





Your Guide to Developing a Community Garden

Welcome! This toolkit was developed by Food Banks Canada to support you in starting a Community Garden at your food bank. We will take you through the steps to consider if you are thinking of starting a garden at your food bank, and provide you with the information you need to successfully plan, plant and harvest a community garden!

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Special thanks to the following for sharing their community garden wisdom and advice:

Mary Millar, The Salvation Army, Wiarton
Brit MacDonald, Saskatoon Food Bank & Learning Centre
Barb Stewart, The Salvation Army Penticton



What is a Community Garden?

A community garden is a collective space where people gather together to grow fruits, vegetables and flowers.

The most successful community gardens are designed with the input of the community, ensuring that they meet the unique needs of your community and are of the size and scale that is manageable for your situation. You can start small and grow your garden once you have gotten some experience and garnered interest and engagement among the community.

In this guide, we will focus on food banks that want to start a community garden to grow fruits and vegetables for their food bank recipients, to build stronger community ties and to offer garden-based programming to the community.

There are several kinds of community gardens - they can consist of collective plots, allotment plots, or a combination of the two. How you design your garden will be based on your own needs and situation.

Features of Collective Plots

These plots are collectively tended to – a community group or group of volunteers is organized to take care of all elements of the garden. The produce from the garden often goes back to the group or to the food bank.

Features of Allotment Plots

With allotment plots, the garden is divided into smaller plots that are then allocated to individuals to take care of. They can be rented out to members of the community, given to individuals, including food bank recipients, or allocated to community groups. Each person is responsible for the maintenance and growing of their individual plot and often keep the produce that is grown on their plot.

Hybrid Models

There may be value in separating off some areas for individual plot use even within a collective-style garden. If you have access to quite a bit of land this could be a good way to generate income to sustain garden activities. A portion of the garden could still be reserved for growing supplemental fresh herbs and vegetables for your food bank. An experiment or test plot can allow for new crops or techniques to be tested before the group decides whether or not to adopt it for the garden as a whole. If you are just starting out this is your chance to experiment with different models to determine what works best for your food bank.

Look at your needs, resources, support and land available to decide which model is best suited to your community.





Why Start a Community Garden?

Food from the garden can benefit your community and the recipients at your food bank by providing fresh produce to compliment current food bank offerings. Seasonal produce from your garden will increase your ability to offer fresh, healthy, low-cost food that can substitute for otherwise expensive food purchases.



Additional benefits include:

- Community building and increased engagement with food bank recipients;
- Additional access to opportunities for physical activity for all age groups;
- A social gathering place for the community;
- Increased education for participants including basic gardening skills, healthy eating, and an increased understanding of the local food system and sustainable food systems;
- An opportunity for individuals to build confidence and new skills;
- Improvement of the local environment through the preservation and productive use of green space.
- Potential to engage with local businesses to support your food bank.

There will be unique benefits to your food bank, which you will discover on your community garden journey.

Share Your Experience

What's the most important thing you've learned with your garden project? What advice would you give to another food bank that is just getting started with their garden? Email us to let us know: grants@foodbankscanada.ca





Before your organization invests time, resources and talent into the development of a new community garden initiative, you need to be sure that you've thought through some key elements.

Some of the most important factors to consider when starting up a garden are:

- The purpose of your garden be clear on the outcome you are hoping for and design the garden program accordingly.
- Who will lead it it is important to have at least one paid staff or ongoing volunteer for coordination. Casual volunteers are key to a garden's success; however it can be a risk to rely on a fully volunteer-driven garden project.
- The level of enthusiasm consider whether there is a significant amount of motivation and enthusiasm associated with the garden. This will drive the startup of the project.

Advice from the Field

It is useful to be clear on the purpose of your garden. An important distinction is whether you want the garden to primarily provide produce for your food bank or whether it is more strategic to use it as an education and engagement project.

Food banks have had varying levels of client participation in gardens – in some cases the clients love the opportunity to get involved, get active and give back, in others it has been more difficult to foster engagement. Take time to understand whether the clients at your food bank would be interested in getting involved.

The Getting Started Questionnaire

Gather your team together and ask yourselves the following important questions before getting started.



Is there interest?

Before starting your community garden, you want to make sure that there is a lot of community interest in the idea so it can be sustained over the medium- and long-term.

- Start talking to people about it and observe what the reaction is, are people excited about the idea? Is there enthusiasm?
- Host a meeting to discuss your garden idea. How many people show interest and how many people attend? A suggested meeting agenda can be found in Appendix B.
- Are there people who are willing to put time into this? Do people feel that the garden is needed and wanted?







Do we have sufficient resources to support the community garden?

Based on your capacity to run the garden it's important to be clear on what "sufficient" is for you but remember that community gardens generally will require some financial investment, volunteer time, and staff support (if applicable) to be successful.

- Are there committed staff and/or volunteer resources available?
- How many volunteers will we need?
- How much funding will we need to get our garden started?
- Do we have enough community support to fund the garden?

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Who will take the lead?

"It is ideal to have a paid staff to oversee the garden project, even if it is a component of their role to start. Leadership by a dedicated volunteer is wonderful but may not be as effective." – Mary Millar (Wiarton Salvation Army Food Bank)

You will need someone to lead the garden project; it is helpful to consider the following in relation to the leadership of the project:

- Who has time?
- Who has the skills? Ideally a paid staff member would be able to lead the initiative or provide consistent support to a motivated group of volunteers; if this is not feasible think about others in your community who have expressed interest, are collaborative nature and are good at leading initiatives.
- Is there an engaged gardener who would love to commit the time to volunteer and mentor your group?
- Consider who you would want to work with for the next year on this project.

Based on your answers to the questions above and the results of initial meetings and conversations in the community, you will need to decide whether this is something that is worth pursuing for the upcoming growing season.

Advice from the Field

Among other garden programs, the Wiarton Salvation Army has a 10X14 plot where they grow lavender exclusively. The lavender is thriving and this one herb allows them to develop therapeutic oils, to gift lavender plants to clients and even make lavender cookies. Consider that you do not need to grow everything in your garden, perhaps just choose a few crops that have multiple benefits to you and your community.

