COMMUNITY GARDEN START-UP GUIDE

Adapted for Cedar Valley Grows from Des Moines metro area City of Des Moines Parks and Recreation, December 2012, Garden Start-Up Guide found at www.eatgreaterdesmoines.org which was adapted from the Twin Cities metro area by Garden Works September 2007 version and the LA Version found at http://communitygarden.org/docs/startup_guide.pdf, 8/15/2007 By Rachel Surls, UCCE County Director With Help of Chris Braswell and Laura Harris, Los Angeles Conservation Corps Updated March 2001 by Yvonne Savio, Common Ground Garden Program Manager, UCCE

This "Community Garden Start-Up Guide" is intended to help neighborhood groups and organizations along the path to starting and sustaining a community garden.

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Things to Do in Your Garden Year-Round

Things to Do in Your Garden

January
February
March
April
May
June
July
August
September
October
November
December

Getting Answers to Your Gardening Questions

Iowa State University Extension Resources
Iowa State University Extension Gardening Publications

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Gardening with Children

Guidelines for gardening with children
Fun Plants to Grow with Children
Youth Gardening Resources

Field Trip Ideas and Contacts

Gardens:

Farms: RACHEL CAN YOU PUT OUR FARMERS HERE? DO YOU WANT TO DELETE DES MOINE FARMERS?
Compost and Landfill Facilities
Food Pantries
Local Grants for Community Greening Efforts
National Grants for Community Greening Efforts
Community Garden Fundraising Projects

Advantages
Disadvantages
Advantages
Disadvantages
Disadvantages
Honey - Product of honeybees
Advantages
Disadvantages

Resources
Gardening Methods
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Resources
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Square Foot Gardening
Companion Planting
Mulching
Composting
Applicable ISU Publications

Gardening with Native Plants
Local Resources
Rain Gardens
Rain Garden Resources
Container Gardening
No-Till Gardening
Accessible Gardening
What is a Community Garden?
A community garden is an area used for growing plants or animals, which has been collaboratively created and is maintained by members of the public. A community garden can take place on public or private land and can involve a broad cross-section of the public, as in a neighborhood community garden. Or it can involve specific sectors of the population, such as a school garden that involves students, teachers, parents, and other community members who support the garden for education.

Why Start a Community Garden?
Many families living in the city would like to grow some of their own fruits, vegetables, herbs, and flowers. Some want to save money on their food bills. Others like the freshness, flavor and wholesomeness of home-grown produce. And for many, gardening is a relaxing way to exercise and enjoy being out-of-doors. There are also families from other cultures who would like to grow traditional foods not available in the supermarket. Those who are lucky enough to have sunny backyards or balconies can plant a garden whenever they have the time and energy. Community Gardens may also help those that don’t have a place to garden.

Benefits of Community Gardening
(Information from American Community Garden Association)

- Improves the quality of life for people in the garden
- Provides a catalyst for neighborhood and community development
- Stimulates Social Interaction
- Encourages Self-Reliance
- Beautifies Neighborhoods
- Produces Nutritious Food
- Reduces Family Food Budgets
- Conserves Resources
- Creates opportunity for recreation, exercise, therapy, and education
- Reduces Crime
- Preserves Green Space
- Creates income opportunities and economic development
- Reduces city heat from streets and parking lots
- Provides opportunities for intergenerational and cross-cultural connections
Step by Step Guide  
To Start Your Own Community Garden

1. Get Your Neighbors Involved  
There is a lot of work involved in starting a new garden. Make sure you have several people who will help you. Over the years, our experience indicates that there should be at least ten interested families to create and sustain a garden project. Survey the residents of your neighborhood to see if they are interested and would participate. Create and distribute a community flyer (see page 10) inviting people to become involved. Hold monthly meetings of the interested group to develop and initiate plans, keep people posted on the garden's progress, and keep them involved in the process from day one. Church groups, teachers and kids are great and can be helpful, but are not enough to begin & maintain your project. You will need 1-2 people with experience. Make sure your group has time to commit. Gardens involve mowing, picking up trash and lots of weeding. Remember a 20 ft x30 ft takes 1.5 hours of watering and weeding a week!

2. Form a Garden Group  
A garden group is a way of formally organizing your new group. It helps you make decisions and divide-up the work effectively. It also ensures that everyone has a vested interest in the garden and can contribute to its design, development, and maintenance. It can be formed at any time during the process of starting a community garden; however, it's wise to do so early on. This way, group members can share in the many tasks of establishing the new garden.

The typical garden group has at least two officers: a president and a treasurer; although your garden group may have more if necessary. Elections for garden officers usually are held annually. Garden groups share information via a contact list including phone numbers, email addresses, etc.

Before the first meeting, each member should try to identify possible properties, potential partners, organization and or people interested in being part of the community garden. Before the end of the meeting, members should have the elections, started the phone/email contact list, scheduled the second meeting and identified a task for each member to accomplish before the second meeting.

Use the first meeting to draw out people's interest in the garden and what they would like to see from the garden. The worksheet, “Developing a Vision for Your Garden” (see page 11) can guide the discussion, record the outcomes of the meeting, and be shared with people who joining the garden project later. To insure that everyone feels like they were heard during this process, go round the group and ask for people’s thoughts and input, and then write it down on a large pad of paper for everyone to see. Many problems and headaches can be avoided in the future by developing a vision of the garden at the very start, and can be reviewed when decisions are being made.

