HOW TO GROW A COMMUNITY GARDEN

People + Plants

HOW TO GROW A COMMUNITY GARDEN

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People+Plants is a multimedia series on how to build, maintain, and make the most of community gardens. For more titles and topics in the series, visit learningstore.uwex.edu.

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Safety in the Little Gardeners' Garden

Congratulations on digging in! There are many things to consider when starting a garden, especially one that small children will use. This publication focuses on how to build and use a garden space that meets and exceeds the safety requirements and licensing rules for child care programs in Wisconsin. For tips on garden maintenance, plant selection, nutritious recipes, and gardening activities, visit the **Resources** section. Now, let's get growing!

Selecting a space

First we need to select a space for the garden. Vegetables need at least six hours of sunlight daily, so make sure to pick a bright and sunny spot. Consider irrigation needs so that you have close access to water. Choose a space away from garbage, septic systems, and both wild and domestic animals.

For safety purposes, make sure that your garden location falls within the following guidelines.

- Garden structures such as raised beds and containers should not lie within 9 feet of playground equipment that is 30 inches or taller. If playground equipment is less than 30 inches high, a garden structure should be at least 6 feet away. If 0- to 2-year-olds will use the garden, be sure to space garden boxes and other containers at least 3 feet apart.
- Avoid placing gardens next to fences or enclosures that allow climbing access to fences.
- Avoid placing gardens in running zones.
- Be careful near swing sets. Do not place gardens within 6 feet to the side and twice the height of the pivot point behind or in front of swings.

Garden design and construction

What will your garden look like? Two popular options are inground gardens and raised bed gardens. Both have pros, cons, and special considerations for child safety. If you do not have a lot of space, containers can also be used. With all gardens, make sure the garden space is well drained and free of hazards. Keep pathways clear of trip hazards such as hoses and tools. If this is your first garden, start small. It is easy to become overwhelmed with weeds in a garden that is too big!

Safety guidelines for raised beds

- Use nontoxic, non-leaching materials for raised beds, containers, stakes, and trellises. Do not use railroad ties, pressure-treated wood, or wood treated with chromated copper arsenate (CCA). If you are purchasing new lumber, ask a sales associate for lumber without these characteristics. Avoid used tires and single-use plastics.
- Garden beds should be an appropriate height for the developmental level, size, and ability of the children who will visit. A garden structure should be no more than 18 inches high for 0- to 2-year-olds and no more than 30 inches high for preschoolers. If children will play on a garden structure with edges over 30 inches high, a guard rail must be installed.
- Consider constructing raised beds no more than 2–4 feet wide for accessibility. Long, narrow beds can host large groups of children simultaneously.
- Garden beds require sturdy construction. Reinforce the walls and corners of garden beds to avoid breaking or bowing.
- Nails and screws should be completely inserted into the intended material.
- Avoid garden gates, fences, and trellises with gaps and openings greater than 3 inches and less than 9 inches, as these can cause head entrapment.
- Avoid sharp points, corners, and edges. Wooden constructions must be smooth and free from splinters. All corners must be rounded. If sharp edges cannot be fixed, they must have a protective cover.

Safety guidelines for installing or expanding an inground garden

- Call Diggers Hotline at 811 to avoid utilities under your garden space.
- Evaluate the history of the location to avoid potential issues with chemicals and heavy metals such as lead.
- Test your soil through your local UW-Extension office to see what nutrients your soil might need and to identify any harmful heavy metals.
- Avoid garden gates, fences, and trellises with gaps and openings greater than 3 inches and less than 9 inches, as these can cause head entrapment.

If you do not have a lot of space but still want to grow vegetables, consider building a container garden. Container gardens need special consideration regarding which plant varieties to grow, which containers to use, and soil requirements. Consult the container gardens section in **Resources** for information on how to successfully grow produce in a container.