Advice from the Field

In order to be ready for the growing season it is recommended that you make a decision about the garden at least 6 months before the date that you would ideally like to start planting. You can start planning at any time of year but in order to give yourself ample time it suggested that you host your first meeting in the fall before the spring that you would like to start the garden.



What kind of a garden will it be?

- Gardens can vary based on their size, structure and type of plants. What kind of land/space do you have access to?
- If you don't have access to land you can consider raised beds or container gardening (see Designing Your Garden for more information)
- What type of plants will grow well in your climate? Do you want to grow vegetables, flowers and herbs? (See What to Grow for more information)





Community Garden Committee

A Garden Committee will help you to organize the many tasks that are required for the successful implementation of the garden. You can designate the Committee to work on elements of the garden that staff do not have time to address. The Garden Committee will meet regularly to plan, prepare, plant and take care of the garden. Here are some additional considerations when forming a Garden Committee:

- Choose someone who is good at managing projects and works well with others to lead the committee.
- Consider forming a youth committee or find an appropriate way to include youth in garden activities.
- It's important to find the appropriate balance between the number of people

- you involve and your capacity to manage a group of volunteers.
- In order to share the workload, the committee can be broken down into sub-committees for specific tasks. Subcommittees could include Funding & Resources, Planning for Planting, and Garden Construction.

Advice from the Field

During an early Garden Committee meeting, facilitate a visioning session about what the garden could be – dream big – it's useful to get people excited about the idea and what is possible with a garden in the community. Be clear that in the first year you will need to keep it manageable but it's helpful to have a bigger vision to work towards and keep the team motivated.

Budget and Resources

It is important to know what the costs of starting and maintaining a garden will be. Create a budget based on estimated costs to determine whether it is feasible for you.

*See Appendix C for a budget with a list of potential items that you will need – feel free to adapt this for your circumstances

The amount of funding needed to start and maintain your garden will depend heavily on the scope of the project you're undertaking. A multi-site garden with fields of vegetables will have different costs than a container herb garden. If you have a committed team of volunteers available regularly, you might not need as much equipment to maintain your garden than if there are fewer helpers and hands available.

There are opportunities to find resources outside of your food bank budget to support the garden. Brainstorm possible sponsors who may be willing to donate cash, tools, soil or seed. Some ideas to start you off include churches, schools, local businesses (such as garden or tool suppliers), municipal government or parks and recreation departments. Start with an inventory of what already exists in terms of tools that you have or that community members are willing to donate or lend and then determine what the gaps are. Once the gaps are identified you can determine a strategy for securing the resources you need.

Food Banks Canada's
Community Garden Fund
is available to Provincial
Associations and affiliate
food banks that want to start
or enhance their community
gardening initiatives. Thanks
to Compass Group Canada for
their generous support as the
founding sponsor of this fund.

Advice from the Field

Community partners of the Salvation Army Penticton Food Bank have been extremely supportive of their garden project. Supporting the garden is appealing because of its many community benefits: much needed fresh air for participants, exercise, community building, and fresh produce for those who need it the most. Every request for in-kind donations has been granted including tools, soil, lumber, toolsheds and more.



Fun Ways to Get Support for Your Community Garden:

- Ask local businesses to sponsor a row, a plot or even a vegetable for the season.
 Ensure you put signage up in the garden to recognize local support.
- Host a garden party and invite potential sponsors or in kind donors to the garden to see what they would be supporting and to meet the people involved.
- Approach local organizations that would be interested in supporting your garden initiative and bring them together to share knowledge and learning. Potential organizations and individuals include local horticultural societies, other community gardens and urban farmers, service organizations, non-profits with a focus on local food, and "expert" advisors (people who don't have time to be on a committee but can provide advice when needed.)
- Take lots of pictures of your garden and post regularly on social media. Especially during planting and harvesting season, these types of posts are very popular and can drive engagement and support.
- Host team volunteer days for local business, where they can send teams of employees to volunteer in the garden as a way of giving back to the community. Ask businesses to include a donation to your garden as part of their support.

Calendar

Develop a calendar with a plan for the growing season to ensure that everyone knows when various tasks need to be completed.

Remember! Although the growing season is only for the warmer months, a community garden is a year-long commitment for your organization. Planning for your garden should be well underway as the snow begins to fall.

While a specific calendar will depend on many factors, including the length of winter where you're located and what types of plants you intend to grow, below is an overview of the tasks to be completed in each season.

Fall

- Harvesting
- Celebrating
- Collecting learning from participants
- Starting the planning for the upcoming year

Winter

- Intense planning, including finalizing goals for the year and which plants to grow
- Fundraising and securing resources

Spring

- Getting the garden ready for planting
- Purchasing supplies
- Planting
- Tending garden

Summer

- Tending garden
- Harvesting
- Showing off your garden and engaging the community

Advice from the Field

Host a thank you party for gardeners and garden supporters in the fall to celebrate the harvest and maintain momentum throughout the winter months.





Choosing a Garden Site

If you don't have ready access to land for your community garden, there are many options to look at in your community. Contact local municipal planners or your community for potential site locations.

When you visit the site it is useful to develop a sketch of the site so that you can recall the features.

Answering the following questions will also be helpful when considering a site for your garden:

- Who owns the land?
- Are you able to get a lease agreement/ permission to use the land for at least three years?
- Will public liability insurance be required?
- How easy is it to access the site? Is it accessible by transit? Would people with disabilities be able to access the site?
- Are there additional benefits to the site such as a play area or benches for people to sit on?
- What state is the land in? How much work will be required to convert the land into a functioning community garden?
- Is there room for people to gather around the gardens for activities, celebrations and educational sessions?

Insurance

Insurance will protect your organization as well as the landowner against liability for injuries or damages that may occur in the garden. Insurance may also be required to receive support from funders. During site selection, find out if the landowner already has liability insurance that would cover a community garden. If not, speak with the landowner and a local insurance company to determine the appropriate coverage for the garden.

A complete Garden Site Checklist can be found in Appendix D

Sunlight

Sunlight is extremely important for your garden – the amount and type of sunlight that your garden receives will determine the types of plants you will be able to grow. Vegetables need at least six hours a day of sunlight. Consider the amount of sunlight your garden has access to when you plan your planting.

