



EAT SMART, MOVE MORE NORTH CAROLINA:

*Growing Communities
through Gardens*





Eat Smart, Move More North Carolina: *Growing Communities*

Gardens bring communities together. Not only are community gardens a good way to get more fresh fruits and vegetables in our diets, they also allow us to be active outdoors and build a strong community.

Eat Smart, Move More North Carolina: Growing Communities through Gardens is a planning and resource guide for anyone who is thinking about starting a community garden. This guide highlights:

- **Benefits** of community gardens for healthy, local economies, fit bodies and connected communities.
- **Options** and resources for becoming involved in community gardening or starting a garden in your own community and enjoying the produce from it.

What Is a Community Garden?

A community garden is any piece of land gardenized by a group of people. Community gardens are as varied as the neighborhoods in which they are located. Community gardens are located at schools, parks, housing projects, places of worship, vacant lots, private properties or anywhere there is open land and lots of sunlight. Each is developed to meet the needs of the people who come together to grow fruits, vegetables, flowers, herbs and other plants on common ground. A community garden can be any size or shape, from large gardens on two or three acres, to just a few raised beds in an urban parking lot.

Community gardens bring people together. They serve a variety of purposes. Gardens provide fresh fruits and vegetables to those on a limited budget and those without gardening space. Some gardens focus on growing food for the gardeners themselves. Other gardens donate their produce to the hungry. Some focus on education, or on nutrition and exercise, while others may sell what they grow for income. Some simply provide a place to share the love of being out-of-doors and gardening.

Types of Community Gardens

The communities that start gardens are as unique as the types of gardens listed below.

Communities of Faith Gardens: Community gardens are often associated with service or faith organizations or churches. Produce from the garden is sometimes distributed equally among gardeners. It may also be donated to charities such as food banks and soup kitchens.

School Gardens: With the increasing interest in science and nutrition education, many primary schools plant gardens to serve as “outdoor learning laboratories.” Commonly, raised bed gardens are

assigned to classes at a particular grade level. Hands-on-curricula and activities guide students in learning important concepts.

Youth Gardens: In youth gardens, found in neighborhoods, at community centers and other locations, the focus is on learning. Youth learn how to grow produce and develop other life skills, including the importance of good nutrition, teamwork and planning. Some youth gardens are also market gardens that teach entrepreneurial skills.

Market Gardens: At entrepreneurial market gardens, gardeners learn not only how to grow food, but how to run a business selling fruits and vegetables at local farmers’ markets or grocery stores.

through Gardens

Benefits of Community Gardens

Participating in a Community Garden:

- **Builds community.** Thriving community gardens are a great way to bring people together and create healthy and strong communities. Gardens can increase community involvement and development and enhance personal satisfaction in a neighborhood.
- **Strengthens bonds.** Gardening brings families and neighbors closer to nature and helps children and adults learn how to care for the environment.
- **Saves money.** Gardeners can lower their grocery store bills and earn extra income by growing their own food.
- **Creates opportunities to connect.** Gardens help us meet people who live nearby. There you can share your interests and desire to garden. From potluck dinners to community service, opportunities to build relationships are abundant at gardens.
- **Increases fruit and vegetable consumption.** Adults who participate in community gardening eat 1.4 times more fruits and vegetables per day than those who do not. Community gardeners are 3.5 times more likely to eat five or more fruit and vegetable servings each day. Fruits and vegetables grown in a garden may be less expensive and more readily available than produce at a grocery store. Planting and harvesting vegetables are great ways for adults and children to learn about new foods.
- **Improves skills in food preparation.** Fruits and vegetables are a quick, easy and nutritious snack. They can be prepared in a number of ways in salads, soups, sauces, sandwiches and desserts. Community gardens are one place to teach people how to prepare nutritious and delicious foods. At community potlucks, gardeners can share recipes and enjoy the fruits of their labor with one another.
- **Increases physical activity.** Gardening not only burns calories, it tones muscles and increases flexibility.
- **Teaches life and business skills.** Participating in community gardening helps teach valuable life skills such as discipline, timeliness, pride, patience, leadership and responsibility. In gardens that function as a business, gardeners can learn skills such as marketing, packaging, customer service, trouble-shooting and leadership.

COVER PHOTOS, TOP LEFT: PHOTO COURTESY OF THE GASTON COMMUNITY GARDEN, TAKEN BY JULIE FLOWERS;
TOP CENTER: PHOTO COURTESY OF GUILFORD COUNTY EXTENSION MASTER GARDENER VOLUNTEERS, TAKEN BY
LINDA BRANDON, COORDINATOR.



