













Jessica Vincent, M.Ed. CHES AgrAbility Coordinator

University of Arkansas Division of Agriculture 2301 S. University Ave. Little Rock, AR 72204

www.uaex.edu

The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer. This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture under Award No. 2010-41590-20718. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.

Lesson Guide

Endless Gardening is designed to be an interactive 60 minute workshop.

Lesson Materials

- Endless Gardening Presenter's Guide
- Power Point, 12 Slides
- Handout: Endless Gardening Magazine
- Endless Gardening Survey

Equipment and Supplies

- Endless Gardening Toolkit with demonstration items
- Laptop computer and projector
- Screen and extension cord
- Podium and microphone, if needed
- Table
- Plastic rectangular container and potting soil or dirt

Learner Outcomes

- Participants will understand how to garden with arthritis using proper tools and techniques.
- Participants will use and be able to identify the difference between ergonomic and nonergonomic tools.
- Participants will understand the principles of Universal Design.
- Participants will name the benefits of gardening.
- Participants will recognize the different types of gardening gloves.
- Participants will be able to identify the different types of raised garden beds.
- Participants will illustrate the different types of stretches to be done before, during, and after gardening.

Preparation for the Session

- Review all lesson materials, including the presenter's guide, handouts, activities, and visual aids.
- Prepare all of the supplies you will need to conduct all of the activities.
- Secure a laptop computer, projector, and screen.
- Check the room for appropriate lighting, temperature, and seating arrangements. This is an interactive lesson so allow room for your participants to use the gardening tools and do the stretches.

Endless Gardening Activities

The toolkit has a variety of demonstration items – ergonomic gardening tools, regular gardening tools, long-handled gardening tools, gloves, kneelers/stools, tool caddies, seed spreaders, etc.

In addition, you will need either one or two containers of dirt. These need to be wide and deep enough for the participants to dig in, but not too big that they are too heavy to transport.

Instructions

Throughout the presentation you will show and explain to your participants the different types of tools that are available to make gardening easier when you are on the appropriate slide in the power point. Allow the participants to use the tools to dig in the dirt. They can either dig in one single container, or they can transfer dirt from one container to the other. The purpose of this activity is to allow them to feel the difference in the various types of tools available. Also, if you put the containers on the floor, your participants can also use the kneeler/stool.

At the end of the power point is a tips section. This is where you will get your participants involved in doing the stretching activity. Have the participants do the stretches with you as you demonstrate and explain how to do them. Use as much visual demonstration as you possibly can for the other tips. For example, when talking about protection from the sun, wear a hat and sunglasses.

Questions to Ask

Did you notice a difference in the gardening hand tools?

Did the ergonomic tools make it easier to dig in or transfer the dirt? Why or why not?

Which tool did you like the best and why?

Do you have any questions or other tips you have found successful in making gardening easier and more enjoyable?

Introduction

The benefits of gardening are endless. For example, it can help you connect with nature, reduce stress, and it can offer a form of physical activity. Suffering from a limiting health condition doesn't have to interfere with these benefits. This toolkit is designed as a guide and resource for those who want to create a universally designed personal garden or community garden. "Universal design" is a broad term to encompass the design of products and environments that can serve and be usable by as many people as possible – regardless of age, ability, or circumstance. This toolkit is in no way meant to be a complete or all inclusive guide. For more information or additional resources on this and other topics, visit your local University of Arkansas Cooperative Extension Service in person or online at www.uaex.edu.

Universal Design Principles

The Center for Universal Design at North Carolina State University conducts research on usability and has provided the public with the following seven principles for universal design.

- 1. **Equitable Use**: Designs should be made useful and marketable to all persons, without segregating or causing a disadvantage for any group of users. i.e., powered doors at shopping centers.
- 2. **Flexibility in Use:** Designs should accommodate a wide range of both individual preferences and abilities. i.e., large grip scissors.
- 3. **Simple and Intuitive Use:** Designs should be easy to understand for all persons regardless of their experience, knowledge, language skills, and/or educational level. i.e., public emergency stations that utilize recognizable emergency colors.
- 4. **Perceptible Information:** Designs should communicate information effectively regardless of ambient conditions or a person's sensory abilities. i.e., small bumps on a phone or keypad.
- 5. **Tolerance for Error:** Designs should minimize any hazards or adverse consequences from accidental or unintended actions. i.e., sequential-trip triggers on a nail gun.
- 6. **Low Physical Effort:** Designs should be able to be used efficiently and comfortably and with a minimum amount of fatigue. i.e., door levers that don't require hand-grip strength to operate.
- 7. **Size and Space for Approach and Use:** Designs should accommodate for appropriate size, space, and use regardless of a person's body size, posture, or mobility and should target approach, reach, and manipulation. i.e., wide gates that accommodate wheelchairs.

