ED COMMITTEE #2
September 24, 2012
Update

MEMORANDUM

September 20, 2012

TO: Education Committee

FROM: Essie McGuire, Senior Legislative Analyst

SUBJECT: **Update – Edible Gardens in Montgomery County Public Schools**

Today the Education Committee will receive an update on edible gardens in the Montgomery County Public Schools (MCPS). The following individuals are expected to participate in this discussion:

- Sean Gallagher, Assistant Director, Department of Facilities Management
- Laurie Jenkins, Supervisor, Outdoor Environmental Education

The Education Committee has had an ongoing interest in increasing edible gardens in schools and opportunities for students and schools to incorporate gardening into their communities. The purpose of today's discussion is to receive an update on the status of edible gardens in schools, including the ways in which they are incorporated into the curriculum, and an update on the partnership between MCPS and the Parks Department regarding community gardens on or adjacent to MCPS sites.

Edible gardens in schools: MCPS provided the requested information attached at circles 1-2, and has also prepared an overview presentation for today's worksession. The information reflects a considerably increased effort to facilitate edible gardens in schools and to integrate them into student learning.

- MCPS reports that approximately 20 percent of schools have edible gardens in their school program.
- Circles 3-14 show some of the planning resources that MCPS provides on its website to guide students and schools through the process of developing an edible garden.
- MCPS has partnered with the University of Maryland Extension Master Gardener program which provides additional planning resources and consultation that benefits and supports the program.
- MCPS states that students are able to use the food they harvest from their edible gardens, either to eat in events at the school or to donate to local food pantries.

- MCPS staff states that one key element to the success of an edible garden is a "champion" to lead and coordinate the effort.

  MCPS staff will also speak to the next steps and ongoing efforts to expand this program.

Community garden sites: MCPS provided the update on circle 2 of community gardens on or adjacent to MCPS sites. There are three sites that are fully subscribed, and one additional potential site that has been identified. The update notes that some of the sites may change as construction projects disrupt the grounds. The Committee may want to hear more from MCPS on this partnership with Parks and what site opportunities may be available in the future.

f:\mcguire\2012\edible gardens update comm pckt 912.doc

McGuire, Essie

From: Cascone, Judy [Judy_Cascone@mcpsmd.org] on behalf of Gallagher, Sean [Sean_Gallagher@mcpsmd.org]
Sent: Wednesday, September 12, 2012 9:51 AM
To: McGuire, Essie
Cc: Confino, Robin; Caplon, Marla R.; DeGraba, Susanne; Song, James; Jenkins, Laurie C; Steinberg, Laura
Subject: Edible Gardens in Schools

Dear Ms. McGuire:

The following are responses to the questions posed to Montgomery County Public Schools (MCPS) staff in regard to edible gardens in schools in preparation for the September 24, 2012, Education Committee work session.

Please provide an overview update of edible gardens in MCPS, including:

- **The number of schools with edible gardens, and any specific examples you would like to highlight.**

  Currently, a little more than 20 percent of MCPS schools have integrated edible gardens into their school program. A few examples of schools that have incorporated edible gardens in a meaningful way are Cedar Grove Elementary School, Francis Scott Key Middle School, and Sherwood High School.

- **How edible gardens are connected to the curriculum.**

  As an integrated context for learning, gardens are being used to teach lessons that address standards within a variety of content areas. The following are examples from different grade levels:
  - Math—measuring height of new plants and displaying data in table and graph form
  - Science—collecting data to explore the diversity of organisms in a garden that help plants grow
  - Social studies—studying sustainability practices as students investigate local food production as a part of the global food market
  - Health—growing, nurturing, and harvesting local vegetables that introduce students to alternative foods as part of a healthy diet
  - Literacy—creating before and after pictures of what students predicted they would see in a garden versus what they discovered
  - Career awareness—learning about the real work of farmers as small businesses in our community, as well as science careers in entomology, horticulture, and chemistry

- **Other ways in which edible gardens are generated in schools (i.e. Parent Teacher Associations, student clubs, etc.).**

  In most MCPS schools with edible gardens, a "champion" has been the driver behind the garden—those champions may be elementary school teachers, special education teachers, science teachers, paraeducators, and parents. A few of the gardens have been supported by grant funds from local nonprofits (e.g., Audubon Greenkids). While a champion with a class of students are usually the creators and implementers of gardens, a few environmental clubs have introduced edible gardens to their school. In several schools, clubs help with the day-to-day chores of maintaining the garden.

