Choosing a site for the vegetable garden

The location of your vegetable garden will have a big impact on its productivity and on the types of vegetables that you can grow. When choosing your site, consider climate, topography, exposure, soil conditions, and accessibility.

Climate and topography

Plant growth depends on three climatic factors: temperature range during the growing season, frostfree period, and moisture. You might think that you don't have much choice when it comes to selecting a local site based on climate but there can be a surprising range of microclimates over a small area or even within a garden. While wandering around a potential site in short sleeves on a cool evening you may become aware of warmer and cooler spots. You can also watch for areas where snow first melts in the spring and where plants first green. These are good spots for siting a garden.

Naturally warmer sites occur on south facing slopes and on the lee side of windbreaks. Cold air is heavier than warm air and tends to flow down slopes so avoid placing the garden at the foot of a slope or in low spots. These areas are more prone to frost and are slow to warm up in the spring. Avoid windy locations; if you must plant in a windy spot, build or grow a windbreak. Consider highbush blueberries, hazeInuts or other shrubs.

The garden site should be level or slightly sloped to ensure drainage. Avoid sites that are spongy and slow to drain in the spring. Steep slopes should be avoided to prevent soil erosion; however, contour rows or terraces across moderate slopes can transform them into very productive gardens.

Exposure

Most vegetable plants require full sun. An uninterrupted 8 to 10 hours of unfiltered sunlight is ideal; 6 hours is the minimum. Some vegetables, such as spinach, lettuce, and peas, do well in partial sun with 5-6 hours of direct sunlight and shade or filtered sun the rest of the day. (See section on selected vegetable crops for specific light requirements.) Avoid planting near trees and shrubs: they may cause excessive shading and compete for nutrients and water. Sites too near buildings may also result in plants not receiving enough sunlight. Observe shading patterns throughout the growing season, if possible, before starting the garden.



The potential of this site will be limited by its slope and northern exposure. ©R.Campbell, Dalhousie.

Soil conditions

Good soil is the gardener's key to success. (You'll learn more about soil and how to keep it healthy in 'Improving the Soil'.) Although poor soil conditions can be improved, it may take years. Look for a site with as many good soil qualities as possible. Soil should be loose and well-drained. It should be fertile, high in organic matter, and have a pH of 6.0-6.8. A deep fine sandy loam or silt loam is ideal. Soils with



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23 Sheep Hill Lane, Rm 276 | Haley Institute | Agricultural Campus | Truro, NS Tel 902.893.6666 | dal.ca/extended-learning | extended.learning@dal.ca lots of sand will drain quickly but will not hold the soluble nutrients required for plant growth in the root zone. Heavy clay soils hold nutrients but offer poor aeration and may become water logged. Have your soil tested before you begin gardening, and adjust pH and nutrients the season before, if possible.



Heavier clay soils require extra care if they are to maintain their structure. ©R.Campbell, Dalhousie.

Avoid sites composed of 'fill dirt'. Fill usually consists of subsoil, rocks, and debris and is low in fertility. Also avoid locating the garden on a site where buildings with lead paint have stood; soil lead may be present in toxic amounts.

If you are unsure about your chosen location, have the soil tested for lead content, or have tissue analysis done on some leafy vegetables. A study on the levels of heavy metals in city gardens, and recommendations on how to deal with them, is available through the Ecology Action Centre ecologyaction.ca/content/urban-garden-project.

The Halifax Urban Soil Guide also has useful information on how to deal with pesticide residues and heavy metals in urban soils. It is available at:

ecologyaction.ca/files/images/file/Food/ urbansoilguide.pdf

Accessibility

Locate the garden so that it is easily accessible, both to you and to vehicles that may deliver needed materials such as soil or compost. Watch for hidden obstructions like tree roots, shallow boulders, and utility lines. Shared gardening tools should be stored onsite and made accessible to the community group. A small shed secured with a combination lock works well.

Almost all sites will require some irrigation during the growing season. Locate the garden near a good and accessible source of water or make plans for setting up rain barrels or having water brought to the site.



Vehicle access is critical if you are purchasing compost or other materials in bulk. ©Tracy Kittilsen, Dalhousie.

Consider constructing some waist-high raised garden beds for those with limited mobility. A maze of pathways around garden beds, pole tent trellises or a designated children's garden will also make the garden inviting for young and old to share.

Unfortunately, there is always a risk of vandalism in a public garden. Having the garden visible from neighbouring houses and streets will help deter vandals.



This community garden has a secure tool shed conveniently located at the garden site. © Lana Bos, Dalhousie.

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ACTIVITY Use this report card to assess your site. Mark the green, orange or red square that best describes your site.					
	GOOD		FAIR		POOR
	LOOK OVER THE GARDEN SITE. ARE THERE ANY FEATURES THAT WILL CREATE CHALLENGES (LARGE STONES, BIG TREES, UTILITY LINES, POOLING WATER?)				
	No challenges		One or two challenges		Several challenges
	DOES THE EXISTING VEGETA	тіс	N ON THE SITE LOOK HEALTHY	?	
	Very healthy		Fair		Poor
	IS THE SITE ON A SLOPE? IF SO, WHAT DIRECTION IS THE SLOPE FACING?				
	South slope		No slope		North slope
	IS THERE A GOOD AND ACCESSIBLE SOURCE OF WATER?				
	Yes		Could be arranged		No
	HOW MUCH SUNLIGHT DOES THE SITE GET DURING THE GROWING MONTHS?				
	8-10 hours		6-8 hours		5-6 hours
	DIG A PIT 50 CM DEEP. IS IT DIFFICULT TO EXCAVATE THE SOIL (E.G. COMPACTION OR ROCKY)?				
	Easy		Moderate		Difficult
	WHAT COLOUR IS THE SOIL NEAR THE SURFACE (DARKER SOIL INDICATES MORE ORGANIC MATTER)?				
	Dark brown		Light brown		Grey
	DO YOU SEE ANY EARTHWORMS AS YOU DIG?				
	Lots		A few		None
	FIGURE OUT SOIL TEXTURE USING THE 'FEEL TEST' OR 'JAR TEST' DESCRIBED IN 'SOIL BASICS'.				
	Loam		A bit high in clay or sand		Very high in clay or sand
	HAVE A LOOK AT SOIL STRUCTURE.				
	Soil breaks apart easily		Soil breaks apart with some pressure		Hard soil. Lots of clods.
	IS THERE A RISK THAT THE SOIL MIGHT BE CONTAMINATED WITH HEAVY METALS OR OTHER TOXICS?				
	Low		Moderate		High
	DOES THE SOIL ANALYSIS REPORT INDICATE APPROPRIATE PH?				
	6.5 – 6.8		Slightly high or low		Very high or very low
	DOES THE SOIL ANALYSIS RE	PO	RT INDICATE ADEQUATE LEVEL	s c	DF SOIL NUTRIENTS?
	Good		Fair		Very high or very low
	IS THE SITE EASILY ACCESSIBLE?				
	Yes		Moderately		No
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