Universal Design and Gardening

So how do these universal design principles apply to community gardening? Here are some areas to consider:

- Main and Public Entryways: These areas should be level by removing any steps-up if
 possible or include a ramp if the area is elevated.
- Parking: Make sure to have close parking areas designated for those with disabilities.
- **Steps**: Either replace steps or include an ADA approved ramp with a flat and gentle slope. (ADA Americans with Disabilities Act of 1990 requires public places and publicly funded projects to provide accessibility to persons with disabilities)
- **Pathways**: All walkways should be firm, wide, and level. Make sure they are well-drained and avoid abrupt or extreme drop-offs.
- Water: Make sure that water spigots are at a height that is accessible to persons in a wheelchair. Also use a lever handle versus a twist handle because these can be used without a tight grip.
- Benches: Have comfortable benches to sit on as an area of rest.
- **Portable Toilets**: If your garden area has a portable toilet, make sure it is wheelchair accessible.
- Raised Garden Beds: Raised beds are accommodating and come in various forms and heights including raised boxes, container gardens, and vertical gardens.
- **Tools**: Tools should be made of lightweight material that is less tiring to use. Also consider long-handled tools, telescoping tools, and ergonomically designed tools.
- **Garden Carts**: Carts aid in moving plants, mulch, or heavy objects and are easier to maneuver than wheelbarrows.

Pathways

Garden pathways are essential. Not only can they provide beautification, they should also provide easy access both in and out of your garden. Pathways can be made out of almost any material, but remember the following tips:

- Make sure paths are firm, level, smooth, and stable.
- Follow ADA guidelines when constructing accessible ramps.
- Pathways should be an accessible width of at least 36" to accommodate a wheelchair or walker, or five feet wide to allow people to walk side-by-side. To provide ample turnaround space for a wheelchair or walker, a five foot by five foot area is needed at the beginning of the pathway, periodically throughout the pathway, and at the end of the pathway.
- Make sure pathways have a clearly marked beginning and ending.
- Mark all borders with appropriate edging, making sure to avoid abrupt drop-offs.

- Textured surfaces provide better traction and help to prevent against falls. Remember, gardens require water which may cause pathways to become wet. Avoid surfaces that are slippery when wet.
- Increase pathway visibility by using vibrant and contrasting colors.
- While gardening is safer during daylight hours, your garden should still include ample lighting to light all areas, including beds and pathways.
- Pathways should include comfortable benches or seating to provide areas of rest.

Many garden pathways consist of grass, mulch, compacted soil, or gravel. While some of these benefit the natural environment, they are not always accommodating to those with mobility issues. Consider installing hard pathway surfaces to help avoid uneven surfaces that can throw off a person's balance or hinder navigation by a wheelchair, walker, stroller, or other wheeled device. Some hard materials to consider are aggregate, stone, asphalt, brick, and flagstone.

Raised Garden Beds

Raised bed gardening is becoming more popular. Not only can they provide better drainage, expanded growing seasons, and ease of maintenance, they can also make gardening more accessible. There are different categories of "raised gardening". These include, actual raised beds, containers such as hanging baskets and large pots, and vertical gardens such as trellises and arbors. This section is going to focus on three types of actual raised beds – those that are on the ground, those that are semi-ambulatory, and those that are wheelchair accessible.

Regardless of which type of raised bed you build, the following principles apply. For a one-sided bed (such as those adjacent to a building), the width should be limited to **two feet**. For a two-sided bed, the width should be limited to **four feet**. Staying within these widths will assist you in being able to reach from one side to the other for a one-sided bed or to the center of a two-sided bed without over-exertion.

Ground level garden beds:

Height: ½ to 1 foot

Width: 2 feet for one-sided

4 feet for two-sided



Semi-Ambulatory garden beds:

Height: 2 ½ to 3 feet

Width: 2 feet for one-sided

4 feet for two-sided



Wheelchair accessible garden beds:

Height: 2 to 2 ½ feet

Width: 2 feet for one-sided

4 feet for two-sided



Raised garden beds can be made out of various types of materials. Here are a few along with the advantages and disadvantages of each.

Wood

- Advantages: This is the easiest material to work with and it can blend in with almost any environment.
- Disadvantages: Wood can be expensive, tends to rot, and treated wood may contain chemicals that can harm plants.



Stone

- Advantages: There is a large selection to choose from and stone can blend in with almost any environment.
- Disadvantages: Stone is usually permanent and can be abrasive. It may also require a contractor due to its weight and for the skill needed to construct.



Concrete

- Advantages: Concrete is very adaptable by combining colors and textures.
- Disadvantages: Pouring concrete may require a contractor and it can be abrasive. Concrete also requires an appropriate foundation.



• Cinder Blocks

- Advantages: Cinder blocks are a less expensive alternative, easy to work with, and the holes can be used as planters.
- Disadvantages: Cinder blocks can be an eye sore aesthetically because they are large and bulky. Soil contained within cinder blocks tends to dry out quickly which will require more frequent watering.



Bricks

- Advantages: Bricks are available in many colors and can be visually appealing.
- Disadvantages: Bricks can be expensive and are usually permanent. They may also require a brick layer to construct.



Salvage

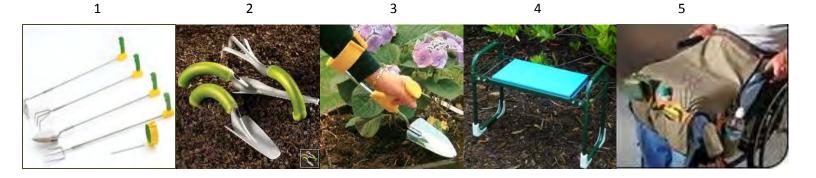
- Advantages: Salvage can be very cheap, even free. It may also allow for more creativity than traditional building materials.
- Disadvantages: Depending on the material, salvage can be abrasive or possibly have safety issues.