- **Current policies and practices governing edible gardens in schools**

  To support schools that are interested in having edible gardens, MCPS developed the following website providing instructions for how to create various types of gardens, including edible gardens:

http://www.montgomeryschoolsmd.org/curriculum/outdoored/outreach/container.aspx

This website includes guidance on everything that is needed to have a successful edible garden, including detailed instructions on the type of vegetables, plants, and growing seasons that are recommended. This resource was developed by a work group of master gardeners and MCPS staff. Guidelines also are provided for locating the garden on the site. Because of the need to ensure that the location does not interfere with easements, air intakes, future expansion of the school, and other issues of which the school may not be aware, the school is required to submit the garden plan to the Department of Facilities Management (DFM) for review and approval. DFM staff works with the school to make any location adjustments needed to ensure that the school has the ability to have a successful garden.

- **How the food is and can be used from these gardens.**

  Food produced in school gardens is used in a variety of ways. Some schools have tasting parties and salad celebrations that allow children to become familiar with foods that they might not normally eat; other schools have pizza parties with garden harvested toppings; and some donate food to local food pantries.

Please provide an update on the status of the MCPS partnership the Parks Department regarding community gardens on or adjacent to MCPS sites.

MCPS and the Parks Department have partnered for the past three years to create two community gardens on MCPS sites and to identify another two sites that potentially could be developed as community gardens.

- Rocking Horse Road Center—Developed in 2010, this garden is fully subscribed with approximately 60 plots.
- Emory Grove Center—Developed in 2010, this garden also is fully subscribed with approximately 60 plots. This community garden will be closing in December 2012 as the site is needed for the Upcounty Holding Center for elementary schools. Candlewood Elementary School is scheduled to move in during the summer 2013. MCPS is working with the Parks Department to find an alternative location for the Emory Grove Center community garden.
- Spring Mill Center—This is another MCPS site that the Parks Department has evaluated. However, the Parks Department has found that there is insufficient community interest for a community garden to be developed in the near future.
- Bradley Hills Community Garden—This garden is not on MCPS property but is directly adjacent to Bradley Hills Elementary School. This garden is fully subscribed with approximately 40 plots. Bradley Hills Elementary School temporarily has been relocated to Radnor Holding Center during an addition project. The school is scheduled to return to its home location during summer 2013.

For questions or additional information, please contact me at 240-314-1060 or via e-mail at Sean_Gallagher@mcpsmd.org, or Ms. Laurie C. Jenkins, supervisor, Outdoor Environmental Education Programs, at 301-924-3123, or via e-mail at Laurie_C_Jenkins@mcpsmd.org.

Sincerely,

Sean Gallagher
Assistant Director, Department of Facilities Management

Montgomery County Public Schools

Outdoor Environmental Education

Outdoor and Environmental Education → Outreach → Creating an Edible Garden

Creating an Edible Garden

"The courtyard planting days were a huge hit with my students! They were so excited to be able to dig a hole and plant a plant… It was a wonderful opportunity to build language and vocabulary skills in the context of a meaningful activity. Thanks!"

Mary C. Carter, First Grade Teacher, Rolling Terrace ES

Why should gardening be used as an instructional tool?

What is a container garden?

What are some benefits and challenges of a container garden?

What are the steps to create a container garden?

What are some additional resources?

Credits:

This site is a result of collaboration between Montgomery County Public Schools, Audubon Naturalist Society GreenKids Program (ansgreenkids.org), Montgomery National Capital Parks and Planning Program, M-NCPPC (mncppc.org), Montgomery College (montgomerycollege.edu/landscapetechnology), and the University of Maryland Extension (extension.umd.edu). These organizations support successful and safe container gardening in schools. Please use their excellent resources to help your gardens grow!