3. Find Land for the Garden  
Look around your neighborhood for a vacant lot that gets plenty of sun--at least six to eight hours each day. A garden site should be relatively flat (although slight slopes can be terraced), free of trash and debris and without paving. Any rubble or debris should be manageable--that is, it can be removed by volunteers clearing the lot with trash bags, wheelbarrows, and pick-up trucks. Ideally, it should have a fence around it with a gate wide enough for a vehicle to enter. It is possible to work with a site that is paved with concrete or asphalt by building raised beds that sit on the surface or
using containers. You can also remove the asphalt or concrete to create gardens, but it will take more time, be more difficult and expensive.

The potential garden site should be within walking, or no more than a short drive from you and the neighbors who have expressed interest in participating. If the lot is not already being used, make sure the community supports establishing a garden there.

It’s best to select three potential sites in your neighborhood and write down their address and nearest cross streets. If you don’t know the address of a vacant lot, get the addresses of the properties on both sides of the lot--this will give you the ability to make an educated guess on the address of the site. We suggest you identify at least three potential sites because one or more might not be available for you to use for various reasons, and you want to end up with at least one that works out.

Use the “Garden Site Evaluation Checklist” (see page 13) to help assess potential sites.

4. Find out Who Owns the Land
It is illegal to use land without obtaining the owner's permission. In order to obtain permission, you must first find out who owns the land. Take the information you have written down about the location of the sites in step 3 to your county's tax assessor's office or visit the website at [http://www.co.black-hawk.ia.us/depts/bhentry.htm](http://www.co.black-hawk.ia.us/depts/bhentry.htm). The Black Hawk County Assessor’s office is located at County Courthouse
Room 209
316 East 5th Street
Waterloo, Iowa 50703

Phone: (319) 833-3006
Fax: (319) 833-3100
E-Mail: assessor@co.black-hawk.ia.us

If you find a vacant lot, call the Black Hawk County Auditor’s Office at 319.883.3006 to see who owns the lot. If the city owns the lot, contact the City’s Engineering division to find out about purchasing.

5. Find out if Your Proposed Site has Water
Every garden needs water. The easiest solution is to ask a neighbor resident or business to provide the garden with water.

If you need your own water system and meter, while you are researching site ownership, contact the water service provider in your area to find out if your potential site(s) has/have an existing water meter to hook-in to. In Cedar Falls, call Cedar Falls Utilities at (319) 268-5280. In Waterloo call Waterloo Water Works at (319) 232-6280. Call your water provider's customer service department, and ask them to conduct a "site investigation". They will need the same location information that you took with you to the Tax Assessor's office. Existing access to water will make a critical difference in the expense of getting your project started. Depending on the size of your garden site, you will need a 1/2-inch to 1-inch water meter. If there has been water service to the site in the past, it is relatively inexpensive to get a new water meter installed (if one doesn't already exist). If there has never been water service to that site, it might cost much more for your water provider to install a lateral line from the street main to the site and install your new meter.
6. Contact the Land Owner
Once you have determined that your potential site is feasible, contact the land owner to see if they are open to the idea. If so, follow-up by writing a letter to the landowner asking for permission to use the property for a community garden (see page 14). Be sure to mention to the landowner the value of the garden to the community and the fact the gardeners will be responsible for keeping the site clean and weed-free (this saves landowners from maintaining the site or paying city weed abatement fees).

Establish a term for use of the site, and prepare and negotiate a lease. Typically, groups lease garden sites from landowners for $1 per year. You should attempt to negotiate a lease for at least three years (or longer if the property owner is agreeable). Many landowners are worried about their liability for injuries that might occur at the garden. Therefore, you should include a simple “hold harmless” waiver in the lease and in the gardener agreement forms. For more information on the lease, and the hold harmless waiver, see 8, “Signing a Lease”.

Be prepared to purchase liability insurance to protect further the property owner (and yourself) should an accident occur at the garden. For more information on the hold harmless waiver, and liability insurance, see below #8, “Signing a Lease”, and # 9, “Obtaining Liability Insurance”.

7. Get Your Soil Tested
It might be advisable to have the soil at the site tested for fertility pH and presence of heavy metals. For information on submitting a soil sample view form ST11 on the Iowa State University Extension and Outreach Store at [https://store.extension.iastate.edu/ProductList.aspx?CategoryID=94](https://store.extension.iastate.edu/ProductList.aspx?CategoryID=94) or call 319-234-6811.

8. Signing a Lease
Landowners of potential garden sites might be concerned about their liability should someone be injured while working in the garden. Your group should be prepared to offer the landowner a lease with a “hold harmless” waiver. This “hold harmless” waiver can simply state that should one of the gardeners be injured as a result of negligence on the part of another gardener, the landowner is “held harmless” and will not be sued. Each gardener should be made aware of this waiver and should be required to sign an agreement in order to obtain a plot in the community garden. A sample gardener agreement form (see pages 18-21) is attached which your group can use as a model.

9. Obtaining Liability Insurance
Landowners may also require that your group purchase liability insurance. Community gardeners may be able to contact their neighborhood organization, a nonprofit or business that already has property nearby to put a rider on their insurance. It is possible to purchase insurance independently, but this is often more expensive than finding a community partner.

10. Planning the Garden
Community members should be involved in the planning, design, and set-up of the garden. We strongly recommend that garden group members take the initiative early on to connect with gardeners from other community gardens in their area or have a similar vision. Not only will group members learn the lessons of other garden groups, but also take away new ideas and new relationships with nearby and similar community gardens.