Tools

There are a variety of gardening tools available that have been adapted to meet certain needs. Choosing the right ones can make your gardening experience more enjoyable.

- Long-handled or telescoping tools extend your reach which can ease the strain on your lower back.
- 2. Ergonomic handled tools feature specially shaped handles to help keep your body in a neutral position and ease the stress on your joints.
- 3. Pistol grip tools can include a forearm grip to give you additional leverage when digging or weeding and ease the stress on your hands.
- 4. Kneelers help to ward off knee pain. Combination kneelers serve a dual purpose by providing "handles" to assist you when getting up and can be turned over and used as a stool.
- 5. A caddy is necessary for keeping your garden tools within reach. Garden tool aprons are available and some are designed for wheelchair use.



Health and Safety Tips

Many gardening tools can be replaced when they are worn or broken. But there is one very important gardening tool that cannot....your body. Follow these tips to help reduce your risk of injury.

- **Respect Pain**. If you feel severe pain, STOP gardening and rest. Consult your healthcare provider if the pain continues.
- **Posture**. Try not to slouch over while you garden. Poor posture can cause pain, fatigue, and even strains.
- **Switch Tasks Often**. Staying in one position too long can cause stiffness. Stretch often and alternate bending or stooping jobs with standing or reaching jobs.
- *Repetitive Tasks*. Just like staying in one position too long, repetitive tasks can cause stiffness and also inflammation and joint pain. Take periodic breaks.
- **Use Your Largest and Strongest Joints**. For example, when lifting use your legs instead of your back. When troweling, use your forearm and elbow instead of your wrist and fingers. And use the palms of your hands to push levers and tools instead of your fingers.
- **Sun Protection**. Always remember to protect yourself from harmful effects that can be caused by the sun. Wear lightweight, long-sleeved clothing, gloves, a hat with a large brim, sunglasses, and a sunscreen of at least SPF 15.
- **Avoid Dehydration**. Drink plenty of decaffeinated fluids, avoid being outdoors between 10 a.m. and 2 p.m., and allow time for breaks in the shade.

For more information on Universal Design, gardening, and other topics, visit your local University of Arkansas Cooperative Extension Service in person or online, www.uaex.edu.

Additional Resources

www.design.ncsu.edu/cud The Center for Universal Design at NC State
www.extension.missouri.edu University of Missouri Extension
http://agrability.missouri.edu/gardenweb/ Gardens for Every Body, University of Missouri - Columbia

www.ncpad.org The National Center on Physical Activity and Disability

Radius Ergonomic Tools are available through Lee Valley at www.leevalley.com
Easi-Grip Pistol Tools are available through The Wright Stuff at www.arthritissupplies.com



Endless Gardening Survey



1. For the following questions, check the rating that best describes your feelings before and after this presentation.

	Before the Presentation			After the Presentation		
	Didn't Know	Knew the Basics	Knew Well	Don't Know	Know the Basics	Know Well
The Universal Design Principles can be applied to gardening.						
Raised garden beds can be ground level, semi- ambulatory, or wheelchair accessible.						
Ergonomic tools are designed to keep your wrist in a neutral position and ease the stress on your joints.						
Long-handled and telescoping tools can ease lower back pain by extending your reach.						
Combination kneelers serve a dual purpose by providing handles to assist you when getting up and can be turned over and used as a stool.						
Poor posture can lead to fatigue, joint pain, and strains.						
Switching tasks often can help prevent stiffness and joint pain.						
Stretching often can help prevent stiffness and joint pain.						
Sun protection is important and can be obtained by wearing lightweight, long-sleeved clothing, gloves, large brim hats, and sunscreen of at least SPF 15.						
There are different types of gloves to wear for hand protection depending on the task you are doing.						

2. Was the information in this presentation useful?

3.	Do you plan to apply t life of someone you kn	-	-	this presentation in your own life or the nes?
	Age	Male	Female	County
	Race/Ethnicity:		_ African Ameri _ American Indi _ Asian _ Hawaiian/Pac _ White	ian/Alaska Native

The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer. This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture under Award No. 2010-41590-20718. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.

2 or more mixed races

Additional Resources:

Aging in Place: Home Maintenance and Household Fun Gardening Adaptations for Senior Adults

Introduction

As a person ages, he or she experiences many changes. Some of these are normal aging processes while others are a result of disease or illness. Regardless of the cause, these changes impact a person's physical, emotional and cognitive abilities as well as social roles. Besides being one of America's most popular hobbies, gardening can be therapeutic and enhances creativity. Gardening also relieves stress and provides a natural way to exercise and burn calories.



However, many of the changes involved in aging must be addressed by modifications in gardening practices, situations and tools. The following chart lists changes that occur with age, the impacts of the changes, and the gardening adaptations that can result in continued participation.

Changes Caused by Aging	Impacts	Gardening Adaptations			
Cognitive					
Concept development may decrease if the person is not active and social. Alzheimer's	It becomes more difficult to learn new skills and to remember recent activities.	The garden can be kept simple with less confusing plantings.			
disease is more likely, resulting in loss of short-term memory.		Plants that trigger memories can be planted.			
		A distinctive and familiar			
		focal point allows for easier			
		orientation and way-finding.			
Reaction time increases.	The learning pace slows. Accidents with power tools	Avoid the use of power tools.			
	are more likely.	Allow plenty of time for			
		gardening activities, keeping the pace leisurely.			