- Home
- About Us
- Calendar of Events
- Staff Directory
- Instructional Programs
- Information for Parents
- Professional Development
- Go Green

(3)

Montgomery County Public Schools

Outdoor Environmental Education

Outdoor and Environmental Education → Outreach → Creating an Edible Garden → Why should gardening be used as an instructional tool?

Gardening as an Instructional Tool

All types of gardens provide a great outdoor classroom for interdisciplinary learning experiences for students. Gardening as an instructional tool will:

- Engage and motivate students.
- Promote inquiry! Students can develop testable garden questions and set up experiments to answer them.
- Provide a learning laboratory for investigating living things including plant growth and development, animal/plant interactions and adaptations, and the concepts of food chain and food web.
- Provide a learning laboratory for mathematics, both in the planning and construction of the garden container, and in the growing of the plants.
- Promote the authentic use of math as a tool in science through measurement, the construction of tables and graphs, and data analysis.
- Provide a food laboratory experience in which students can be involved with food research and production, from planting to harvest.
- Promote healthy lifestyles and increases the likelihood that students try a new food.
- Engage students in the concept of sustainability—support local growers, grow your own food.
- Provide a familiarity with agriculture—through an authentic experience, students experience the work and time involved in growing food plants.
- Provide a connection between local gardens and larger ecosystems including streams, rivers, and Chesapeake Bay.
- Instill a sense of place.

4

Montgomery County Public Schools

Outdoor Environmental Education

Outdoor and Environmental Education → Outreach → Creating an Edible Garden → What is an Edible Container Garden?

What is an Edible Container Garden?

Container gardening is one of the easiest ways to start growing vegetables and other plants at your school. Container gardens can be located in the classroom, courtyard, or other approved parts of the school property.

You can build containers for edibles, buy them, or re-purpose previously used containers. The following are examples of containers that can be used for edible gardens:

- planter boxes
- clay pots and faux clay pots
- plastic pots
- Salad Tables™
- hanging baskets
- recycled milk and juice jug
- food grade barrels
- Earth boxes
- 5-gallon buckets

*** Do not use treated-lumber products and containers that previously contained toxic materials (examples: paint, spackle, varnish, pesticide, etc.). Also, some plastics and clays are not intended for outdoor use and may become brittle from exposure to the elements.

(5)

Montgomery County Public Schools

Outdoor Environmental Education

Outdoor and Environmental Education → Outreach → Creating an Edible Garden → Benefits and Challenges

Benefits and Challenges

Benefits of Container Gardens

The perfect solution for students and teachers interested in integrating gardening into instruction because container gardens—

- can be used when space is limited;
- can be placed to take advantage of sunny places that aren't suitable for raised beds or in-ground gardens;
- are suitable for almost any vegetable, herb, or annual flower;
- are ideal for Spring and Fall planting when school is in session;
- need little or no weeding;
- are portable and can be removed or re-purposed if the school/teacher/parent wishes to discontinue their use;
- can be easy for beginner gardeners; and
- can be used incrementally—schools can decide to start small and add containers as space, interest, and budgets permit.

Challenges of Container Gardens

Keep in mind container gardens require—

- sufficient and consistent watering too much will damage the plants and too little can kill them;
- 4-6 hours of direct sun for Spring/Fall season vegetables and 6-8 hours of sun for summer vegetables;
- correct growing medium—a good quality soilless* mixture and compost (not soil dug from nearby ground); and
- moving—you may need to be able to move your container garden: It may be heavy and difficult to move when filled with growing medium.

(6)

Montgomery County Public Schools

Outdoor Environmental Education

Outdoor and Environmental Education → Outreach → Creating an Edible Garden → How to Create an Edible Container Garden

How to Create an Edible Container Garden

Step 1: Select a site

For beginning gardeners, a consultation with a University of Maryland Extension Master Gardener is highly recommended. Contact mgmont @ **umd.edu** to request a School Garden consultation from a Montgomery County Master Gardener. Master Gardeners can provide guidance and assistance with the site selection, as well as garden creation and maintenance planning.