PHOTO COURTESY OF BRUNSWICK COUNTY 4-H

Start Your Community Garden: Steps to Success

GARDENS NEED:

- Planning
- A dedicated group of gardeners
- Land with safe soil
- Tools
- Seeds
- Water
- 6–8 hours of sunlight
- Compost or mulch area
- Proper drainage
- Sitting and/or workbench area



Get Ready

- **Identify and visit community gardens near you.** The North Carolina Cooperative Extension Community Gardens Web site (nccommunitygardens.ces.ncsu.edu) has a list of community gardens. You may find a garden near you to join, or you might get great ideas on how to start a successful new garden. You can also add your garden to the Web site to help recruit new members! The Web site provides helpful information on starting and managing a community garden and can help you can find sources for funding, seeds and much more.
- **Determine who will work in and benefit from the garden.** Establish criteria for membership. Will it be the youth in your area? Senior citizens? Will it be restricted to nearby residents or members of a certain group?
- **Determine logistics.** Laying out the details of day-to-day operations in the beginning will help to ensure its success. Determine a strategy for assigning plots. Decide and make clear how you will fill vacancies when they occur. Decide how to maintain the garden's common areas. They will need to be weeded, watered and kept neat. Decide whether to provide community tools such as hoses and hoes. If so, how you will check them out to gardeners? Schedule group projects, workdays or potluck dinners. Social events promote the success of the garden.
- **Establish leadership.** Keep it simple and responsive. Structure can promote stability, trust and a foundation for growth. It also provides a framework within which new leaders can develop. Develop a well-organized leadership team with specific tasks assigned to different people. You will need individuals who oversee garden organization, partnership development, recruitment and special events. Include the people who will work in and benefit from the garden, nearby residents and potential partners. Identify and invite natural leaders within the community. As your garden project grows, you may need more than one person to be responsible for each of these aspects. At that time, you may find it helpful to form committees.
- **Define (and write down) your plan.** Set short and long-term goals. Decide how your leadership team will make decisions. Define processes for selecting leaders. Decide the garden's scope. For example, how large will the garden be? Will fruit trees be included? Will you use pesticides or not?
- **Develop a budget.** Decide and clarify how dues, if collected, will be used and what services gardeners will get in return. Gardens, like many community-building projects, can cost a little or a lot, depending on many factors. Create a budget and a wish list of what you will need to be successful. Update your wish list regularly. Identify how you will raise money to support the garden.



- **Consider insurance costs and requirements.** Many landowners require liability insurance. However, many insurance carriers and their underwriters are reluctant to cover community gardens. Explore whether any of your partnering organizations, such as a local school, can provide insurance for free or at a minimal cost. If you purchase insurance, consider working with a firm that represents many different carriers. Get several quotes, including at least one from a major insurance carrier.
- **Identify potential sources of support (financial, in-kind, political, media, etc.).** Find members of the community who support gardening as part of their profession. Local extension, public health and department of agriculture staff will likely be good resources to contact as well.
- **Create rules and guidelines.** Developing written bylaws ensures that the planning committee agrees about how the garden operates and what to do when problems arise. Bylaws are also useful in clarifying expectations to gardeners. If rule enforcement becomes necessary, the steps are clear and fair. Develop an agreement that outlines the rules, and ask every member to sign them.
- **Recruit gardeners.** To build membership, you may want to recruit participants for your garden. You can contact community organizations, such as churches and schools, to identify potential gardeners in your area. Post flyers and advertise through local media. Connect with residents who can help “spread the news.”

Partnership and Sponsors

- Seek donations of money, labor, land, soil amendments (compost, fertilizer, etc.), tools, seeds, plants, mulch, fencing and supplies. Consider both start-up and recurring expenses when asking for donations. There are endless possibilities for garden funding. Find a list of funding ideas on the N.C. State University Community Gardening Web site: nccommunitygarden.ncsu.edu
- Develop a way to track your donors and sponsors. To build effective relationships with partners or donors, it is important to track key information. Keep a current list of personal contact information, requests to donors, meetings, donation dates and amounts.

URBAN GARDENERS, CHARLOTTE. PHOTO COURTESY OF DON BOEKELHEIDE, URBAN MINISTRY CENTER, URBANMINISTRYCENTER.ORG



There are many types of organizations that choose to sponsor and support community gardens. The following places may have land, resources, and interested employees or clients.