Changes Caused by Aging	Impacts	Gardening Adaptations		
Physical				
Vision: The lens will thicken, yellow and become opaque.	Reduced clarity. Blue, violet and green are harder to see. Depth perception is diminished.	Paint tools a bright color. Use larger seed or pelletized seed. Grow plants with more tactile and olfactory stimulation. Use vertical planting.		
		Create smooth-surfaced paths		
Muscular and skeletal: There is reduced agility, balance and strength and an increase in tremors and broken bones.	Difficulty lifting and moving objects. Falling is more likely. Gardening becomes more difficult.	Raised beds reduce the need to bend or kneel. The edges of raised beds can provide a place to sit while gardening. Stools provide an intermediate step between standard gardening and raised beds. Adaptive tools with better leverage and improved grips help make gardening easier.		
Temperature adaptability: The body does not adjust as quickly or as well to temperature extremes and changes.	High and low temperatures are not tolerated as well. Hyperthermia or heatstroke is more likely. Heat exhaustion caused by loss of body water and salt is likely. Sunburn, eczema, dermatitis and infections increase.	Garden early in the morning or late in the day. Drink water and juice and avoid alcoholic beverages. Shower frequently or splash water on the body. Wear lightweight, loose-fitting clothes that cover exposed skin. Wear a hat. Apply sunscreen. Eat light meals. Discuss heat-related problems that may be complicated by medications with a physician. Wear gloves. Soak cuts and punctures in a mild salt solution (1 teaspoon per cup of water) until scab forms.		
Disease and chronic conditions: arthritis and rheumatism, heart disease, kidney function.	Strength decreases and pain increases. The person tires easily. Urination increases in frequency.	Adaptive tools combined with light, easily worked soil allow gardening activities to continue. Indoor and container gardening projects		

Changes Caused by Aging	Impacts	are more appropriate. Frequent resting periods and a cool place to rest are needed. Bathroom facilities should be near the garden. Gardening Adaptations
	Societal Roles	
Sense of security and safety is decreased.	This increases the level of fear of outside events and accidents.	Gardening activities should be in a safe place that provides a sense of security. Fences and walls provide security. Gardening with other people provides security and safety.
Family roles change. Economically the elderly person becomes more dependent and loses control of many aspects of life. Family and friends may move or die, isolating the person. Self-esteem and self-confidence are reduced.	This can result in aggressive behavior, isolation, regression or depression.	Gardening activities should be kept low in cost. The gardener should be given control over his or her area of the garden or have his or her own plants to care for. The gardener should be allowed to express individuality while working within a group. In groups, a committee structure can be used to make policies and solve problems. Social activities associated with the garden should be encouraged. Allow gardeners to teach others. Inter-generational activities are particularly effective.

LaVona Traywick, Ph.D., Associate Professor - Gerontology, 2007

Resources

Sources of adaptive tools adaptability, Post Office Box 515, Colchester, CT 06415 Lehman Hardware and Appliances, 4779 Kidron Road, Post Office Box 41, Kidron, OH 44636 Mellingers, Inc., 2310 West South Range, North Lima, OH 44452 Park Seed Co., Cokesbury Road, Greenwood, SC 29647 Walt Nicke Co., 36 McLeod Lane, Post Office Box 433, Topfield, MA 01983 W. Atlee Burpee & Co., 300 Park Avenue, Warminster, PA 18974

Adapted from The Ohio State University Extension Fact Sheet, Horticulture and Crop Science, 2021 Coffey Rd., Columbus, Ohio 43210-1086, "Gardening with The Elderly," HYG-1642-94 by Jack Kerrigan.

The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.



Community Gardening Guide





Jessica Vincent, M.Ed., CHES
AgrAbility Coordinator
University of Arkansas
Division of Agriculture
Research & Extension
2301 S. University Ave.
Little Rock, AR 72204
www.uaex.edu

The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer. This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture under Award No. 2010-41590-20718. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.

Introduction

Community gardening can have a different meaning for different people. Typically, they reflect the needs and/or desires of those directly involved in their management and upkeep as well as the needs of the community the garden serves. Whatever the reason, the activity of gardening in itself can be both rewarding and challenging. This toolkit is designed as a guide and resource for those who want to start a new community garden or enhance an existing community garden. This toolkit is in no way meant to be a complete or all inclusive guide. For more information or additional resources on this and other topics, visit your local University of Arkansas Extension Service in person or online at www.uaex.edu.

Types of Community Gardens

Community gardens exist in various forms and serve numerous functions.