Safety guidelines for container gardens

- Make sure that the container will not tip. Consider long, low-lying containers or large permanent structures.
- Follow all of the materials guidelines under **Safety guidelines for raised beds** if considering metal, wood, or plastic containers. Avoid sharp points, corners, and edges.
- Make sure potential containers provide drainage.
- Only use potting or container soil for container gardening.
- Do not use old tires or other items that raise safety concerns.

Soil and water in the garden

Now that your garden space is selected and designed, you need to add safe soil and water. First, consider the soil. If you are using a raised bed, it is important to use some kind of soil mix. Soil taken directly from the ground will not work well in a raised bed garden. Use potting soil, top soil, or a compost and soil mix. Read all labels to ensure safe use and storage of these materials. Compost should be processed and handled appropriately to avoid food safety hazards. Inground garden beds can be amended with compost; a soil test will help identify nutrient needs.

Gardens need regular irrigation. It is important to only use approved water and watering systems in your garden. This means you must water your plants with the same water your program uses indoors. Municipal water is regulated and safe for garden use. Creeks, open-water systems, and other water collection systems are not safe, and can only be used if approved by safety officials and tested regularly for bacterial contamination.

Once you have soil and water, you are ready for plants. Take a look at "Got Dirt?" in the **Resources** section for ideas on which vegetables to consider. Keep in mind any potential allergies your children may have, and avoid planting varieties that could cause a negative reaction. If younger children will visit the garden, take care to select plants that are fully edible.

Ground soil and potential lead exposure

Lead was commonly used in paint before 1979 and was added to gasoline up until the 1980s. As a result, lead levels may be higher in soil where a demolished structure such as a house or garage existed, around a structure that was built before 1979, or near roads heavy with traffic.

There is no safe soil-lead level for children. Children under six and pregnant women are at greatest risk for lead poisoning. Once ingested, lead stays in your body and can have devastating lifelong effects such as decreased IQ, permanent brain and nervous system damage, and reproductive problems.

If you plan to build or expand an existing inground garden and are concerned about potential lead exposure, contact your UW-Extension county office for information on how to test your soil for lead and other harmful contaminants. If your soil test results show that your soil contains lead, it is best to forgo building an inground garden. Instead, build a container or raised bed garden using a topsoil or potting soil mix. See the garden safety section in **Resources** section for more information on lead safety and soil testing.

Garden maintenance

With your garden space selected, built, and planted, it is time to maintain the garden. There are several good gardening practices discussed in "Got Dirt?" in the **Resources** section and other publications, but it is important to consider a few factors when it comes to working with small children.

Avoid using chemicals for pest and disease management. Follow good integrated pest management techniques and utilize cultural control for any pest issues. These practices include careful monitoring for pest issues, manually removing pest insects, using mulch to keep weeds away, and watering from below to prevent the spread of disease.

While using mulch is an important and useful gardening technique, avoid using chemically treated wood chips and other mulches that may be harmful to young children. Choose age-appropriate gardening tools for the children who will use the garden.

Food safety

Because young children have immune systems that are not yet fully developed, they are at increased risk of foodborne illness. Special attention to proper planting, harvesting, storing, and preparing produce will help keep children and early childhood sites healthy. Federal and state agencies allow the use of youth garden produce; however, your community may have local regulations that apply. The following suggestions are general considerations and should not serve as the final rule for food safety regulations.

- Do not allow animals (both wild and pets) into the garden.
- Use approved water and water systems.
- Wash hands before and after harvesting. If possible, set up an outdoor washing station to make hand washing easy.
- Ensure that the children and adults harvesting produce have been healthy for at least 48 hours after an illness.
- Only harvest and use produce that has no visible damage.
- Use clean tools to harvest produce and food-grade containers to collect and transport produce.
- Store produce requiring refrigeration at 41° Fahrenheit or less.
- Store other produce at room temperature in a cool, dry, and well-ventilated area.
- Store produce in sanitized containers with labels.
- Wash produce under running tap water, even if the produce will be peeled. Use a scrub brush on firm surfaces.
- Avoid cross contamination with dirty surfaces, tools, or foods.

