised beds. [3] [7]
- pH: Most fruit trees do well with a slightly acid to neutral pH (6.0-7.0).
- Test the soil to better understand your conditions and what you can do about them: [UVM Extension Testing Lab](#).
- Go beyond the soil test. Actually dig in to learn more about the soil compaction, drainage, texture, etc. Use the ribbon test to determine where your soil falls on the soil texture triangle. [8]

Hardiness zone

- Select fruit cultivars that are adapted to the [winter hardiness zone](#) of your setting. Winter temperatures affect the survival of most fruit crops.
- Also consider temperature variations that might be influenced by nearby structures that reflect heat, or affect wind patterns or nearby bodies of water that help to moderate temperatures. Planting fruit trees on a gently sloped site where cold air can drain away will lessen frost and freeze damage to blossoms in spring and frost damage in fall. Avoid northern and eastern facing slopes, as they tend to be cooler and may delay ripening of fall-harvested fruits. [3,6]

Sun exposure

- In general fruit & nut trees require full sun (6-8 hours per day). [3]
- Consider how light changes throughout the year.

Water

- Especially in their first years, fruit and nut trees need lots of water to thrive and survive. Consider how you will address this high volume

need. Also take time to think about who will be doing the watering and if it will be accessible to them and easy to use.

Size of planting area

- Tree fruit spacing in-row needs to be about equal to or greater than the expected mature tree/shrub heights.
- Between-row spacing should not be less than the expected mature tree/shrub height, and should account for equipment clearance needs. [3]
- In regions with cold winters and short grower seasons, dwarf apple, apricot, plums, peaches and sour cherries need a spacing of six to eight feet, semi-dwarf trees about 15 feet, standard or full-sized trees about 25 feet, and pears about 30 feet. [4]

Spatial constraints

- Above ground- your planting space should be free from the interference of walls, eaves, sheds, fences, or powerlines.
- Below ground- be aware of underground utilities, contaminated soil, or buried debris on site. [5] If your planting site is between, adjacent to, or near buildings, we recommend that you contact [DigSafe](#) to have the underground utilities marked out before planting.

Clearance needs for sidewalks, patios or driveways

- Consider where unharvested fruit might fall and any associated hazards or unwanted messes that might arise.

Environmental threats

- Is the planting site exposed to any pollutants like road salt?
- Is flooding or soil erosion an issue on the site?

Determine maintenance needs and assign responsibility for upkeep.

- Do you have time to water the newly planted tree(s) until established or will you need assistance? If you need assistance, who can you ask for support?
- How will the tree's natural form fit with the site or will it need regular pruning?
- Does the site have significant wildlife pressure? If so, what can be done to protect your trees (i.e. ability to fence the site or wrap individual trees)?
- Are the selected trees susceptible to common diseases and pests?

Sources:

1. [Cornell: Cornell Guide to Growing Fruit at Home](#)
2. [MSU: Considerations for Growing Backyard Small Fruit](#)
3. [MSU: Considerations for Growing Backyard Tree Fruit](#)
4. [University of Maine Cooperative Extension: Tree Fruits](#)
5. [UCF: Right Tree, Right Place: Site Assessment & Species Selection](#)
6. [UVAC: Rick W. Harper - The Successful Planting Initiative: Conducting a Site Assessment](#)
7. [Vasquez Tree Service: Which is the best soil for planting trees?](#)
8. [Topsoil Characteristics and Ribbon Test for Estimating Soil Texture](#)