- Youth/School Gardens introduce children to food production, nutrition, composting, and ecological awareness. These are typically associated with classroom lessons and hands-on gardening activities.
- Entrepreneurial/Job Training Market Gardens are used by non-profit organizations and other agencies to employ youth and others while teaching them practical skills for future employment. Typically, they grow and sell the produce that they raise.
- **Communal Gardens** are organized and maintained by groups of people who share both the work and the rewards. Produce is usually distributed among the group members or donated to local food pantries.
- **Food Pantry Gardens** are maintained by volunteers and/or food pantry clients and all of the food is donated to the food pantry.
- Therapy Gardens are a way to provide horticultural therapy and are usually led by a horticulture therapist. Typical sites for a therapy garden are hospitals, senior centers, and prisons.
- Demonstration Gardens are used to show the public different types of gardening methods, composting techniques, and plant varieties. These are open to the public for display and used for demonstration classes. Often they are managed by those who have received training in horticulture and who volunteer to educate the community on gardening, such as Extension's Master Gardeners. For more information on Master Gardeners in your area, contact your local University of Arkansas Extension Service.





The Benefits of Community Gardening

Community gardens can benefit individuals, families, and communities by providing long-term functions. Some of these benefits include:

- **Food Production.** Community gardens allow families and individuals access to traditional produce or nutritionally rich foods where it may otherwise be unavailable.
- **Exercise.** Gardens can be a place for both recreation and exercise. Because gardening requires physical activity, community gardens can help improve overall physical health.
- **Environment.** Community gardens can help improve the overall health of city ecosystems by reducing rain runoff and soil erosion, restoring oxygen into the air to help with air pollution, by reducing the "heat island" effect, and by filtering rainwater which can help to keep lakes, rivers, and groundwater clean.
- **Education.** Community gardens can serve as outdoor classrooms. People of all ages can benefit by acquiring and sharing knowledge about gardening, nutrition, health, cooperation, stewardship, and environmental responsibility.
- **Cultural Opportunities.** Community gardens enable opportunities to establish relationships where there are physical and social barriers.
- **Horticulture Therapy.** Exposure to green space or nature can reduce stress and provide a sense of wellness.

Starting a Community Garden

Community gardens can beautify neighborhoods and help bring people closer together, but there is a lot of work involved. It is about more than just growing food, flowers, or herbs. Community gardens should grow interpersonal relationships, and involves planning, organizing, and group decision making. Before you get started, form a planning committee to determine the following:

- Determine if there is a need and a desire for a community garden
- What type of community garden is needed? i.e. vegetables, trees, flowers...
- Who will the community garden serve? i.e. youth, seniors, special populations...

Once you have established there is a need and a desire for a community garden, form a garden club. A garden club is just a formal way of organizing your new group. This club will help to make decisions and make sure the work is divided up effectively. It can also help ensure that everyone involved has a vested interest in the garden and will contribute to its design, development, and maintenance. Within the garden club, you should:

- Establish garden rules
- Accept and review garden applications
- Make plot assignments
- Collect garden dues (if any)

- Pay water/utility bills
- Resolve conflicts

Typically, a garden club has at least two officers – a president and a treasurer, but you may have more depending on your needs. See the attached Gardener's Welcome Packet sample. Once you have your garden club established, choose a site. To find and evaluate potential garden sites, tour the neighborhood and make sure you consider churches, non-profit organizations, and businesses as potential partners. They may have land they are willing to donate. Once you have found a site:

- Identify the owner of the land
- Obtain a lease or agreement
- Determine the source of water
- Make sure the site gets at least 6 hours of direct sunlight during the day
- Do a soil test (Soil tests can be obtained through your local University of Arkansas Extension Service)
- Determine how the site has been used in the past
- Determine the present use of the site

Community gardens can require a great deal of tools, equipment, supplies, and knowledge. The following questions can help your garden club identify local resources.

- Does your group already have access to tools and other gardening equipment?
- Will your site need to be plowed or tilled?
- Do you have access to compost or mulch?
- Is there a shed available for storage?
- Does your site need a fence?
- How will the site be cleaned? Removal of trash, branches, etc.
- Are there trees on the site that need to be trimmed?
- Will the site need to be mowed regularly?
- Will your garden club have to carry liability insurance on the site?
- Are there any community gardens in your area that are already established that your garden club can learn from?
- Do you know the Master Gardeners in your area so they can share their expertise?
- Do you need a community organizer to help facilitate your club?
- Are there any local government agencies, non-profit organizations, or businesses that are willing to sponsor the garden, make donations, or provide other means of support?

Once you have chosen your site and identified needs and local resources, start to plan your garden. The design of your community garden can be as simple or as elaborate as you choose, but before you begin you should measure the site and make a simple, to-scale site map. Make sure you hold several design meetings at times that are convenient for your participants and

record group decisions in official minutes. This will ensure that the decisions that are made can be communicated and that your progress won't be slowed down. Try using drawings or photos from magazines or other community gardens to help generate ideas. Some things to consider when designing your community garden are:

- The boundary of the site
- The location and size of your garden beds
- Existing trees, shrubs, and vegetation
- Driveways and pathways
- A place for a storage shed and compost bin
- The location of the water source
- Common areas such as picnic tables and grassy areas
- A name for your community garden
- A sign for your community garden

Challenges

There are many common challenges that community garden groups face and you are bound to experience problems at some point in time. Rather than getting discouraged, get more organized. One of the keys to having a successful community garden and not only being able to prevent problems from occurring, but being able to work together as a team to solve problems when they do appear. Some of these include:

- <u>Management</u>: Community gardens are intensive and require strong leadership, organization, and rules. Systems need to be in place to enforce the rules and resolve conflicts.
- <u>Communication</u>: A strong leader can go a long way when it comes to minimizing misunderstandings. Make sure things are spelled out clearly and in a format everyone can understand.
- <u>Theft and Vandalism</u>: Unfortunately, community gardens can be a common place for theft and vandalism. It happens, so don't get discouraged. Replant and keep on going.
- <u>Maintenance</u>: Community gardens also require intensive maintenance weeding, mowing the grass, repairing equipment, composting, etc. Make sure maintenance guidelines are in place and people are assigned specific maintenance duties.
- <u>Participation</u>: Community gardens can be plagued by a high rate of turnover in gardeners and garden leaders, and also a lack of participation during "off season" and winter months. Have rules in force and consequences for those who don't follow through with their agreement.