General considerations for selecting a site include the following:

- A courtyard or protected area is the best choice, if available, to minimize vandalism and theft, prevent application of pesticide or herbicide, and minimize animal access (rats, mice, groundhogs, deer, etc.).
- The site must have adequate sunlight and be fairly level.
- The site should be easy to access and safe for student movement (provide ADA accessibility).
- The site must have access to a functioning, outdoor water source
- The garden containers should be placed outside of NO MOW zones and Forest Conservation Areas, if present on school property
- Include students in the site choice.
- Request input from Building Service Manager.
- **Discuss the proposed site with school principal.**

Important Safety Guidelines include:

- The garden site cannot impact flow of traffic, obstruct sidewalks, or utilities.
- The garden site cannot impede emergency exit routes.
- Important Facility Regulation

- *Container Gardens may not be within fifteen (15) feet of the exterior building walls or air intakes and/or three(3) feet of a fence*

top

Step 2: Complete and Submit Approval Form

Complete and submit the following items to the Division of Construction. The more complete your form and attachments are, the shorter your project evaluation time will be.

- Facility Project Request
- School site plan with proposed garden location marked (Your school principal can acquire the site plan from the Division of Construction.)
- Plant list, only if not using plants from recommended list found in Step 3

Timeline: Submit your request to Division of Construction between September 15 and March 31: Six weeks is an average response time. (Requests received after April 1 will not be reviewed until September 15, because summer projects take precedence over new requests.

top

Step 3: Plan the Garden with Your Students

Student involvement in the garden planning process immediately engages them in the full experience. Here are links to some helpful documents to guide your container gardening experience.

- Youth Garden Planning Document
- Recommended Plant List: PICK YOUR Plants for Success : Spring and Fall

top

Step 4: Plant the Garden

For details: Factsheet on Container Vegetable Gardening and Crop Profiles

- Mix water into the growing media until it is as wet as a wrung–out sponge
- Fill your container with the growing media and level it off (don't pack it).
- Seeds can be planted in straight rows (furrows) or in a pattern. You create a furrow by dragging your finger or a pointed object through the growing media. The furrow should only be about 1/2 in. deep. You can also poke your finger ½ in. deep in the growing and plant a few seeds per hole.
- Shake some seeds into a folded index card and tap them where you want plants to grow. Or, tap some seeds from the packet into your hand and use your thumb and forefinger to plant the seeds. The spacing between plants will vary depending on the crop.
- Many of the crops have dark color seeds making them harder to view against the dark color growing mix. Some of the lettuce seeds are white making them easier to see. The round seeds tend to bounce so keep the index card close to the growing mix. (NOTE: young children will have difficult time picking up and dropping the seeds at the correct spacing).
- Cover the seeds about ¼" deep by gently brushing the growing mix from either side of the furrow. Press down on the growing media so that good contact is made with the seeds.

What should I do with the extra seed?
Carefully re-seal or fold the seed packet. Keep all seed packets in a protected container indoors where they will be dry and at room temperature. You can increase the life of your leftover seeds by storing them in a small glass jars in a refrigerator or freezer.

When will I see the new seedlings?
Members of the cabbage family (e.g. arugula, kale, mustard, and broccoli) will germinate the fastest (2-4 days). Lettuces are next (6-10 days). Spinach, chard, and cilantro will take 7-10 days to germinate. Germination will be slower when growing media temperature is below 60°F or above 80°F

How long does it take? How big will they get?

Vegetable plants grown in containers don't get as large or produce as much as the same plants grown in a garden, because they don't have as much growing room above or below the ground. For example- a Swiss chard plant will grow 3 ft. tall and 2 ft. wide when planted 2 ft. apart in an in-ground garden. The same plant will grow 1/3 that size when planted 1 ft. apart in an 8-in. deep container; and only 6-8 in. tall when planted 2 in. apart in a 4-in. deep container. But container-grown plants may germinate and grow more quickly. Managing expectations is important to avoid disappointments.

Salad greens will grow:

- 2-3 inches in height in 12-24 days (micro-greens)
- 4-6 inches in height in 25-40 days (baby greens)
- 7-10 inches in height in 40-60 days (mature size)

This all depends on...