- Churches
- Civic organizations
- Community and senior centers
- Community service/development organizations
- Day Care and assisted living centers
- High density housing developments
- Hospitals
- Municipalities
- Neighborhood associations
- Parks and recreation
- Private businesses
- Public housing and social service authorities
- Retirement communities
- Schools
- Worksites

ABOVE PHOTOS, LEFT TO RIGHT: PHOTO COURTESY OF ST. LUKE'S EPISCOPAL CHURCH COMMUNITY GARDEN IN SALISBURY, NC; PHOTO COURTESY OF PASQUOTANK COUNTY 4H KIDS IN THE GARDEN PROGRAM; PHOTO TAKEN AT SEEDS COMMUNITY GARDEN AND COURTESY OF KELLY M. MURDOCH-KITT



Choose a site that:

- is safe and convenient for gardeners.
- has a safe, easily accessible and affordable water source.
- has healthy, well drained soil. Conduct a soil test to make sure the soil is safe and will support plant life.
- has six to eight hours of full sunlight each day.



PHOTO OF WALKER SANDERS COURTESY OF HIS MOTHER MOLLY NICHOLIE, APPALACHIAN SUSTAINABLE AGRICULTURE PROGRAM.

Build the Garden

Community and senior centers make great community garden sites. People gather at these places with the expectation of taking part in organized activities. Becoming involved with a center prior to its construction increases the likelihood of space being reserved for gardens.

Vacant lots are widely available in the inner city. Often city officials are happy to save money by having someone else take care of the property. Check with local planning and zoning department for leads. The Charlotte, N.C. Parks and Recreation department has started developing community gardens in city parks in response to gardening popularity.

Negotiate a lease or written agreement which allows the space to be used as a community garden for at least five years. The agreement should clearly state:

- who is responsible for providing water and security;
- what liability insurance is required;
- how much the usage fee will be and when it is due;
- who will be responsible for clearing the property for gardening;
- what, if any, resources the owner will be providing for the garden;
- how the contract will be terminated; and
- who the primary contact person is for the garden and its land.

Consider the pros and cons of working toward ownership of the garden site.

Design the garden.

- Create a diagram of the garden with plot size(s) and location. Include placement of storage sheds, compost, gathering space, rainproof bulletin boards, children's plot, and ornamental perimeter plantings for curb appeal and irrigation design. Even if you do not currently have the resources for each of these items, place them on your design so they can be added later. Pathways at least three feet wide are necessary to allow for wheelbarrows and carts to pass between plots without damaging plants.
- Remove existing rubbish and weeds; lay out the beds.
- Arrange for soil preparation.
- Install an irrigation system. Available at many hardware stores, 1" polyvinyl chloride (PVC) pipe provides adequate water flow and can be placed underground. Conveniently located spigots attached to the underground PVC can provide water for garden plots. You may also want to consider installing drip irrigation for individual beds. Consider freeze-proofing your system to prevent flooding and a high water bill should the pipes burst.
- Install a bulletin board to share information, meeting notices, contact information and task lists for gardeners.

Prepare for challenges.

Gardening can be fun and rewarding, but it's good to identify potential challenges in the beginning and take actions to overcome them. Here are some solutions to gardening challenges:

- **Find quality topsoil.** Many potential garden sites in communities and at schools have had the topsoil removed during grading or consist of various “fill” materials. If this is the case, you may need to install raised beds with imported topsoil. Beds should be 12–24 inches tall.
- **Prevent weed growth.** Specify how gardeners will manage weeds in your garden agreement. Assign responsibility for maintenance of all plots in the garden so no weeds spread in untended plots. Encourage the use of mulch around plants in the garden to reduce weed growth. If weeds do grow, remove them early. The smaller the weed, the easier it is to remove. By removing weeds before they flower and set seed, you prevent the next generation of weed growth. Have a work day and encourage gardeners to work together to pull weeds.
- **Be a good neighbor.** Complaints about unkempt gardens or rowdy behavior can become an issue. To avoid this problem, be sure to specify in the rules how gardeners are to maintain their plots and the consequences for not complying. Enforce the rules. Work at building a positive relationship with neighbors. Organizers should meet with the neighbors in person to discuss concerns and how they can be resolved. A well-organized garden with strong leadership and committed members can overcome almost any obstacle.
- **Avoid disputes between gardeners.** Organizers should actively identify and quickly resolve issues between gardeners. Stake the corners of the plots to prevent hoses from being dragged across plants. Consider setting aside part or the entire garden as either organic or pesticide-free. Group plots designated as organic or pesticide-free together to minimize potential for chemical drift from other gardeners' plots. Clearly state in the agreement any fertilizer and/or pesticide use restrictions and safety requirements.
- **Maintain abandoned plots.** Outline how you will maintain and re-assign abandoned plots. Organizers can charge an initial deposit to cover the cost of cleaning up abandoned plots.