 Gardening Skills: Participants who are new to gardening may get discouraged and want to give up. Have gardening mentors in place who have the ability to teach and encourage.

Steps to Success

Take your ideas and put them into action. According to the University of Missouri Extension, the following 10 steps can serve as a guide to growing a successful community garden.

- Talk with friends, neighbors, and local organizations about your idea. Make sure
 you take good notes of those who are interested as well as those who are in
 opposition, and why. As a general rule, you should find at least 10 individuals or
 families who want to be actively involved in the community garden before you
 proceed.
- 2. **Hold a meeting with anyone interested in the garden**. You should hold a meeting to determine the purpose of starting a community garden, brainstorm ideas, and address questions and feasibility.
- 3. *Find and evaluate potential garden sites.* Take your group and tour the neighborhood. Make sure to consider those who may have land to donate such as churches and non-profit organizations.
- 4. *Identify local resources needed for starting a garden.* Community gardens can require a great deal of not only knowledge and support, but also tools, equipment, and supplies. Solicit donations to help offset these expenses.
- 5. **Hold a second meeting.** After you have finished the first four steps, you need to regather and evaluate possible garden sites and resources.
- 6. **Draft a lease agreement.** Even if it's not required, it would be in your group's best interest to have a written agreement with the entity that owns the land. It should outline your group's obligations and responsibilities as well as the land owner's.
- 7. **Develop a site plan.** Work in small groups to sketch out a design for your community garden, and then bring all of your ideas together. Starting out in a smaller group will help ensure everyone's ideas are taken into consideration and should make the process smoother.
- 8. **Establish gardener guidelines and draft the gardener application.** Have clear guidelines for your group to follow and an application to collect the participant's contact information. The guidelines will help maintain organization, and the application will give you the information you need to stay in touch with participants.
- 9. *Prepare and develop the site.* Once you have completed the first eight steps, you should be ready to start doing the physical work. How you initiate getting your site

- ready will depend on its current condition. Make sure you schedule regular work days and coordinate equipment, supplies and volunteers.
- 10. *Celebrate your success.* Show off the work you've done. Hold a neighborhood garden party to recognize your accomplishments and gain community support.

Remember



Maintaining a community garden is management intensive. To be successful you *must* keep good on-going records. Some examples of these records are:

- Club Records: All records, past and present, should be kept on hand including membership applications, contact information for local and technical resources, rules and guidelines, lease agreements, and a list of attendees and minutes from all garden club meetings.
- Garden records: Keeping track of what successes and failures your garden faces will help you better plan from year to year. Keep a list of plot assignments, planting plans, and your site plan. Make sure to test the garden's soil each year/season and record how the weather and rainfall affected your growing season and crops – what did well and what didn't and why.
- Community outreach: Make sure the community is aware of your community garden and why it is there. Make a scrapbook to showcase newspaper articles, flyers, and all other types of publicity.

Website Resources

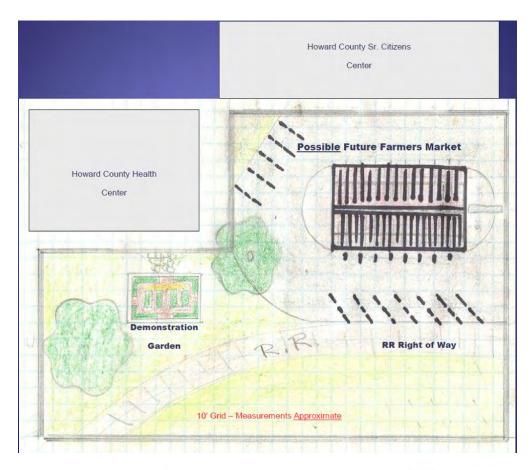
<u>www.uaex.edu</u> University of Arkansas Division of Agriculture Research & Extension Visit your county Extension office or Master Gardener. Included within the UAEX website are gardening resources including:

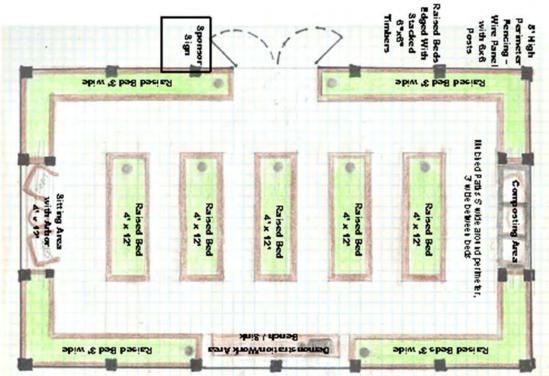
- MP422 Year Round Home Garden Planting Chart
- FSA6062 Year Round Home Garden Planting Guide
- The Home Gardening Series Fact Sheets

http://communitygarden.org American Community Gardening Association
 http://gethealthy4g.com Howard County's Growing Healthy Communities
 www.nashvillear.com City of Nashville Chamber of Commerce
 Information in this publication has been adapted from: www.extension.missouri.ed