- Measure the site and make a simple to-scale site map
- Hold 2-3 garden design meetings for interested participants to attend
Use the Community Garden Planning Worksheet to guide discussion when designing the layout of the garden and how the garden will operate.

Generate ideas & visualize design with simple drawings, garden photos cut out of magazines representing different components (flower beds, compost bins, pathways, arbors, water, sidewalks) that can be moved around. Remember to draw in existing trees (and areas they shade).

Record group decisions in official minutes.

**a. Basic Elements of a Community Garden**

Although there are exceptions to every rule, community gardens should almost always include:

- **PLOTS**
  At least 15 plots assigned to community members. These should be placed in the sunniest part of the garden. Without plots for individual participation, it is very difficult to achieve long-term community involvement. Raised bed plots, which are more expensive, should be no more than 4 feet wide (to facilitate access to plants from the sides without stepping into the bed), and between 8 and 12 feet long (it is advisable to construct your raised beds in sizes that are found in readily-available lumber, or that can be cut without too much waste). In-ground plots can be from 10 x 10 up to 20 x 20 feet. Pathways between beds and plots should be least 3 to 4 feet wide to allow space for wheelbarrows. The soil in both raised bed and in-ground plots should be amended with aged compost or manure to improve its fertility and increase its organic matter content.

- **WATER**
  A simple irrigation system with one hose bib or faucet for every four plots. Hand watering with a hose is the most practical and affordable for individual plots (and it's almost a necessity when you start plants from seed). Drip and soaker-hose irrigation can be used in all areas of the garden for transplanted and established plants, but especially for deep-rooted fruit trees and ornamentals. If no one in your group is knowledgeable about irrigation, you might need some assistance in designing your irrigation system. Seek out a landscape contractor or nursery or garden center professional to help you develop a basic layout and materials list.

- **SHED**
  A tool shed or other structure for storing tools, supplies, and materials.

- **SEATING**
  A bench or picnic table where gardeners can sit, relax, and take a break--preferably in shade. If there are no shade trees on the site, a simple arbor can be constructed from wood or pipe, and planted with chayote squash, bougainvillea, grapes, kiwis, or some other vine.

- **SIGN**
  A sign with the garden's name, sponsors, and a contact person's phone number for more information. If your community is bilingual, include information in this language.

- **COMPOST**
  A shared composting area for the community gardeners. Wood pallets are easy to come-by and (when stood on-end, attached in a U-shape, and the inside covered with galvanized rabbit-wire) make excellent compost bins.
b. Nice Additions to Your Garden Plan
   o **A community bulletin board** where rules, meeting notices, and other important information can be posted.
   o **A small fruit tree orchard**, whose care and harvest can be shared by all the members, can create shade for people as well as shade-loving plants.
   o **A water fountain** can be a simple drinking fountain attachment to a hose bib (or faucet) you can purchase at a hardware store.
   o **Perimeter landscaping**, could include drought-tolerant flowers and shrubs, plants which attract butterflies and hummingbirds, or roses and other flowers suitable for cutting bouquets. Herbs are also well-suited to perimeter landscaping and help to create barriers to unwanted insects who do not like the smell of their essential oils.
   o **A children's area**, could include special small plots for children, a sand box, and play equipment.
   o **A meeting area**, could range from a semi-circle of hay bales or tree stumps, to a simple amphitheater built of recycled, broken concrete. Building a shade structure above would be beneficial as well.
   o **A food pantry plot.** Contact your local food pantry see what items they would like and remember to consider shelf-life.

11. Creating a Garden Budget
Use your design to develop a materials list and cost-out the project. You will need to call-around to get prices on fencing and other items. You might be surprised at the cost. A community garden with just the Basic Elements (listed above) typically costs between $2,500 to $5,000. At this point, your group might decide to scale back your initial plans and save some design ideas for a "Phase Two" of the garden.

12. Where to Get Materials and Money
While some start-up funds will be needed through determination and hard work, you can obtain donations of materials for your project. Community businesses might assist, and provide anything from fencing to lumber to plants. The important thing is to ask. Develop a letter that tells merchants about your project and why it's important to the community. Attach your "wish list", but be reasonable. Try to personalize this letter for each business you approach. Drop it off personally with the store manager, preferably with a couple of cute kids who will be gardening in tow! Call the manager to follow-up. Be patient, persistent, and polite. Your efforts will pay-off with at least some of the businesses you approach. Be sure to thank these key supporters and recognize them on your garden sign, at a garden grand opening, or other special event.

Money, which will be needed to purchase items not donated, can be obtained through community fund-raisers such as car washes, craft and rummage sales, pancake breakfasts, and bake sales. They can also be obtained by writing grants, but be aware grant writing efforts can take six months or longer to yield results, and you must have a fiscal sponsor or agent with tax-exempt 501(c)3 status (such as a church or non-profit corporation) that agrees to administer the funds.

13. Make Sure Your Garden Infrastructure is in Place
If you have not yet formed a garden group, now is the time to do so. It's also time to establish garden rules, develop a garden application form for those who wish to participate, set up a bank account, and determine what garden dues will be if these things have not already been done. This is also the time
to begin having monthly meetings if you have not already done so. Also, if you haven't already contacted your city councilperson, he or she can be helpful in many ways including helping your group obtain city services such as trash pick-up. Their staff can also help you with community organizing and soliciting for material donations.