Direct sunlight from the East, South and West creates suitable conditions for sun-dependent crops. Otherwise, you will need to plan your planting in accordance with the solar needs of the plants and the available sunlight during the day.

There are a variety of shade-tolerant plants which are options if you have limited access to sunlight. You can enhance solar access by terracing or stacking pots vertically, so the garden takes advantage of sun from a specific direction. Mirrors and white surfaces can be utilized to bounce and reflect sunlight within your garden.

Access to water

Your site will need access to water. Determine whether it is possible to harvest rainwater from a nearby roof using a rainwater barrel. You will also need to make a decision regarding what type of watering system to use. Examples include drip irrigation, sprinkler, hand watering, etc...). For more extensive information on watering systems and efficient use of water the following resource is helpful: http://aggie-horticulture.tamu.edu/earthkind/drought/efficient-use-of-water-in-the-garden-and-landscape/



Soil

As with any kind of garden, success starts with the soil! Healthy soil is imperative if you plan to plant edible plants. Soil contaminants need to be considered and range from heavy metals and petrochemicals to high levels of salt. It is often possible to find a local nonprofit that will offer free or low-cost soil testing, investigate whether there is an organization in your area that can support soil testing. Repeat the test annually to monitor your situation and remediate as required. The majority of vegetables do best in moist, well-drained soil that's rich in organic matter such as compost or peat moss.

Healthy soil requires a balanced pH and N-P-K (Nitrogen, Phosphorus and Potassium/ Potash) ratio. By testing your soil you will have a better idea of which fertilizers to use and whether your pH needs to be adjusted to allow the plants to absorb nutrients efficiently. More information about soil testing and what it means can be found here:

http://www.learn2grow.com/ gardeningguides/fertilizer/basics/ understandingfertilizernumbers.aspx

To find an organization that does soil testing in your area check this link or ask gardeners in your community how they test their soil. Kits are also available to test the soil yourself: http://www.certifiedorganic.bc.ca/rcbtoa/services/soil-testing-services.html

The Soil Quality Test

This is a basic soil test to give you an idea of the drainage in your garden (this is only required for land plots – or if you plan to use local soil for your raised beds):

- Soak the soil and wait a day.
- Dig up a handful of soil and squeeze the soil in your hand. If water streams out you may need to improve drainage by adding compost or organic matter.
- Open your hand if the soil hasn't formed a ball it is sandy soil.
 If the soil has formed a ball and it holds together even when you poke it you have clay soil. Adding organic matter will improve sandy and clay soil.
- 4. Ideally the soil ball will break into crumbs when you poke it.
- 5. If the soil doesn't drain well at all you might want to consider raised beds.



Designing Your Garden

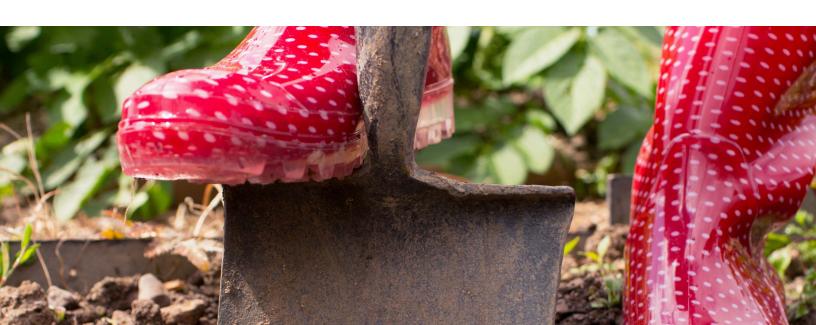
There are several different options for designing a garden. Below the options are explained in more detail to help you determine which works best for your situation.

Advice from the Field

Keep your garden simple and manageable for the first year. It will be easier to manage and expand upon in subsequent years.

Garden Types

Garden Type	Description	Benefits	Basic Requirements
Herb Garden	A smaller garden endeavour that would provide various types of herbs to supplement food bank offerings	Low land requirements. Herb gardens can be set up in containers and placed in areas with very little space.	Containers Soil Herb seeds
Container Garden	Use of various containers to grow herbs and vegetables	Low land requirements, containers can be placed wherever there is enough sunlight	Containers (examples: pots, buckets, planters, Soil Seeds for appropriate vegetables and herbs Garden tools
Raised Beds	Build raised beds with lumber, fill with soil.	Raised beds are more accessible and easier to work with, their height makes them less strenuous for gardeners.	Enough land to support the number of raised beds you would like to build. Budget, time and skills required to build raised beds. Soil Seeds and garden tools
Garden Plot	A plot that is delineated within an area of land.	There is no need to build additional structures.	Land with decent soil required. Plot size will be determined by how much is available or how much you intend to grow. Seeds and garden tools
Multiple Sites	Several locations for gardens across the property or city. This could allow for different locations to serve different areas of the community.	More access to the gardens.	Land permissions Seeds and garden tools Raised bed materials if some of the plots are raised beds



Plot Layout

Some areas of your garden site will be more appropriate as plots than others. Determine which areas are best for plots and where you could host for non-growing activities, such as seating, workshops and children's play areas.

There is no one perfect size for a plot, considerations include the size and shape of the overall site, and the interest and capacity of the volunteer gardeners. Circular or curved plots can be an efficient use of space depending on the layout of your space.

A feasible size for a basic plot where space is not an issue is $3M \times 6M$ (approximately 10 feet x 20 feet).



Row Planting

Plants are placed in single file in rows, with a walking path between each row. Row cropping works best for large vegetable gardens, and it makes it easier to use mechanical equipment such as tillers to battle weeds.

With row cropping much of the soil is used for footpaths rather than vegetable plants so production can be lower per square metre. However, accessibility to the rows is an important consideration if you want to host educational workshops.

Advice from the Field

Leaving approximately 45 cm (18 inches) between rows will give you plenty of room to work between them. As you develop your plan, place taller vegetables at the north side of the garden. Tall plants include tomatoes, and plants that grow vertically - including snap peas, cucumbers, and pole beans.

Intensive Cropping

Intensive cropping means using larger spans, generally 0.3 – 1.2 M (1-4 feet) across. This technique reduces the amount of area needed for paths, however it also reduces the potential for using mechanical tools and often means you have to weed by hand. For a community garden, this can create accessibility issues but can allow for increased yield.