- the crop- lettuce and arugula will grow faster and taller than spinach or chard
- spacing- allowing more space between plants will allow them to grow larger
- time of the season- fall salad greens planted in September will germinate and grow faster than the same crops planted in March.
- weather conditions- warm weather will speed up growth; cold, wet weather could reduce growth.

Thinning

It's easy to sow the seeds too thickly. In that case, you simply remove excess seedlings to achieve the 1-2 in. spacing. It's OK to increase the plant spacing. This will give you fewer, larger plants. Removing excess plants is called "thinning." You can gently pull the excess plants out by hand or cut them at the surface with scissors. They can be composted, added to a salad that evening, or dropped on the ground.

http://www.agnr.umd.edu/Extension/gardening/growit/FoodGardeningVideos/Video%20-%20Salad%20Table%20Part%202.cfm (salad table video shows how to thin plants)

top

Step 5: Maintain the Garden

Create a maintenance plan for tasks- watering, fertilizing, and checking plant progress. This can be done by students, parents, teachers, para-educators, building service staff, or after-school clubs.

Should I Fertilize?

Soilless growing media contain a small amount of fertilizer that will provide some nutrients to your plants for 4-6 weeks, depending on weather conditions, planting density, and other factors. Add fertilizer to your containers prior to planting to ensure strong, sustained growth. This is especially important for the salad greens which are "heavy feeders". In most cases the one application will be enough.

Use a fertilizer that contains nitrogen, phosphorous, and potassium. Always follow label directions. If the growing mix used is 50% compost, reduce fertilizer amount by ½, and don't fertilize until plants are up and growing. To prevent leaf burn, wash off any fertilizer that lands on leaves and don't apply fertilizer when leaves are wet. The following fertilizers will work fine: alfalfa meal, cottonseed meal, organic garden fertilizers, liquid fertilizers, and Osmocote (slow-release nutrients).

How much watering will I have to do?

After sowing seed you must keep the growing media moist. You probably will not need to water every day until after seedlings emerge. Then you'll need to water daily using a watering can or watering nozzle (e.g. "water breaker) attached to a hose. Water gently until the growing media is uniformly moist.

Accelerate plant growth with a floating row cover?

All of the recommended crops will germinate and grow under typical spring and fall conditions in MD, and all except snap beans can tolerate a light frost. Covering your plants with a floating row cover will speed growth and protect plants from frosts, insect pests, and wildlife. They are made from spun-bonded polypropylene and will last several years. Prices are 3-5 cents per square foot of material and you cut them to the desired sizes with scissors. A large number of mail order seed and garden supply companies carry various brands and types of floating row covers. Check first with local stores.

What's the best way to harvest salad greens?

The "cut-and-come-again" harvesting method is very efficient. Use scissors to cut all plants close to the growing mix. The plants will produce new leaves from the base and can be harvested a second time in 3-4 weeks. Sometimes it is possible to get a third cutting. An alternative harvesting method is to thin plants so they are spaced 4-6 inches apart and harvest outer leaves or entire plants.

http://www.agnr.umd.edu/Extension/gardening/growit/FoodGardeningVideos/Video%20-%20Salad%20Table%20Part%202.cfm (second part of the salad table video has harvesting)

http://growit.umd.edu/Salad%20Tables%20and%20Salad%20Boxes/Step%205%20-%20Harvesting%20and%20Salad%20Prep.cfm

top

(10)

Step 6: Clean Up the Garden

The 20 recommended crops produce a first harvest 25 days (e.g. lettuce) to 55 days (e.g. beans) after planting. This means you plant each container one time for the spring season and one time for the fall season. At the end of the harvest just pull up the plants and compost them.