- Garden Rules
- Garden Application
- Set-up Bank Account
- Volunteer Job Descriptions
- Garden Fee Structure
- Monthly Meetings
- Trash Pick-up

14. Get Growing!
Many new garden groups make the mistake of remaining in the planning, design and fundraising stage for an extended period of time. After several months of the initial research, designing, planning, and outreach efforts, people need to see visible results or they will begin to lose interest in the project. Plant something on your site as soon as possible. To keep the momentum going, initiate the following steps even if you are still seeking donations and funds or your project (but not until you have signed a lease and obtained insurance).

a. Iowa One Call
To prevent damage to underground infrastructure and to keep your gardeners safe, call [Iowa One Call](tel:811) to get all underground lines located. Dial 811 or 1-800-292-8989 at least 48 hours in advance.

b. Clean up the Site
Schedule community workdays to clean up the site. How many work days you need will depend on the size of the site, and how much and what kind of debris are on site.

c. Get Water
Without water, you can't grow anything. So get this key element into place as soon as possible. There are plenty of opportunities for community involvement in irrigating the garden--from digging trenches to laying out PVC pipes.

d. Plant Something
Once you have water, there are many options for in-garden action. Stake out beds and pathways by marking them with stakes and twine. Mulch pathways. If your fence isn't in yet, some people might still want to accept the risk of vandalism and get their plots started. You can also plant shade and fruit trees and begin to landscape the site. If you do not yet have a source of donated plants, or don't wish to risk having them vandalized, plant annual flower seeds which will grow quickly and can be replaced later.

e. Continue to construct the garden as materials and funds become available.

15. Celebrate!
At this point, your ideas and hard work have finally become a community garden! Be sure to take time to celebrate. Have a grand opening, barbecue, or some other fun event to give everyone who helped
to make this happen, a special thank-you. This is the time to give all those who gave donated materials or time a special certificate, bouquet, or other form of recognition.

16. Troubleshooting as the Garden Develops
All community gardens will experience problems somewhere along the way. Don't get discouraged--get organized. The key to success for community gardens is not only preventing problems from ever occurring, but also working together to solve them when they do inevitably occur. In our experience, these are some of the most common problems that “crop-up” in community gardens, and our suggestions for solving them.

a. Communication
Clear and well-enforced garden rules and a strong garden president can go a long way towards minimizing misunderstandings. But communication problems do arise. It's the job of the garden group to resolve those issues. If it's something not clearly spelled out in the rules, the membership can take a vote to add new rules and make modifications to existing rules. Language barriers are a very common source of misunderstandings. Garden group leadership should make every effort to have a translator at garden meetings where participants are bilingual--perhaps a family member of one of the garden members who speaks the language will offer to help.

b. Trash-Compost-Recycle
It's important to get your compost system going right away and get some training for gardeners on how to use it. If gardeners don't compost, large quantities of waste will begin to build up, create an eyesore, and could hurt your relationships with neighbors and the property owner. Waste can also become a fire hazard. Make sure gardeners know how to sort trash properly, what to compost, and what to recycle. Trash cans placed in accessible areas are helpful to keep a neat and tidy garden.

c. Gardener Drop-Out
There has been, and probably always will be, a high rate of turnover in community gardens. Often, people sign up for plots and then don't follow through. Remember, gardening is hard work for some people, especially in the heat of summer. Be sure to have a clause in your gardener agreement which states gardeners forfeit their right to their plot if they don't plant it within one month, or if they don't maintain it. While gardeners should be given every opportunity to follow through, if after several reminders either by letter or phone nothing changes, it is time for the group to reassign the plot. It is also advisable that every year, the leadership conduct a renewed community outreach campaign by contacting churches and other groups in the neighborhood to let them know about the garden and that plots are available.

d. Weeds
Gardeners tend to visit their plots less during the winter time, and lower participation, combined with rain, tends to create a huge weed problem in spring. Remember, part of your agreement with the landowner is that you will maintain the lot and keep weeds from taking over. In the late summer/early fall, provide gardeners with a workshop or printed material about what can be grown in a fall and winter garden. Also, schedule garden workdays for the spring in advance since you know you'll need them at the end of winter to clear weeds. If you anticipate that plots will be untended during the winter, apply a thick layer of mulch or hay to the beds and paths to reduce weed proliferation.

Good luck with your community garden project!
Community Flyer (example)
This is an example of a flyer inviting community and neighborhood people to learn more and become involved in the new community garden.

Cedar Valley Grows
start your Community Garden

Who Can Apply?
- Neighborhood groups
- Religious groups
- Service organizations
- Non-profits

What Do You Get?
- 4 Gardens Will Be Awarded
  - 2 in Cedar Falls, 2 in Waterloo
- Black Hawk County ISU Extension and Outreach offers classes and support for garden managers
- The Blue Zones Project provides seeds and tools

Apply Now

Applications available January 2014 at
www.cedarvalleygrows.org
Application deadline March 14th, 2014
Mail/Drop Off at Leisure Services Offices
Cedar Falls Rec Center
110 E. 13th Street
Cedar Falls, IA 50613
Waterloo Leisure Services
1101 Campbell Ave
Waterloo, IA 50701

Who We Are
Cedar Valley Grows is a group of passionate organizations who desire to further develop community gardens in the Cedar Valley through partnering with Leisure Services of Cedar Falls and Waterloo.