Consider leaving some areas of the garden unplanted at first. This way you can plant a second crop and harvest later in the season. Crops that can be planted several times include: lettuce, radishes, green onions, carrots, and bush beans.

Advice from the Field

Utilize vertical space in your garden by using vining crops like pole beans and snap peas.

Raised Beds

If your soil test indicates contaminated or poor soil, raised beds provide the option of bringing in healthier soil. You can enrich the soil in raised beds by adding compost. This can result in fewer pests and weeds, warmer soil and a more effective drainage system as the soil tends to be more aerated than the earth below.

Raised beds provide better accessibility for most individuals, because they are higher off the ground. There is also a clear boundary for animals, hoses and children. Raised beds are most often built from wood, found materials or concrete block with the most popular choice being wood. A recommended minimum of 3 meters squared (32 square feet) is sufficient to grow a variety and quantity of produce.



Advice from the Field

Raised beds should be approximately 4 feet high to reduce strain for those working on the plot. The width should allow for the ability for someone to reach into the centre of the raised bed.

Advice from the Field

The Salvation Army Penticton has several raised beds and have chosen to plant one vegetable per bed. This provides additional opportunities for education and learning.



Pallet Gardens

If your location is restricted to shorter-term gardening, for example a vacant lot awaiting development or a rental property, pallet planters can offer an efficient mobile gardening solution. Pallets can be acquired for low cost and simply require fixed sides to hold soil.

If you are looking to use pallets, ensure that they are untreated or construct your own. Some pallets are treated with chemicals that could affect any food produced in them.

Container Gardening

Gardening in containers is an ideal solution if you have little or no garden space. You can still produce a decent selection of vegetable crops in containers. Herbs and tomatoes are well suited to grow in pots and you can ask for donations of containers from the community.

This is a cost effective strategy and can serve as an excellent opportunity to show that people with limited space can still garden. Remember that you can also add container plants to a larger raised bed or plot garden design.

Borders and Fences

Creating a border for your garden helps to keep out animals and humans, retains soil, protects plants from the wind. It can also give tall plants a structural foundation to climb along. There are many options for borders in a garden – you can be plant beneficial plants, erect a fence, build a trellis, plant bushes (or use bushes that already exist) or create a chicken wire wall.

Paths and Access

It's important to plan out how people will access the garden. Think about where it makes the most sense to have paths and how large they need to be, for example ask yourself if a wheelbarrow can fit on the path. If desirable, the path can be reinforced with gravel, woodchips, compressed soil or another appropriate medium.

If you are planning on offering any programming or having school groups in your community garden, consider space requirements for those activities. You will need room to gather as groups for discussion and learning. If you create the space, you can use your garden as a community gathering spot to host celebrations and parties.

Tool Storage

It is helpful to have tools and storage on your garden. The benefit of having tool storage at your garden is that tools will be available when you need them, which often translates into better garden maintenance. Another benefit is that you won't have to transport heavy tools and equipment to and from the site.

Advice from the Field

Designate a portion of the garden as a children/ youth zone with specific activities for young people to learn about planting and harvesting.





What to Grow

Deciding what to grow in your garden can be one of the most fun and energizing parts of planning your community garden. Choose the varieties of vegetables you're most likely to eat, or that will be appealing for your food bank clients. Consider what type of produce is most expensive or tasteless when purchased from a grocery store.

Experiment with different varieties to see what works best for your location. For instance, you might plant several different tomato varieties one season to see which type food bank recipients prefer. Take notes in a garden journal and learn from your experiences.

Hardiness

Knowing your hardiness zone will help you to determine which plants are likely to succeed in your garden. You can find your hardiness zone here: http://www.planthardiness.gc.ca



Top 6 Veggies for Gardening Beginners

Source: http://lifehacker.com/the-seveneasiest-vegetables-to-grow-for-beginnergarde-1562176780

Tomatoes - Tomatoes love sun and tend to do well in containers. Ensure that you support their stalks as they grow.

Cucumbers - Cucumbers also do well in sunlight and grow extremely well with regular watering. Be aware that cucumber plants tend to spread out and take up lots of real estate. Consider planting vertical cucumbers.

Carrots - Carrots like deep, well-drained soil and do especially well in raised beds. Carrots will do alright in light shade but prefer full sun.

Radishes - Radishes are hardy and can be planted early. They take 20 days to mature and can be replanted throughout the season.

Green Beans - Green beans grow well in variable conditions and tend to produce many, many beans. They enjoy full sun and well-drained soil.

Zucchinis - Zucchinis are a hardy plant that will do well from seed once the soil is warm. Be prepared to find many ways to use zucchinis as they are prolific and take up a lot of space.

Shade-Tolerant Vegetables

If you find yourself with limited sunshine, the following vegetables are good bets:

- Arugula
- Chard
- Kale
- Lettuce
- Peas and beans
- Root vegetables
- Spinach

For additional information, visit:

http://www.motherearthnews.com/organic-gardening/shade-tolerant-vegetables-zm0z11zsto.aspx

Advice from the Field

Vegetables such as tomatoes, peppers, and squash continue to provide throughout the season – so consider that you may not need as many plants to serve your needs. Carrots, radishes and corn produce only once so you may want to plant more of these throughout the season.

Heirloom

Heirloom refers to varieties of fruit, flower or vegetables that were grown before World War II. The flavor of heirlooms is often superior to hybrid varieties and many feel that it's important to grow heirlooms to preserve diversity in food crops. Heirlooms are not always as resistant to variations in weather and pests as hybrids so it may be worth considering having a mix of both within your garden.

Advice from the Field

Heirlooms are a great discussion topic for education which is another reason to include in your garden programming.

Tip/Resource:

Additional information on planning for and ordering seeds:

http://www.harvesttotable.com/2013/11/seed-starting-schedule-next-season/





Garden Like a Pro

Pests

There are a variety of methods to deal with pests ranging from organic to chemical methods. Remember that whatever method you choose needs to be safe for any food you are producing in the garden.

Starting out with healthy plants is important; hardy plants with good soil, sunlight and water will generally be more likely to survive a pest infestation.