Information in this publication has been adapted from: www.extension.missouri.edu University of Missouri Extension Community Gardening Toolkit, publication MP906

Sample Garden Plot Design





Sample Gardener's Welcome Packet

The information contained on the up-coming pages was taken from the University of Missouri Extension Community Gardening Toolkit, publication MP906. It is designed to be template for creating your own written materials that will explain how your community garden will operate and how your gardeners should be involved.

Welcome to Community Gardening

Taken from the University of Missouri Extension Community Gardening Toolkit MP906

A community garden means many things to many people. For some, a community garden is a place to grow food, flowers, and herbs in the company of friends and neighbors. For others, it's a place to reconnect with nature or get physical exercise. Yet others use community gardens simply because they lack adequate space to have a garden at their house or apartment.

Regardless of why you are choosing to take part in a community garden, the activity comes with both responsibilities and rewards.

Responsibilities: Successful and vibrant community gardens rely on the dedication of each and every gardener to 1) maintain his or her own plot and 2) contribute to the upkeep and management of the entire garden. There are many jobs that need to be done in order to help the garden run smoothly, including keeping paths mowed or mulched, maintaining tools and equipment, planning events and workshops, stocking and hauling supplies and building raised beds, among other things. The adage *many hands make light work* is appropriate. If everyone pitches in according to their ability and desire, then the garden will prosper and grow.

Rewards: Community gardening has the potential to offer a range of benefits to individuals, families, communities, and the environment. Benefits include, but are not limited to, the following:

- **Food production** Community gardens enable people to grow high quality fruits and vegetables for themselves, their families, and their communities.
- **Nutrition** Some research indicates that community gardeners eat more fruits and vegetables than non-gardening families.
- Exercise Gardening requires physical activity and helps improve the overall physical health of gardeners.
- Mental health Interacting with plants and nature helps reduce stress and increase gardeners' sense of wellness and belonging.
- Community Community gardens foster a sense of community identity and stewardship among gardeners. They provide a place for people of diverse backgrounds to interact and share cultural traditions.
- **Environment** Gardens help reduce the heat island effect in cities, increase biodiversity, reduce runoff from rain, recycle local organic materials, and reduce fossil fuel use form long-distance food transport.
- **Learning** People of all ages can acquire and share skills and knowledge related to gardening, cooking, nutrition, health, culture, etc.
- Youth Community gardens provide a place for youth to explore gardening, nature, and community.
- **Income** Produce grown at community gardens may be sold or used to offset food purchases from the grocery store.
- **Crime prevention** Community gardens can help reduce crime.
- **Property values** Some research indicates that property values around community gardens increase faster than property values in similar areas without gardens.

Above all, community gardening can provide a real sense of satisfaction and accomplishment for all involved.

Success and Security at the Garden

Taken from the University of Missouri Extension Community Gardening Toolkit MP906

The following tips are intended to help ensure your success at the garden, minimize theft and vandalism, and keep you safe while gardening.

Successful Community Gardening

- Plan to visit your garden two to three times a week during the growing season. Make a schedule with yourself or other gardeners. Write it on your calendar. Post a colorful reminder on the fridge. Because your garden is not located outside your front door or back door, it's sometimes easy to forget that there is weeding, watering, staking, or harvesting to do.
- Attend scheduled meetings and workdays. This will help you meet other gardeners and become a part of your gardening community. You'll also learn about the various jobs and projects that need to be done to keep your garden in shape.
- Make friends with other gardeners. Experienced gardeners are an invaluable resource at your garden. Pick their brains for gardening tips. Visit their plots to see how they stake their tomatoes or trellis their beans.
- Volunteer for a garden job or committee. Community gardens don't manage themselves. They require a fair amount of work. By pitching in on a certain job or project, you'll be supporting the garden as a whole and ensuring that the work is spread among many people.
- **Educate yourself.** Check out books from the library. Attend classes. Become a Master Gardener. There's always something to learn about gardening. The more you learn, the more success you'll have.

Security and Personal Safety at the Community Garden

- **Know your neighbors.** Learn the names and a little about your non-gardening neighbors. Share some extra produce. Take the time to visit with them about how the garden works if they're not familiar with it. You may be surprised to find that people just assume that they can take food from the garden. "Hey, it's for the *community* right?"
- Harvest produce on a regular basis. Some people use the excuse that "a lot of food is going to waste" to justify taking food from a garden without permission. During harvest season, let garden leaders know if you plan to be out of town for more than a few days. Gardeners can harvest for you and donate the food to a local pantry.
- **Consider growing unpopular, unusual, or hard to harvest varieties.** People generally go for easy to snatch things like tomatoes, peppers, and corn.
- Grow more than you need.
- **Put a border or fence around your plot** if your garden rules allow it. Even a simple barrier can be a deterrent.
- Use common sense. Even though your garden may be well-lit from street lights, only garden
 during daylight hours. Garden in pairs or keep a cell phone nearby if it makes you feel more
 comfortable.
- Report theft, vandalism, and unusual activities to garden leaders and the police. The more people who are looking out for the garden and talking about what's going on, the more success you'll have at being safe and curbing unwanted activities.