Learn More
Join our Community Information Meetings to learn more:
Thursday Feb. 20th, 2014
Cedar Falls Rec Center (4-5:30pm)
Friday Feb. 21st, 2014
Waterloo Sports Plex (10-11:30am)

Contact Info
Felicia Cass
Cedar Valley Grows Coordinator
fcass@cascom.com
p: (319) 883-8626
Defining why you want to develop a community garden will help you create a vision for your garden project. Similarly, it will help you (your garden group) identify what you want to accomplish and how you will prioritize your garden's goals. This will help to recruit new garden members and gain community support.

**Developing a Vision for Your Garden**

A community garden doesn’t just happen, it takes hard work and commitment. List three reasons why you (your group) want(s) to develop a garden.

1. 
2. 
3. 

**Define what you want to accomplish and prioritize your goals.**

Example:

1. Our primary goal is to produce fresh nutritious food for our families and our neighbors.
2. We want clean up our neighborhood block and create a beautiful garden where people can come together.
3. We want to educate youth about gardening and the importance of environmental stewardship.

List three goals your garden group wants to accomplish and then prioritize

1. 
2. 
3. 

**Use your garden goals to create a brief mission statement**

Example: “Our mission is to strengthen our neighborhood by maintaining a community garden that provides a common ground for neighborhood members to garden together and get to know each other.”

Create a mission statement that unites the group and the garden to a larger purpose.
Identify how your garden project will benefit your neighborhood and community.
Think of examples:
1. 
2. 
3. 
4. 
5. 
6. 
7. 
8.

Adapted from the Guide to Community Gardening (2002) by Urban Lands Program, Sustainable Resources Center.
Resources used in developing the original worksheet are:
Growing Power, Inc. Milwaukee, WI www.growingpower.org
Garden Site Evaluation Checklist

Sun:
- Shade/ Partial Shade/ Full Sun (6-8hrs)
- Shading Structure Description
- Facing Southwest/South/Southeast/North/Northeast/Northwest

Soil:
- Texture (sand/silt/clay/organic matter)
- Drainage (wet-moderate-dry)
- Depth of Topsoil (where darker soil ends)
- Compact/Loose: ph level (soil test)
- Nutrient levels (soil test)
- N-P-K Lead or Other Toxins (soil test)

Topography: (Try to avoid steep hills water will run off causing erosion)
- Flat or sloped (degree)

Water Access: (If water is more than 100 ft. away, think twice about location)
- On-site/Neighboring Apt./Home/Business/Church
- Type and Proximity to Garden and Future Plots
- Hoses (How many will you need?)
- Fire Hydrants & Water Meters

Site Amenities:
- Shed or Tool Box Site
- Composting Site
- Estimate of # of Plots
- Visibility (safety and publicity)
- Parking
- Restroom Access
- Power
- Site History (parking lot/gas station/residential)
- Vehicle Access (Can trucks & tractors get in? Are there low wires and branches?)
- Current Use & Future Plans

Neighborhood:
- Interest/Involvement Level of Neighbors
- Demographic Profile (Children/young adults/adults/senior citizens)
- Animals (deer, raccoons, rabbits, dogs)

Quick Sketch of Property:
Sample Letter to Landowner

(Insert Property Owner Name)
(Insert City, State Zip)

Dear (Property Owner Name),

My name is (Insert Your Name) and I am contacting you on behalf of the (Insert Name) Community Garden, a group of neighborhood residents working on starting a community garden in the (Insert Name) Neighborhood. We have met several times and are building a diverse group of garden supporters including (Insert organizations or members of Garden).

While searching for potential garden locations, we came across your property located at (Insert address). We are inquiring about the possibility of using your land as the site of our garden.

We'd love to speak with you in person or over the phone to discuss what hosting a community garden on your property would entail. We'd also like to present to you our vision of this space, discuss it in detail and answer any questions you may have.

In general, a community garden is a space where gardeners could grow nutritious produce on plots they would rent for the cost of maintaining the garden each year. Community gardens improve the quality of life for gardeners, reduce crime, preserve green space, stimulate social interaction and community development, encourage self-reliance and beautify neighborhoods while providing nutritious food and reducing family food budgets as well as creating new recreational and education opportunities outdoors.

The garden would be managed by (Insert name) and there would be an elected Garden Coordinator to oversee the project, a Treasurer and a Garden Steward to handle general garden maintenance and make sure that gardeners are maintaining their individual plots. This means you would have access to all these volunteers and no longer would need to maintain the site by yourself.

Technical issues we would need to discuss may include negotiating a lease, liability insurance, garden rules and regulations, and water access and billing. The gardeners will cover all the costs for the project.

I’ve included some general information about community gardens and what they can bring to a community. We are an organized group of residents who are committed to creating and maintaining a community garden in the Neighborhood and hope we can gain your support.

Thank you for your consideration and please feel free to contact me to discuss this project in more detail. My contact information is included below. Thank you again.

Respectfully,
(Insert Your Name)
(Insert Your Contact Information)

Adapted from Wasatch Community Gardens, From Neglected Parcels to Community Gardens: A Handbook 2005
**Sample Lease Agreement**

**Community Garden Site at**
**Insert address, City, IA, Zip**

This lease is between Property Owner, the owner of the property at (Insert Address), and the lessees: the (Insert Name) Community Garden and the (Insert Neighborhood Name) Neighborhood, (Insert Neighborhood address).