Here are two methods that you might want to try:

Handpicking - This method involves actually picking the offending insects off of the plants, if you don't like bugs or don't have regular volunteers, this is may not be the best option for you. It could, however, be the ideal activity for a group of young gardeners.

Companion planting - Certain types of plants repel insects from gardens.

Here are a few examples:

- Leeks support carrot yields by repelling carrot flies.
- Earth flies do not like the smell of lettuce, plant radishes or kohlrabi with lettuce to discourage earth flies.
- Nasturtiums and chives repel aphids and can be used around broccoli and tomatoes.
- Ladybugs can be used for organic pest management and can be purchased from gardening centres or ordered online.

Source: Natural News

http://www.naturalnews.com/035853_companion_planting_garden_vegetables.html

Advice from the Field

Talk to local gardeners and farmers about what pests they most commonly deal with in your area and what approaches have worked in dealing with them.



Gardening Tools

The equipment and tools you need to start your garden will depend largely on the size and scope of your garden and who will be assisting you to maintain it.

If you're just starting out, consider that you might need some of the following common gardening tools:

- Garden hoses
- Watering cans
- Garden scissors
- Pruning shears
- Gardening gloves
- Shovels, spades, trowels
- Rakes
- Hoes
- Weeders
- Wheelbarrows

Ask members of the garden committee, volunteers and others with experience organizing a community garden to determine what can be donated or borrowed and how the list needs to be modified for your garden particular plans and garden type.

Compost

Making your own compost from food and organic waste is an eco-friendly option. An outdoor composting pile or bin is an easy way to recycle food waste and create nutrient-rich fertilizer for your garden. Composting helps to keep biodegradable materials out of landfills. The key to successful composting is aeration, which means turning the compost over to provide more oxygen: it is the oxygen that speeds up the decomposition process and helps to reduce odors.

Process for composting:

- Create a compost pile container with a
 few pieces of wood, a plastic bin or a
 purchased compost container. The bin
 ideally will have contained sides and a
 top hatch for your waste. Bins that are
 purpose built for compost can be turned
 easily to aerate the soil, and have a lower
 door for extracting finished compost. A
 black or dark coloured bin will heat the
 compost using solar energy.
- 2. Using a ratio of 1:1 mix green waste (nitrogen-rich leaves, kitchen scraps, garden weeds, coffee grinds, and lawn trimmings) with brown waste (dried leaves, wood chips, sawdust and shredded newspaper). If you find that your compost begins to smell or attract flies (which lay eggs that hatch into maggots), turn the pile for aeration and add more browns.

NOTE: For food safety, do not include meat or manure in your compost. Non-commercial composting systems may not get hot enough to inactivate pathogens.

 Turn over the pile on a regular basis for aeration. Alternating food scraps with layers of dead leaves or grass clippings will help to eliminate unpleasant smells and keep methane-contributing materials out of the landfill.

Advice from the Field

Fertilizing your crops will help to increase the amount of produce from your garden. Sometimes adding high quality compost at planting time is all your vegetables need. Depending on soil composition you might want to consider applying a packaged vegetable fertilizer. Be aware of the recommended amount as too much fertilizer can actually decrease yield.



Tips for Gardening Like a Pro

- Seed packages will indicate the most appropriate growing conditions, and the mature size of the plant. The following acronyms are often utilized: HHA is a half-hardy annual (a oneseason plant that prefers warmer temperatures), HA is a hardy annual (this plant will grow for one season and can survive a variety of growing temperatures), B is a biennial (a two-year plant) and P is a perennial (this plant will continue to live for many years.
- You have the options of starting from seeds or seedlings. Seeds
 will need to be ordered ahead of time. Seedlings help to accelerate
 a garden, and have the added benefit of better withstanding
 weather and pests.
- Consider approaching a local beekeeper to see if they would like to locate some of their hives at your garden. This gives the bees access to the food they need and supports the pollination of your plants.
- You will want to keep weeds to a minimum as they will compete with your vegetables for water and nutrients. Weeds can get out of control quickly so ensure that you have a consistent weeding schedule and reliable volunteers to help with weeding. Using a hoe or hand fork to lightly stir up the top inch of soil regularly will discourage weed seedlings. A mulch of clean straw or compost can lessen weeds around larger plants like tomatoes.
- Most vegetables like a consistent supply of moisture, but generally
 do not enjoy standing in water. The general rule is to water when
 the top inch of soil is dry. Raised beds tend to drain faster and may
 require daily watering, for gardens in the ground you may need to
 water about once or twice a week depending on weather and soil.
- Water slowly and on a regular basis. Gardens tend to prefer watering that completely saturates the sub-soil, which means that a few sustained waterings can be more beneficial than shorter periodic watering.
- You need to loosen your soil before you plant a garden. You can use a tiller or dig by hand. Once the soil is loosened, work compost into the soil to enhance the quality of the soil. Avoid stepping on freshly tilled soil otherwise you will compact the soil again. Once you are finished tilling, smooth the surface with a rake and water thoroughly. If you have time, allow the bed to rest for a few days before you begin planting.
- TIP: There are several apps available that will answer your gardening questions, share helpful tips and help you plan your garden: http://www.canadiangardening.com/garden-gear/gardening-books/10-apps-to-help-your-garden-grow/a/31568

Advice from the Field

While it's clear from other food banks that have started community gardens that they are a lot of work, it is also clear that they provide clear benefits. From educational opportunities and programming, to fresh produce for food bank clients, to increased engagement in the community, you can truly harvest the benefits of the work put into a community garden.





The content in this section is excerpted from:
Campus or Community Gardens
Compass Group Canada
Standards and Unit Compliance
2014

The contamination of food in a garden or on a farm occurs when the plants come in direct contact with animal droppings, human waste, polluted water, or contact with contaminated large or small equipment. Fortunately these risks can be mitigated with diligent attention to safe operating standards and procedures. Properly designed and managed, community garden produce is a safe and local produce supply.

This document addresses the main risks associated with community gardens, including, but not limited to:

- environmental factors, in particular proximity to animal rearing operations, seasonality and associated climatic conditions (e.g. heavy rainfall causing floods) that increase the transfer of pathogens from their reservoirs;
- use of untreated or insufficiently treated manure or compost;
- use of contaminated agricultural water (for irrigation or pesticide treatments);
- cross-contamination by food handlers and equipment at harvest or post-harvest.
- contact with animals (domestic or wild life) or unauthorized personnel.