Dump the growing media in heavy plastic bags and store them and the empty containers in a suitable location. Containers can be left in place but animals may disturb the growing media. The growing media can be re-used the following year. Freshen it up with some new growing media and add fertilizer to make up for the loss of nutrients over the growing season.

top

- Home
- About Us
- Calendar of Events
- Staff Directory
- Instructional Programs
- Information for Parents
- Professional Development
- Go Green

Emergency information

Curriculum 2.0

- MCPS Home
- Parents
- Students
- Staff
- About
- Schools
- Community

- Contact
- Privacy
- Nondiscrimination
- Get Acrobat
- Get Flash
- Montgomery County

Facility Project Request Form

Department of Facilities Management
2096 Gaither Road, Suite 200 • Rockville, Maryland 20850
240-314-1006 (phone); 240-314-1036 (fax)

For new work, school-based projects, & projects not covered through maintenance work orders (including changes and modifications to existing facility)

DFM TRACKING # _____

School Name _____ Date ____/____/____

Principal _____

Principal's designee, primary contact for project _____ Phone number ____-____-____

E-mail address _____

Approximate cost of project $ _____

Funding source: ☐ PTA or private funding (See BOE Policy CNE) ☐ School funds, IAF account
☐ Other, please identify _____ ☐ Funding not identified

Type of project: ☐ change of existing space to a new use
☐ landscaping or courtyard (attach site plan w/project location) Location _____
☐ school sign (attach site plan w/ sign location) _____
☐ playground equipment _____
☐ other, describe _____ _____

Please provide a short description of the requested project and/or attached a project description & information:

_____

_____

_____

_____

(Providing a thorough description and associated information reduces the time for the evaluation/approval process.)

Please attach additional information that would assist our review of the proposed project. Attachments may include proposals, contractor quotes, site plans, drawings, sketches, markups, addition description, etc.

Description of attachments _____

Requests can only be reviewed from September 15 through March 31. Requests received after April 1 will be held until September 15. Please allow 6 weeks for the evaluation process.

Who is being proposed to accomplish the project (check one).

☐ Outside contractor hired by PTA or _____ (Attached contractor's proposal)
☐ MCPS approved contractor ☐ DFM Maintenance or Construction staff
☐ school-based staff, identify _____
☐ volunteers or community members ☐ other, please describe _____

Approved by: _____, Principal ____/____/____ Date
(By signing, the principal is endorsing this project and certifying, that if approved, the project will be implemented in accordance with the final approved plan)

DFM use only

Required reviews: ☐ Facility Planner ☐ Construction ☐ Maintenance Depot ☐ SW Safety ☐ SPO ☐ Real Estate ☐ Energy

Review comments _____

_____

_____ (use attachment if necessary)

☐ Approved as proposed, no changes needed **Policy CNE: Include in report to the BOE?** ☐ **Yes** ☐ **No**
☐ Approved with modifications ☐ Denied ☐ Resubmit proposal with modifications ☐ Inclusion in future capital project

Additional notation: _____ (☐ see attachment, if checked)

By: _____ Director, Department of Facilities Management ____/____/____ Date

Montgomery County Public Schools

Outdoor Environmental Education

Outdoor and Environmental Education → Outreach → Creating an Edible Garden → Resources

Resources

There are many free and low cost resources to help beginner gardeners get started growing vegetables and other plants in containers. The following list represents a sampling of what is available.

Web Sites:

- University of Maryland Extension:

  Home and Garden Information Center
  Grow It Eat It
  Montgomery County Master Gardeners

- National Gardening Association Kids' Gardening Programs
- Audubon Naturalist Society GreenKids
- GardenABCs: The School Garden Share-Site
- Compost and Worm Castings from Growing Soul (info@growingSOUL.org or 301-537-7422 for more information)

Possible Places to Visit:

- Maryland-National Capital Park and Planning Community (M-NCPPC) Community Garden
- Brookside Gardens
- Montgomery County Master Gardeners Demonstration Garden (Contact at mgmont@umd.edu to arrange a guided tour.)

Book list:

McGee and Stuckey.The Bountiful Container. Workman Publishing, NY: 2002.

Bucklin-Sporer and Pringle. How to Grow a School Garden. Timber Press, Portland, OR: 2010.

Scott Appell (ed). The Potted Garden. Brooklyn Botanic Garden, Brooklyn, NY: 2001.

Kenin, Justine. We Grew It, Let's Eat It. Tenley Circle Press, 2010.

Krezel, Cindy. Kids' Container Gardening. Ball Publishing, 2005.