The duration of the lease shall be from (Insert Month Day, Year) to (Insert Month Day, Year) and will be renewed a yearly basis after (Insert Month Day, Year) unless one of the three parties does not approve. There shall be no charge for use of the land for the purpose specified herein.

The lease is for use of land for the purpose of building and operating a community garden.

The garden shall be located on the eastern portions of the lot owned by Property Owner.

The Property owner shall provide access to and reasonable use of water.

The (Insert Name) Community Garden will prepare a plan for the garden in consultation with (Insert Property Owner) showing the location of the beds and submit the plan to the (Insert Property Owner) for approval.

In the future, features may be added to the garden such as a decorative fence, compost bins, a pergola/gazebo type structure, a sign, etc.

Plans for such improvements will be presented to (Insert Property Owner) for design and location approval.

Liability insurance will be provided by (Insert Name) Neighborhood Board and the (Insert Name) Community Garden and Property Owner will be listed as additional insured parties on the insurance policy.

Signing of this agreement constitutes acceptance of the above terms and conditions.

__________________________________________
Property Owner  
Date

__________________________________________
(Insert Name) Community Garden  
Date

__________________________________________
(Insert Name) Neighborhood Board  
Date
COMMUNITY GARDEN PLANNING WORKSHEET

Discuss these questions and work together to generate ideas and policies for your community garden. Add more questions as necessary and delete when appropriate.

Garden name ____________________________________________________________________

Garden Opening Date ___________________________   Closing Date______________________

How many plots? _____________   How many people? __________________

Will there be plot fees? __________   If so, how much? ___________________

What do plot fees include? (water, tilling, tools, etc.) ____________________

What is the process for plot selection? ___________________________________________________________________

What about for last year’s gardeners? ___________________________________________________________________

What are specific plot care requirements (weed control, etc.) ________________________________

What if the plot is not planted or maintained? ___________________________________________________________________

Will a warning be given? __________   By whom? ______________   After how long? __________

What should gardeners have accomplished by the closing date? ____________________________

Will a portion of the fee be refunded if gardener leaves plot in good condition? _______________

What are the garden’s policies on:

Pesticides, herbicides and fertilizers?

(Strongly recommend only organic pest controls and fertilizers, and no herbicide use)

If a garden OK’s chemical use, what are application rules? (for example on windy days?)

Compost Bin and its maintenance: __________________________________________________________________________

Water __________________________________________________________________________

Tools __________________________________________________________________________

Overripe/diseased vegetables __________________________________________________________________________

Structures/supports __________________________________________________________________________

Tall or vining plants? __________________________________________________________________________

What are the garden’s policies on:

Trash __________________________________________________________________________

Parking __________________________________________________________________________

Locking of gate __________________________________________________________________________

Are gardeners responsible for a common garden task? __________________________________________________________________________

Are gardeners responsible for weeding the paths around their plots? __________________________________________________________________________

Are non-gardeners and children permitted in the garden? __________________________________________________________________________

What about pets? __________________________________________________________________________

Who should be notified if there is a problem in the garden? __________________________________________________________________________

What should a gardener do in case of an extended absence? ________________________________

Will there be a treasurer? ______________   A bank account? ______________

Who will cut the grass on the borders and boulevards? ______________________________________

Will the garden have a bulletin board or information kiosk? ________________________________

Do gardeners want to order seeds or plants as a group? ________________________________
Will the garden:
Set aside a plot for a food shelf? _____ Who will tend it? ____________________________________
Include plots accessible by wheelchair? ______________________________________________________
Have a picnic table, bench, trellis or sandbox? _______________________________________________
Set aside space for perennial plants (raspberries, strawberries) or fruit trees? ___________________
Have a flower border? __________________ Who will tend it? ______________________________________
What about a spring work day? __________________
Must gardeners attend group work day? __________ When? ____________________________
What about a regular gardening time? __________________
What about a harvest potluck? _____________________________________________________________

Community Garden Application & Agreement
Individual Plot
(Insert Year)

- I understand I am responsible for my plot(s), unless it is reassigned.
- I will not modify size/dimensions of plot assigned to me. Plot size is approximately 10’x15’.
- I understand plot limits below and will not take over someone’s plot without permission from staff.
  - One plot for first-time plot holders
  - Two plot limit per household (if there is no waiting list)
- I understand I am responsible for preparing my plot for gardening, which may or may not involve tilling my plot.
- I will remove debris, weed and plant my plot(s) by INSERT DATE (dependent of course on date of last frost).
- I will mulch one foot into the pathway around the plot(s) perimeter, using wood chips (if the garden I’m assigned to uses wood chip pathways, wood chips provided by INSERT NAME) by INSERT DATE. I agree to weed and maintain the mulch pathways the entire gardening season.
- I agree to use only organic gardening methods and will not use chemical fertilizers, herbicides, pesticides, and fungicides.
- I will use seed-free mulch to conserve water and reduce weeds.
- I understand the garden will provide only INSERT RESOURCES PROVIDED.
- I agree if I am away for an extended period of time, I will make arrangements with someone to care for my plot.
- I will notify the INSERT GARDEN COORDINATOR if I am unable to harvest or care for my plot(s).
- I will not shade neighboring plot(s).
- I will not harvest produce from other plot holder’s plot(s)
- I agree if I receive a notice for my plot(s) being unkempt or weedy, I will address and resolve the issue within one week or my plot(s) will be reassigned. If I receive 3 plot notices in one gardening season my plot will automatically be reassigned.
- I will prepare my plot(s) for winter by the last work day as designated by INSERT GARDEN COORDINATOR, including removal of diseased plants to discourage the spread of plant diseases and pests.
- I will place dead plant material in the designated areas, containers, or trucks.
- I will keep trash and litter picked up in my plot(s) and adjacent areas, and deposit in proper receptacles. No organic matter in trash, and no trash in compost.
o I will leave numbered stakes in plot(s) where they have been placed so each plot is identifiable.
o I understand if I give up a plot(s), then ask for a plot(s) later, I will be placed on a first come/first served waiting list if a plot is not available.
o I understand plots are non-transferable.
o I understand individual fencing cannot extend beyond plot borders into pathways. Colored plastic fencing is not allowed, nor is using twigs or branches as fencing allowed.
o I understand that if I have multiple plots I will maintain the pathways between adjacent plots.
o I will water my plot according to water-wise guidelines. (If I use more than the recommended amount of water, I will pay a fee each month to cover the cost of this additional water.