Source: EFSA Journal 2014;12(3):3600-3



The Importance of Hand Washing

Hands can be a source of contamination of food harvested from a garden. It is especially important that community garden workers wash their hands before harvesting and handling all vegetables and fruits.

Proper hand washing can reduce the chance of human sources of bacteria and viruses to contaminate produce. Many people eat fruits and vegetables without cooking them. If the food is not cooked, the bacteria and viruses will not be destroyed.

Hands could also be contaminated with allergens (e.g. peanuts from a snack) which could cause an allergic person to have a serious allergic reaction.

Follow proper hand washing procedures as listed below:

- 1. Wet your hands
- 2. Add soap
- 3. Scrub back of your hands, wrists, between fingers, under fingernails for 20 seconds
- 4. Rinse
- 5. Dry hands using a single use towel or hot air drier
- Turn off the taps with a paper towel and dispose of the paper towel in the designated garbage can

Product Transportation & Receiving

Receiving is a critical step for many foods, including fresh produce. Persons responsible for the receiving of incoming foods are likewise responsible for careful monitoring of potentially hazardous food temperatures, without exception. Temperature is one of the prime factors that controls the growth of bacteria in food. Many, though not all, types of pathogens and spoilage bacteria are prevented from multiplying to microbiologically significant levels by receiving and storing foods properly under the right temperature conditions.

Below are some additional pointers for safe receiving:

- Excess dirt should be removed from the produce by shaking or wiping clear with dry paper towels, prior to being delivered to the food bank but keep in mind produce should NOT be washed prior to delivery. If heavily soiled, produce can be wiped or rinsed under running water in the community garden.
- Produce should be transported from the garden to the food bank in clean, food grade containers. Using containers that are not made of food grade materials may allow leaching of chemicals into the foods being transported.
- Transport to the food bank should be done immediately following harvest unless the community garden can store the produce in an acceptable refrigeration unit.
- A record of the produce delivered (harvest date, type, quantity, date, delivered/received by) should be completed by a designated person at the food bank.
- Someone with safe food handling training at the food bank should be available to receive and sort through produce. After the delivery is received and recorded, label and refrigerate the produce.
- Do NOT wash produce before sharing with food bank clients. Food bank clients should wash the vegetables and fruit before they use it.
- It is best to use produce within two days of being received by the food bank. Rotate produce so that Community Garden produce is used first. The receiving date is considered Day 0.





Storing Garden Produce

Produce from the garden should be stored at the food bank as soon after being received as possible. If excess dirt remains on the produce, you can shake, rub, or brush off with clean, dry paper towels. Never soak, hose/spray, or use wet towels/rags to clean excess dirt.

Here are some additional tips about produce storage:

- Store garden produce in separate containers to maintain traceability. Label the container(s) with the date of receipt (Day 0), and that the produce came from the community garden.
- Do not serve or distribute fresh produce until it has reached 40°F (4°C). Produce from the garden may need to be stored under refrigeration for a day to reduce its temperature sufficiently.
- Any fruits or vegetables that are stored at room temperature (such as tomatoes, potatoes, and onions) should be stored in a cool, dry, pest-free, well-ventilated area separate from chemical storage.
- Leafy greens (for example, lettuce varieties, kale) should always be refrigerated once harvested and prior to including in any hamper or meal program.

Preparing and Serving Fresh Garden Produce

More often than not we eat fresh fruits and vegetables raw and therefore we cannot rely on heating to destroy pathogens on our produce. This is one reason why fresh produce is a big source of foodborne illness. It is important to prepare raw fresh produce with food safety first. Follow food safety procedures when handling fresh produce. Produce from a community garden should be received, handled and prepared using the same principles as produce coming from any other source.

Here are some key points to remember:

- Store, prepare, and distribute community garden produce separately from other sources of produce to maintain traceability.
- As with all food, ensure kitchen contact surfaces are cleaned and sanitized before and after working with garden produce (including cutting boards, knives, utensils, and storage and serving containers).
- If you have leftover produce that has been cut, sliced or cooked, store it in a clean air-tight container at 40°F (4°C) or less.
- Follow all other standard procedures for maintaining food safety when reusing produce (temperature maintained at 40°F (4°C) or less, discard if contaminated with other foods, etc.)

Safe Food Handling Checklist

Production					
Location	Locate gardens away from garbage areas, wells, septic systems, utilities, animals and livestock. The area directly above the growing area should be free of tree limbs or utility lines where birds can perch.				
	Plan: Explain how the location of your garden meets the recommendation. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A	
Security	The garden area should be fenced or otherwise secured to deter unwanted visitors. Visitors should not be allowed unless a supervisor is present. Unaccompanied visitors (such as volunteers) should be trained and vetted prior to being allowed in the garden.				
	Plan: Explain how your garden meets the recommendation. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A	
Fencing	Fence openings should be no greater than 1 inch.				
	Plan: Explain how your garden meets the recommendation. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A	
Soil Testing/Soil History	If commercial soil is not used, soil should be initially tested for volatile organic compounds, lead and any other regionally-pertinent heavy metals Maintain records. Even when commercial soil is added, any underlying / existing soil must be tested.				
	Plan: Describe the results of any soil testing performed or where soil was purchased. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A	
Water Testing	ter Testing Only clean and potable water should be used in the garden. Regardless of its potable water for the garden should be tested annually to conform to Canad Water Guidelines.				
	Plan: Describe the water source for your garden and the results of testing. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A	
Compost and Manure	Composting is very complex and regulations can vary. Only commercial be used. Avoid the use of fresh manure.	al comp	ost sh	ould	
	Plan: Explain how your garden meets the recommendation. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A	
Fertilizer	Only commercial fertilizes should be used. Check fertilizers for organic garden adheres to organic principles.	certific	ation, i	f your	
	Plan: Explain how your garden meets the recommendation. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A	
Pest Control	Avoid the use of pesticides. Develop an Integrated Pest Management strategy to address pest issues through natural methods.				
	Plan: Explain how your garden meets the recommendation. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A	