Minimize theft.

- Designate a plot near the entrance for people to “help themselves.” Put up a sign inviting visitors to harvest from this and only this plot.
- Put up a sign identifying the garden as a neighborhood project.
- Develop a shared vision and ownership of the garden. Nurture relationships with neighbors and neighborhood residents. Request their assistance in keeping a protective eye out over the garden.
- Plant potatoes and other root crops that are harder to harvest or plant less popular vegetables along the sidewalk or fence. Purple cauliflower and beans, and white eggplant are stolen less frequently.
- Install a fence. This will not keep out someone who is determined to come in. However, it clearly marks possession of a property and will keep out dogs, deer and other animals.
- Plant raspberries, blackberries, roses or other thorny plants along the fence as a barrier to fence climbers.
- Get old hoses donated rather than purchasing new hoses. Old hoses are rarely stolen.
- Encourage gardeners to plant more than they will need in preparation for potential losses.
- Keep gardeners and neighbors informed of any reported theft.
- Encourage gardeners and neighbors to spend time in the garden. Establish children's plots and invite young people to participate. Hold meetings, and encourage others to hold meetings and social events in the garden. These activities can help to increase the number of people in the garden and decrease the amount of time it is vacant.



Grow Fruits and Vegetables

Nurture the soil

Conduct a soil test (sampling kits are available at your local N.C. Cooperative Extension office) and amend the soil based on the recommendations you receive. Soil building is an on-going process. Spread compost annually. Grow cover crops to improve soil fertility. For more information see go.ncsu.edu/covercrop. Avoid compacting soil. Vegetables grow quickly and consume lots of nutrients. These must be replenished regularly, using compost, rotted manure or fertilizer.

What to grow

Choose fruit or vegetable varieties that will grow well in your garden. Varieties that thrive in the mountains rarely do well at the coast. Read the seed packet carefully to see where the plant grows best, when to plant, and to what pests and diseases the plant is resistant. Visit Vegetable Varieties for Gardeners vegvariety.cce.cornell.edu to review gardeners' ratings in your area.

Plant at the right time

In most parts of North Carolina, we have three growing seasons: you can plant spring crops in February and March, summer crops April through July, and a second set of cool crops in August and September. Check with your local Cooperative Extension office for a planting and harvesting guide specific to your region. More information can be found at: go.ncsu.edu/vegplantcalendar.

Water

Community gardens do not require an elaborate watering system. Hand watering from a hose works just fine. Disperse spigots throughout the garden to minimize damage done to plants by dragging hoses.

Manage pests

Careful soil preparation, plant selection, planting at the appropriate time and adequate water will minimize pest problems. If you find evidence of an insect or disease, first decide whether it is doing enough damage to warrant action. If so, consider some "green alternatives" to pesticides: rotate plants in plots from season to season; pick insects off plants by hand; use netting to keep bugs off plants, and be kind to ladybugs and other helpful insects that eat destructive bugs in the garden.

DOVETAIL COMMUNITY GARDEN, CHARLOTTE. PHOTO COURTESY OF DON BOEKEL HEIDE, URBAN MINISTRY CENTER, URBANMINISTRYCENTER.ORG

From Garden to Table



- **Plan and Plant.** Decide what kinds of vegetables and fruits you and your family (or group of gardeners) like to eat and then plant them. In spring and fall, consider leafy greens, such as lettuces, spinach, kales, spring onions, and fall and winter squashes. In summer, consider crops such as tomatoes, squashes, herbs, peppers and potatoes.
- **Pick Produce at its Peak.** Fruits and vegetables look and taste their best and are most nutritious when they are harvested at their peak, have their skin intact, and don't have bruises or cuts. Check out this web site for tips on when to pick: go.ncsu.edu/vegharvest.
- **Store it Safely.** One advantage of community gardening is that the produce is as fresh as the day you pick it. Follow these tips to extend the life and keep your produce from spoiling. Store lettuces and greens wrapped in paper towels or clean dish towels in the fridge. Peppers, squashes, radishes, melons and fresh herbs can be stored in the produce drawers in the fridge. Winter and fall squashes, onions and potatoes should be stored in a cool, dark place in the kitchen or in the fridge. Tomatoes do best stored in a cool place, but avoid refrigerating. Most produce will last longer if you postpone washing until just prior to eating. When you have more than you can eat, consider freezing, canning or drying food for later use. Visit go.ncsu.edu/foodprep and go.ncsu.edu/ncfreshproducesafety-consumers for more food safety and preservation tips.
- **Wash.** Always wash and scrub produce under cold running water. Along with any soil from growing, you'll wash off any germs that can lead to illness. Prepare foods using a clean knife on a clean surface or cutting board.
- **Fix, Eat & Enjoy: Have Fun with Fruits and Vegetables.** Gardening can be a family or group activity and your harvest can continue to provide entertainment even after you head home. For example, try making edible art using your own fresh grown produce. Here's what tools you'll need:

- plates
- knife
- camera
- cutting board
- colander

Adults provide supervision and help prepare, wash, and cut produce. Cut up fruits and vegetables into different shapes so they are usable pieces for edible art. Kids provide the ideas. Older children can help with cutting and washing. Younger children can set out plates and napkins. Taking photos of the artwork can inspire healthy eating.

Growing and eating garden-fresh produce can decrease overall food costs, introduce group members to seasonal produce, and provide lots of nutrition in the form of fiber, vitamins, minerals and more! It's also a great way to have easy, quick and healthy meals.



For tips on selecting, storing and fixing specific N.C. grown fruits and vegetables visit go.ncsu.edu/theproducelady.

For other healthy meal planning tips or recipe ideas go to: eatsmartmovemorenc.com/myesmm.

ABOVE, LEFT: PHOTO OF WALKER SANDERS COURTESY OF HIS MOTHER MOLLY NICHOLIE, APPALACHIAN SUSTAINABLE AGRICULTURE PROGRAM.

ABOVE, RIGHT: UMC PRODUCE, CHARLOTTE. PHOTO COURTESY OF DON BOEKELHEIDE, URBAN MINISTRY CENTER, URBANMINISTRYCENTER.ORG

Market and Sustain the Garden



There are many ways to create excitement and community support for your garden. Find creative ways to involve your local media and other organizations to promote the garden. Develop flyers and place them in busy areas in your community to recruit members. Possible locations include grocery stores, shopping centers, schools, worksites and churches.

To keep your garden growing, it is helpful to share your successes along the way. Take photos from the garden and document how the garden has impacted the lives of its members. Take time to celebrate your gardening successes.



Highlighted Resources

Community Gardening Resources:

N.C. State University Community Gardens

Use the link below to get gardening information and funding sources, join the N.C. Community Garden listserv where you can share ideas, events and questions with other gardeners, search for community gardens in your area and add your garden.
nccommunitygardens.ces.ncsu.edu

N.C. Cooperative Extension

ces.ncsu.edu

Click on "County Centers" to find local Extension support in your community.

Growing Small Farms

ces.ncsu.edu/chatham/ag/SustAg/production.html

American Community Gardening Association

communitygarden.org

Come to the Table: How People of Faith Can Relieve Hunger and Sustain Local Farms in North Carolina

rafiusa.org/cttt

Nutrition Information:

My Eat Smart Move More

eatsmartmovemorenc.com/myesmm

Produce for Better Health Foundation

fruitsandveggies.org

USDA Choose My Plate

choosemyplate.gov/eathealthy/WhatIsMyPlate

USDA Seasonal Produce Guide

snaped.fns.usda.gov/seasonal-produce-guide

TOP PHOTO COURTESY OF THE FAYETTEVILLE COMMUNITY GARDEN. MIDDLE TWO PHOTOS COURTESY OF THE GASTON COMMUNITY GARDEN, TAKEN BY JULIE FLOWERS. ABOVE RIGHT PHOTO COURTESY OF THE INTERFAITH FOOD SHUTTLE COMMUNITY GARDEN AT MAYVIEW. RIGHT PHOTO: MASTER GARDENER LEE AFFORD, PHOTO COURTESY OF THE FAYETTEVILLE COMMUNITY GARDEN.



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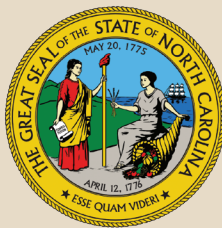
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**HEALTH AND
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Division of Public Health

**NC STATE
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Endorsed by the N.C. Community Garden Partners, a partnership of people from community and faith-based organizations, universities, public health and others who want to see community gardens thrive throughout the state.

Endorsed by the N. C. Fruits & Veggies Nutrition Coalition, a multi-partner alliance whose mission is to promote better health of North Carolinians by increasing fruit and vegetable access and consumption.

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