1 of 4

Common Area

o I will not use tools that are clearly marked with a name without obtaining the consent of that gardener. Please clearly mark tools you do not wish to share. INSERT GARDEN COORDINATOR is not responsible for any lost or missing tools.
o I will share woodchips, water, and other garden materials fairly.
o I will not take community tools or garden materials (wood chips) out of the garden for personal use or in excess.
o I will care for and respect community tools by cleaning and returning them to the designated community storage area. Please turn wheelbarrows upside down to prevent water from pooling.
o I agree to volunteer for four hours doing general garden maintenance in the common areas, this can be done in coordination with organized work days or by communicating with INSERT GARDEN COORDINATOR to identify common area tasks to be completed on your own time or risk losing plot. Staff will send notification of garden work days, expect one work day per month June through October.
o I will not obstruct walkways with fencing, unwound hoses, and plants, including vines.
o I will not make duplicate keys of any locks at the garden or give my key or lock combination to another person.

Community Principles

o I will help keep the garden site looking respectable.
o I will use appropriate language and exhibit respectful behavior towards staff, gardeners & visitors.
o I will notify INSERT GARDEN COORDINATOR of vandalism, theft, inappropriate behavior, or other questions or concerns.
o I will receive permission before entering the other gardeners' plot(s) except for retrieving community tools.
o I will harvest my plot(s) and only my plot(s) unless asked by another gardener for help.
o I will keep pets outside of the garden area and leashed as per city ordinance.
o I will be responsible for guests and/or children at the community gardens.
o I understand I cannot use my plot for commercial activity.
o There is no smoking in the community gardens.

Definitions

- **Unkempt:** This can be, but is not limited to, weeds taking over my plot(s) or pathways, untended paths, debris not removed from my plot(s), rotting produce, etc. that create a gardening problem, nuisance or liability.
- **Weeds:** Any plants not purposely planted or desired by the plot’s gardener, and that is not a vegetable, fruit, flower, decorative plant, or wildlife support plant. Examples of weeds are
thistles, dandelions, plantain, or any type of grass not planted or desired by the gardener of a particular plot.

- **Organic**: Materials derived from 100 percent, all-natural sources which do **not** contain synthetic chemicals. (Resources: Iowa State University horticulture hotline, 515-294-3108 or www.ipm.iastate.edu/ipm/hortnews)

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**RELEASE AND WAIVER OF LIABILITY AND PHOTO RELEASE**

In consideration of my, or my minor child, being permitted to participate in any way in the Community Garden Program, I, the Undersigned, for myself and my minor child, all of my or my minor child’s personal representatives, executors, administrators, heirs, next of kin, successors and assigns, herein referred to as “Releasors”, do hereby:

Waive, release and discharge and covenant not to sue the **INSERT GARDEN NAME** its elected and appointed officials, employees, volunteers, sponsors, and agents, including others who give recommendations, directions, or instructions as part of this Community Garden Program, hereinafter referred to as “**INSERT GARDEN NAME**”, except for my minor child, for any and all loss or damage, and any claim or demands therefore, on account of injury to the person or property or resulting in my death or that of my minor child arising out of or related to use or occupancy of the Community Garden, including any volunteer service by my minor child or me.

Except for my volunteer services at the Community Garden, I agree to Indemnify and Save and Hold Harmless the **INSERT GARDEN NAME** from any loss, liability, damage, or cost that the **INSERT GARDEN NAME** may incur arising out of or related to my, or my minor child’s, or my guest’s, or my invitee’s, use or occupancy of the Community Garden.

I agree that photos or other visual media of me/my minor child may be taken at the garden may be used by the **INSERT GARDEN NAME** for any lawful purpose.

I hereby state that I have read and agree to the terms and conditions and Release and Waiver above while being a plot holder at the (**INSERT NAME**) Community Garden.

*Please keep a copy of this agreement for your reference.*

Name (please print): __________________________________________________________

Signature: ___________________________ Date: __________________

(Self or Parent/Guardian if under 18 years)

Organization (if applicable): __________________________________________________

Email: ____________________________ Phone: ____________________________

Address: __________________________  Zip: ____________________________
Volunteer Needs in Garden

A community garden can only operate because of the members that work together to make it happen. Each gardener must volunteer time throughout the year to help maintain common spaces. We are seeking a few more volunteers that would be willing to donate a little more time assisting the staff.