Sanitation				
Worker and Volunteer Health	There must be a written policy to exclude workers and volunteers that have recently been ill or exhibit symptoms of foodborne illness such as: vomiting, diarrhea, sore throat and fever, jaundice, infected sores or cuts on exposed portions of the hands and arms. Signs should be posted to reinforce the policy.			nd
	Plan: Explain how your garden meets the recommendation. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A
Hand Washing	A handwashing station should be easily-accessible and be stocked of disposable single-towels and a waste receptacle. Training should be workers and volunteers. Handwashing signs should be posted to rein. Hands can be a source of contamination of food harvested from a gainportant that community garden workers wash their hands before handling all vegetables and fruits. Proper hand washing can reduce the potential for human sources of and viruses to contaminate produce. Many people eat fruits and vegicooking them. If the food is not cooked, pathogens will not be destroid that allerging person to become very sick or die. If using rubber or garden gloves to handle or harvest produce, hands before putting the gloves on to prevent contamination of the outside. If using rubber or garden gloves to handle or harvest produce, hands before putting the gloves on to prevent contamination of the outside. Follow proper hand washing procedures as listed below: 1. Wet your hands 2. Add soap 3. Scrub back of your hands, wrists, between fingers, under fingers, Rinse 5. Dry hands using a single use towel or hot air drier 6. Turn off the taps with a paper towel and dispose of the paper towel garbage can	conductor force the arden. It arvesting pathogonetrables byed. should of the graph	ted for a ne policy is especig and enic bac without which could be was loves.	all r. cially teria ould ned
	Plan: Explain how your garden meets the recommendation. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A
Restroom Facilities	Restrooms should be available and conveniently located / accessible Restrooms should be kept clean and stocked with supplies for adequent portable toilets are used, hand washing stations must be convenient toilets and properly stocked.	uate cle	aning. If	the
	Plan: Explain how your garden meets the recommendation. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A



Training	Training must be provided to help workers and volunteers understand the relationship between food safety and personal hygiene. Topics must include proper hand washing a safe handling of produce, and should include first aid procedures, and proper response blood or bodily fluids incidents in the garden.				
	Refer to the Food Banks Canada Safe Food Handling Standards manuadditional information about general personnel practices, hand washin injuries to support food safety.		,		
	Personnel who feel ill or have a communicable disease must not work in the gar persons may accidentally contaminate the produce through improperly washed other ways.				
	Any vegetables and fruit that have been exposed to blood or bodily fluids must not be shared with food bank clients.				
	Do not share any of the food from the garden following a vomiting incident. If son vomits in a garden area wash all tools thoroughly to remove dirt and organic matt carefully sanitize the tools with (25 mL of household bleach [5.25% strength] per water) bleach. This is a strong sanitizing solution; use personal protective equipment protect eyes and skin.		natter. Th er 1 L of	tter. Then, r 1 L of	
	Plan: Explain how your garden meets the recommendation. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A	

Harvest Control of the Control of th					
Containers and Equipment	Harvest containers should be food grade and washed and sanitized before using. Harvest tools and equipment should also be washed and sanitized before using.			ırvest	
	Plan: Explain how your garden meets the recommendation. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A	
Identification and Traceability	Harvest containers should be labeled to include the product name, harvest date and row/bed or location where the produce was grown.				
	Plan: Explain how your garden meets the recommendation. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A	

Transport and Deliv	ery			
Transporting	To maintain produce quality and safety, the produce should be delived on the same day of harvest, otherwise, it should be refrigerated after community garden is located off-site, the produce should be transpervehicle or other approved method to keep the produce cold at or be Transport vehicles should be kept clean and sanitary.	r harvest orted in a	ting. If th a refrige	ne rated
	Plan: Explain how your garden meets the recommendation. Circle at right if your garden fulfills the recommendation.	YES	NO	N/A

Environmental Best Practices

The following are considered 'Best Management' Practices for Community Gardens.

The purpose of these best practices is to:

- Protect the environment
- Ensure safer foods
- Maintain long-term viability of the garden

Land Use:

- Develop the garden on previously cleared land but be aware of surrounding land use as potential sources of contamination
- Do not develop the garden's near wetlands or other protected areas
- Understand the garden's soil type and its permeability to contaminants (e.g. pesticides)

Contaminants:

- Avoid the use of pesticides
- Avoid the use of fresh manure

Erosion and runoff:

- Use fences to maintain plant cover, decrease erosion and protect water
- Establish grass strips or vegetated buffers to help filter runoff
- · Control soil surface water
- Protect highly sensitive areas such as drains, concentrated flow outlets and ditch and river banks
- Maximize soil coverage
- If feasible, use sustainable transportation (e.g. a bicycle cart) to transport garden produce
- Reduce the use of diesel-fuelled and electrical farming equipment





Below are some ideas to leverage your garden for increased impact and community engagement. Use this list to spark your own ideas about opportunities associated with your garden:

Communications – A monthly newsletter for interested supporters and volunteers is a helpful way of keeping people in the loop about activities and opportunities in the garden. You can also use social media like Facebook, Twitter and Instagram to promote your garden, engage volunteers and build community around the garden. Tip from the Saskatoon Food Bank & Learning Centre: Set up a Facebook event page for an event in the fall and invite those who are interested in staying in the loop about the garden. You can then post on the event page about upcoming opportunities and activities and everyone will be notified. This can be useful for timely communications such as harvest dates.

Weekly drop-ins – several food banks have seen the importance and effectiveness of having one day or evening per week as a designated drop in for volunteers and garden participants. This allows people to find out more about the garden and experience it without necessarily committing immediately. It's also a good opportunity to engage with local community groups.

Children and youth – Kids tend to love getting dirty and helping out in the garden. Gardens can be an excellent way to engage young people from the community in your work, and to educate them about gardening, healthy eating, where food comes from, and hunger. Find useful roles for youth to contribute to garden maintenance and harvesting.

Regular celebrations – celebrate the garden, plan picnics or parties around harvest dates and invite people from the community to share in the celebrations. Remember to engage and recognize your volunteers on a regular basis through planned events where people can come together, build community, be acknowledged for their contributions and have FUN.

Education events – use the garden to organize events that engage people in learning about gardening, food security and sustainable garden practices.

Food preparation workshops – use produce from the garden to teach clients and community members about how to use different vegetables in cooking, baking and canning.