Lovejoy, Sharon. Roots, Shoots, Buckets and Boots: Activities to do in the Garden. Workman Publishing, 1999.

(13)

Hannemann, Hulse, Johnson, Kurland et al. Gardening with Children. Brooklyn Botanic Garden, Brooklyn, NY: 2007.

Greening School Grounds: Creating Habitats for Learning, Grant T. and Littlejohn} G. (New Society Publishers} Green Teacher Magazine} 2001).

Danks, Sharon Gamson. Asphalt to Ecosystems: Design Ideas for Schoolyard Transformation. New Village Press. 2010.

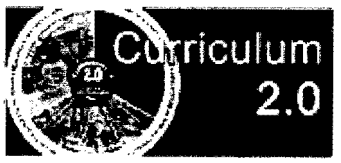
Instructional Resources:

- Growing Healthy Habits, Food Supplement Nutrition Education Program (FSNEP)
- List from DC Schoolyard Greening
- National Gardening Association Kids' Gardening
- Cornell Garden-Based Learning
- The Edible Schoolyard
- National Environmental Education Week School Garden Curricula
- Junior Master Gardener
- American Horticultural Society Partnership for Plant-Based Education
- EarthBOX Curriculum
- Leafy Greens Council

Resource list:

- Oklahoma State DEQ Resources for Edible School Gardens
- Gardening With Kids (from NGA)
- FAO School Gardens site

- Home
- About Us
- Calendar of Events
- Staff Directory
- Instructional Programs
- Information for Parents
- Professional Development
- Go Green



14

GROW IT EAT IT
Maryland's Food Gardening Network

Getting Started with Container Vegetable Gardening

UNIVERSITY OF MARYLAND EXTENSION
Solutions in your community
Search

Container Vegetable Gardening
- Getting Started with Containers
- Types of Containers
- Make Your Own Self-Watering Container
- What is Growing Media?
- Keeping Roots Happy
- Planting and Caring for Your Container Vegetables
- Building Salad Tables and Salad Boxes

Publications
- GE 133 Twenty Vegetable Crops for School Container Gardens (pdf)
- HG 600 Container Vegetable Gardening (pdf)
- GHH Youth Gardening Program Planning Document (pdf)

- Return to Youth Gardening Home Page
- Return to Home Page

There are a few simple ingredients for success— a little bit of room, sunlight, containers, growing media (a.k.a. "potting soil"), water, and nutrients (fertilizer). The single most important ingredient for success is Tender Loving Care because your container plants have to depend entirely on YOU for all of their needs. It's always best to start small the first year. Share ideas and create a plan with the other people in your household. Plant crops that you and your family like to eat, and keep your containers filled with edible plants through the entire growing season.

Location

Incorporating containers into outdoor living space requires some basic knowledge about the needs of the plants you want to grow. An eye for design will produce more pleasing, aesthetic results.

- Containers can be placed on any level surface— decks, balconies, and along driveways and sidewalks. You can also set them on bare ground and allow the plant roots to grow down into the soil or place them on top of a mulched area. Edibles can also be grown in hanging baskets and window boxes.
- Southern and western exposures will be the sunniest and warmest, while northern and eastern exposures will be shadier and cooler.
- You'll need 6-8 hours of direct sun for warm-season crops (tomato, pepper, eggplant, squash) and 3-5 hours of direct sun for cool-season crops (lettuce, spinach, Asian greens).
- Easy access to water is crucial. Some containers will need watering every day when the weather is hot and dry.
- Consider the microclimate in the container garden area. Watch out for heat sinks created by brick, concrete, and reflective surfaces.

15

Cautionary notes:

- Containers and the water that drains from them can mark and stain concrete and wood decking. Using self-watering containers or plastic saucers to catch water will prevent this problem (and is very helpful if you are gardening "above" your neighbour's balcony.)
- The light weight of large plastic containers leads gardeners to believe they can be easily moved. But a 20-inch diameter container filled with moist growing medium and plants can weigh 100 lbs! (You can buy or make plant caddies to make heavy containers portable.)

For more information, contact Jon Traunfeld, University of Maryland Extension Specialist

Last updated: 01/7/2011