You wouldn't grow all that produce without eating it, would you? Visit the **Resouces** section to learn how to incorporate fresh produce into snack time and meals.

Keeping your garden sustainable

Now that you garden is growing and you are enjoying the produce, how do you make sure your garden is sustainable? By engaging the site staff and families, and by creating a policy that supports and encourages further use of the garden, you can work toward making sure the garden is enjoyed for years to come.

To engage program staff, consider showing teachers and employees aspects of garden maintenance and use. Invite classrooms or school groups to steward a plot in the garden to promote pride and ownership in the garden space. Host team meetings in the garden and encourage employees to enjoy the fresh produce. Offer families alternate off-hour times when children and parents can harvest and keep produce. Create educational programs for family engagement nights that focus on garden use and maintenance. Organize a volunteer base of parents willing to help weed and maintain the garden throughout the season. Let parents know what's happening in the garden on a regular basis so that they can talk to their children about it at home. Encourage children to take produce home with them, and provide resources such as recipes for parents to use the produce. Finally, consider writing garden use into the wellness policy of the program. By writing directions for garden use, more employees may be willing to partake in gardening activities.

Wellness policy changes that include gardening align with the growing trend of whole-living wellness initiatives.

Resources

To find more titles and topics in the People + Plants series, visit learningstore.uwex.edu.

Gardening as a teaching tool

Got Dirt?
www.dhs.wisconsin.gov/publications/p4/p40112.pdf
A garden toolkit for implementing youth gardens, "Got Dirt?" from the Wisconsin Department of Health Services provides a wide range of garden tips and examples for engaging kids in the garden.

Early Sprouts Institute
www.earlysprouts.org
Browse programs that help early childhood educators foster enthusiasm for healthy foods and active play in young children.

Wisconsin School Garden Network's Garden Briefs
www.communitygroundworks.org/content/school-garden-briefs
Short, topic-focused documents written specifically for Wisconsin school garden educators.

Teaching in Nature's Classroom
www.teachinginnaturesclassroom.org
Garden-based learning resources ranging from free books and newsletters to an online forum.

Growing Healthy Children
www.communitygroundworks.org/sites/default/files/GrowingHealthyChildren_web.pdf
Garden-based nutrition activities and geared toward curbing obesity.

Garden produce

Got Veggies?
www.dhs.wisconsin.gov/publications/p0/p00228.pdf
A garden-based nutrition education curriculum created to get children to eat more fresh fruits and vegetables.

Healthy Bites
http://dpi.wi.gov/sites/default/files/imce/school-nutrition/pdf/healthy_bites.pdf
Provides sample guides for childcare programs to improve nutrition practices.

Garden safety

Diggers Hotline
Call 811 or (800) 242-8511
www.diggershotline.com

Playground Safety Guidelines and Definitions
http://ers.fpg.unc.edu/sites/ers.fpg.unc.edu/files/playground%20revised%2010-28-10.pdf
A basic overview of scoring playground and safety items.

Soil testing
http://counties.uwex.edu
Contact your UW-Extension county office for details on garden soil testing.

UW-Extension publication A4089, *Lead in Home Garden Soil*
https://learningstore.uwex.edu/Lead-in-Home-Garden-Soil-P1774.aspx
Available in English and Spanish.

Container gardens

UW-Extension publication A3382, *Container Gardening*
http://learningstore.uwex.edu/assets/pdfs/A3382.pdf

UW-Extension publication A3905-04, *Raised Beds and Containers for Community Gardens*
https://learningstore.uwex.edu/Raised-Beds-and-Containers-for-Community-Gardens-P1723.aspx

UW-Extension publication, *Vegetable Gardening in Containers*
http://hort.uwex.edu/files/2014/11/Container-Vegetables.pdf

Container Gardening Manual from the Got Dirt? Garden Initiative
www.communitygroundworks.org/sites/default/files/container_gardening_manual.pdf

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