Appendix A – Gardening Resources

Alberta

Organic Alberta has a list of gardening resources here: http://organicalberta.org/resources-for-gardeners

Calgary Horticultural Society hosts a Community Garden Resource Network: http://www.calhort.org/community-gardens.aspx

British Colombia

City of Vancouver has several toolkits on urban farming and community gardening in the city: http://vancouver.ca/people-programs/community-garden-resources.aspx

Manitoba

A list of resources for gardening in Winnipeg and Manitoba: http://www.winnipeg.ca/publicworks/parksandfields/CommunityGardens/Garden%20 website%20map/Attachments/Gardening%20Online.pdf

Ontario

London Community Resource Centre has resources on community gardens and associated cooking and learning opportunities:

http://lcrc.on.ca

The Community Gardening Network of Ottawa has also produced a 47-page guide for community members getting started on a community garden:

http://www.spcottawa.on.ca/ofsc/en/community_garden_network.asp



Sustain Ontario has a Community Gardening Network to connect Community Garden leaders to share best practices, strategies and solutions.

http://sustainontario.com/initiatives/community-garden-network

Food Share Toronto has developed a Community Garden 101 toolkit, contains resources on how to write proposals for funding for community gardens:

http://www.foodshare.net/files/www/Growing/Community_Gardening_101.pdf

Community Gardens of Waterloo Region:

http://together4health.ca/workgroups/waterloo-region-community-garden-council

Saskatchewan

CHEP Community Garden Network (Saskatoon)
http://www.chep.org/en/programs/community-gardening

Quebec

Guide to setting up your own edible rooftop garden: http://archives.rooftopgardens.ca/files/howto EN FINAL lowres.pdf

Eastern Provinces (New Brunswick, Nova Scotia, PEI and Newfoundland)

New Brunswick Community Harvest Gardens http://www.nbchg.org

Nova Scotia School Garden Resource Guide:

http://novascotia.ca/agri/documents/education/program_schoolgarden-guide.pdf

Dalhousie Garden Box: helping you nourish your garden and your community: http://www.dal.ca/about-dal/agricultural-campus/about/gardens/garden-box.html

Community Gardens Best Practices Toolkit: A guide for community organizations in Newfoundland and Laborador:

http://novascotia.ca/agri/documents/education/program_schoolgarden-guide.pdf

Additional Toolkits and References:

Urban Farming Toolkit

http://issuu.com/tulane_city_center/docs/urban_farming_toolkit_for_web_?e=12636853/8721866



Appendix B – Sample Community Garden Meeting Agenda

1. Welcome and Introductions

- Make sure that everyone knows each other.
- Incorporate a question with the introduction such as "Why are you interested in community gardening?"

2. Purpose of the Meeting

- Explain your vision for the garden and let others know that you are looking for support to make the garden a success.
- Be clear about what you're hoping to achieve at this first meeting, whether it's to gauge interest, sign up committed volunteers, or start an exploration committee.

3. What can we leverage?

- Brainstorm the resources that already exist in the community that could support starting a garden (land, supplies, funders, potential volunteers with expertise, the expertise that is already in the room, potential in kind donations).
- Designate someone or a group of people to determine a budget and list of needs and supplies and to start thinking about where the funding/ supplies can come from.
- Are people willing to commit to supporting the garden? Do you have someone to lead the project?
- Form a Garden Committee, establish a leader and determine sub-committee leads with people who have expressed interest at the meeting.

4. Determine next steps

- Map out a plan of action using a calendar and determining dates (ie. When would like to have everything assembled? When would the garden preparation happen? When would start planting? What would be the regular maintenance schedule?)
- Assign a committee or individual to each action point
- Determine when the next meeting date will be

5. Thank you and wrap up

- Thank everyone for attending the meeting
- Closing activity could include asking everyone what they are most looking forward to about the garden.

TIP: It might be helpful to establish a Terms of Reference for the garden committee so that people are clear about expectations and responsibilities relating to the garden. Some questions that could be answered in the Terms of Reference include:

- How will decisions about the garden be made? (consensus, majority vote, etc.)
- How will planning and communication about the garden take place? (email, phone, Facebook page, etc)
- How often and where will your group meet?
- How will conflicts be resolved?
- How will you manage applications for individual plots? (if this applies to your garden)
- Who will keep track of budget matters?



Appendix C – Sample Garden Budget

Sample Budget Template

Item	Year 1	Year 2	Year 3
REVENUE/INCOME			
Plot rental (if applicable)			
Fundraisers			
Donations			
Grants			
In Kind			
Balance from previous year			
TOTAL REVENUE			
EXPENSES			
Water			
Irrigation/Rain barrels			
Hoses and nozzles; watering cans			
Shed			
Gloves; kneeling pads			
Compost System			
Mulch			
Soil			
Fertilizer			
Wheelbarrow			
Equipment rental (ie. Rototiller, edger, mower)			
Plant labels/markers			
Pots and containers			
Fencing			
Raised Bed Construction			
Tools (hoes, shovels, rakes, etc)			
Seeds			
Transplants			
Garden furniture			
Lease			
Insurance			
Other Expenses			
TOTAL EXPENSES			
NET (Income – Expenses)			

Appendix D - Community Garden Checklist

- Is there interest and enthusiasm from the community and food bank participants?
- Do you have a committee of volunteers who are willing to take this on or support the garden?
- Do you have an appropriate leader for the project? (Either someone from staff or a reliable volunteer who has the required time and skills.)
- Do you have guidelines that outline how the garden will be maintained?
- Do you have an appropriate site? Check the following to assess site suitability:
 - Is there sufficient land space?
 - Is there access to water?
 - Is there sunlight?
 - Is it accessible to those who will be working at the garden?
 - Is the soil composition favourable to planting a garden?
- Do you have the proper insurance?
- Do you have a budget?
- Have you found potential funding or in-kind donations for your garden?
- Have you determined what kind of garden would most benefit your community? (allotment vs collective or a combination)
- Have you designed the garden?
- Will raised beds or other infrastructure be required? If so do you have people who can build the beds/infrastructure?
- Have you determined what you will grow in your first season?
- If you have checked the majority of the boxes in this list then you are well on your way to an awesome community garden. Best of luck!!