Community Garden Job Descriptions The who and what that make your garden tick

Taken from the University of Missouri Extension Community Gardening Toolkit MP906

Community gardens depend on gardeners' willingness and ability to take responsibility for a number of important tasks. Please review the following job descriptions and contact the garden co-leaders to let them know how you'd like to help.

Garden co-leaders: Primary contacts for the garden. Coordinate and facilitate all garden activities and meetings. Recruit gardeners for various jobs. Provide leadership and guidance for gardeners and volunteer positions below. Identify and recruit new garden co-leaders. Chair the garden's leadership team.

Plot coordinator: Organizes spring registration, makes plot assignments and garden map, collects gardener applications and manages the waiting list. Creates spreadsheets or other files for gardener contact information.

Grounds crew: Maintains the garden's common areas. Mows grass, clears pathways and removes trash.

Supply crew: Maintains supplies of common garden materials such as compost, mulch, tools, and hoses.

Events crew: Coordinates regular and special garden events including work parties, neighborhood parties, and educational workshops.

Treasurer: Collects plot fees, maintains garden accounts, writes checks.

Communications crew: Revises and assembles the Gardener's Welcome Packet with leadership team. Writes and distributes garden newsletter or blog. Communicates with gardeners through e-mail, phone call, or mailings about garden news, meetings, and events. Maintains garden bulletin board.

Outreach and community relations: Maintains positive relations with neighbors. Ensures that neighbors are involved in and supportive of the garden. Coordinates social events for neighbors and gardeners with events crew.

Horticulture advisors: Possess gardening experience and a willingness to share it with gardeners. Mentor new gardeners, circulate new gardening resources, and coordinate gardening workshops with the events crew.

Monitors: Ensure that all plots are being used and maintained at acceptable levels according to the Gardener Guidelines. Contact gardeners who either appear to have dropped out or are not keeping their plots maintained. Communicate with the registrar about available plots.

Security: Works to minimize theft, vandalism, and other unwanted activities.

Translation: Provides translation for gardeners, garden literature and signs. May also make arrangements for others to provide translation.

Leadership team: Comprised of the garden co-leaders and at least three other gardeners. Responsible for reviewing, editing, and enforcing all Gardener Guidelines.

Gardener Guidelines

Taken from the University of Missouri Extension Community Gardening Toolkit MP906

Gardener Guidelines (or rules, regulations, policies, etc.) can take many shapes and forms. The following guidelines have been established by members of this garden. Please read the guidelines and direct any questions or comments to the garden co-leaders.

- All gardeners are required to complete an application form. A plot fee of \$_____ is due by _____.
- 2. All gardeners are required to sign up for one of the garden jobs/crews listed on page ____. Please contact the garden co-leaders for more information.
- 3. Garden meetings and work parties are scheduled throughout the season. Please plan to attend to get to know your fellow gardeners and help with garden upkeep and special projects.
- 4. Keep your plot and the adjoining pathways tended. If your plot appears to be untended for a period of time, and you haven't contacted the garden monitor, you will be contacted and your plot may be assigned to another gardener. Call the garden monitor if you need help or if you will be out of town for an extended period of time. If you plan to discontinue use of your space, pleas e let the monitor or registrar know as soon as possible so that your plot can be assigned to another gardener.
- 5. Plant tall plants and vines in places where they will not interfere with your neighbor's plot. Planting illegal plants is prohibited.
- 6. At the end of the gardening season, all dead plants and non-plant materials (string, wire, wood metal, plastic, etc.) must be removed and disposed of properly and all gardens left neat and tidy. If your garden is not cleaned up by _____, you could lose your gardening privileges for the next season or be reassigned to a new, smaller plot.
- 7. Pick up litter when you see it.
- 8. Please put weeds and dead plants into the compost bin provided. Do not leave them in the pathway. Any diseased plants or seedy invasive weeds are to be bagged and put in the trash so as not to contaminate the gardens. Old woody plants are to be placed in the brush pile to be carted to the recycling center.
- 9. Do not apply anything to or pick anything from another person's plot without their express approval.
- 10. Please do not leave the water on unattended. When finished gardening for the day, please roll up the hose at the faucet area, return tools to the shed, and lock the shed before leaving the garden.
- 11. Smoking and chewing tobacco is not allowed. Tobacco can transmit a lethal virus to tomatoes and cigarette butts are loaded with toxins.
- 12. Pets, drugs (including alcohol), radios, boom boxes, and fires are not allowed.
- 13. Please supervise children in the garden.
- 14. For your safety, only garden during daylight hours. Consider gardening in pairs or keeping a cell phone nearby if it makes you feel more comfortable.
- 15. Report theft, vandalism, and unusual activities to the garden co-leaders and police.
- 16. Use common courtesy, be considerate of your gardening neighbors and ENJOY.
- 17. Violation of Gardener Guidelines: If any of the guidelines are violated you will be contacted by phone or e-mail and have one week to address the violation. After one week, if the violation has not been remedied, you may lose your gardening privileges.