Please “X” below any help you’d be willing to provide:

_____ Garden Monitor
Walk garden and report “unkempt” or weedy plots by completing notice form and submitting via email to staff. Monitor compost, manure and woodchip piles and report as needed to staff.

_____ Work Day Coordinator
Work with city staff to schedule, coordinate and secure staff, tools and resources for workdays.

_____ Garden Mentor
Work with interested gardeners to welcome and orient new gardeners. Mentors will provide information and support where needed.

_____ Social Committee
Work with other gardeners to organize social events to build community such as seed swap or potlucks.

_____ Rototiller Operator
Bring and operate personal rototiller to help gardeners prepare plots on workdays.

_____ Volunteer Harvester
Work with staff to harvest abandoned produce and to collect donated produce, on a monthly basis. Recipients of donated produce will vary and be designated before collection, in conjunction with Community Garden Staff.

_____ Other (knowledge, skills, abilities you could contribute to the garden):
(i.e. Maintaining and updating social pages, Master Gardener, Experience in Organics, Writing, Photos, Funding, etc.)
Sample Budget Worksheet

Use this worksheet to list anticipated costs for items that your garden group has planned. Record actual expenditures and donations as they occur.

We’ve included some typical expenses for gardens here in this sample budget. Please note the dollar amounts used in the worksheet are not estimates and are only illustrative.

<table>
<thead>
<tr>
<th>Line Items</th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue/Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plot Fees (20 plots x $25/plot)</td>
<td>$500</td>
<td>$500</td>
<td>$500</td>
</tr>
<tr>
<td>Neighborhood Start-up Grant</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garage Sale Fundraiser</td>
<td></td>
<td></td>
<td>$300</td>
</tr>
<tr>
<td>Balance from previous year</td>
<td></td>
<td>--</td>
<td>$700</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>$1,000</td>
<td>$1,200</td>
<td>$1,400</td>
</tr>
<tr>
<td><strong>Expenses/ Costs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Basic Elements</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water bill (meter and/or hydrant hook-up)</td>
<td>$100</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>Water system (supplies, like hoses &amp; barrels)</td>
<td>$100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tool storage and combo lock</td>
<td></td>
<td></td>
<td>$100</td>
</tr>
<tr>
<td>Hand tools (shovels, rakes, trowels, pruners)</td>
<td>$100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lease fee (if applicable)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liability insurance (if applicable)</td>
<td>$100</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>Woodchips</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compost or topsoil</td>
<td></td>
<td></td>
<td>$100</td>
</tr>
<tr>
<td>Plant materials (seeds &amp; seedlings)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printing (agreements, flyers, etc)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garden sign – construction materials (stakes, board, paint, brushes)</td>
<td>$100</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nice Additions (Wishlist)</strong></td>
<td>$100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulletin board – construction materials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pavers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fence</td>
<td>$100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedges</td>
<td>$100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Picnic table</td>
<td>$100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arbor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tree(s)</td>
<td>$100</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$300</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$600</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$700</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NET INCOME (income-expenses)</strong></td>
<td>$700</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NET INCOME (income-expenses)</strong></td>
<td>$600</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NET INCOME (income-expenses)</strong></td>
<td>$700</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Dear Store Manager or Owner,

There is a new community garden starting in your neighborhood, The Sunshine Community Garden! Our mission is to build community through gardening by creating a space for people to come together to grow food and flowers together, sharing gardening techniques and recipes. We have identified the land, developed the design for the garden, and built a strong contingent of gardeners in the process!

We are asking Urban Garden Nursery, to help the community garden get started by providing the hedges that will go around the perimeter of the garden. We will acknowledge your donation on our garden sign.

One of our gardeners will be in contact with you within the week to follow-up our letter. Thank you for your consideration!

See you in the garden!

Sunshine Community Gardeners

Sally Sunrise
155 Hip Hop Street

Abel Artichoke
234 BeeBop Street

Horace Hortiman
521 Jazz Avenue

Mimi Mananas

Pepe Pepperino

Telly Tomato
Preserving the Garden: Elements of Sustainability

Anything can happen suddenly to the garden coordinator, and with them the information they hold that makes the garden go each year. By being proactive, an accident or suddenly moving away won't leave the garden group in the lurch and necessitate “reinventing the wheel”. Be sure that at least three people know the logistics of the community garden and where information is located, such as…

1. **Bank Account**
   - Bank Name:
   - Bank Address:
   - Name on Bank Account:
   - Account-holders’ name(s) (if different):
   - Bank Account number:

2. **Landowner contact information and lease agreement**
   - Address of Community Garden Site:
   - Parcel Number of garden site:
   - Landowner Name:
   - Contact person:
   - Mailing address:
   - Phone:
   - Email:
   - End of Lease Date:
   - Annual Fee (if any):
   - Comments:

3. **Liability Insurance renewal**
   - Name of Insurance Holder:
   - Contact person:
   - Mailing address:
   - Phone:
   - Fee (if any):
   - Email:
   - Expiration Date:

4. **Water system (how is water handled for the garden?)**
   - Water source: _____________________________ Fee: ________________
   - (neighbor, water hydrant, on-site water system, etc.)
   - Contact name, phone and email:
   - Payment Schedule:
   - Briefly describe the arrangement and how the water system works:

5. **Garbage pick-up (if applicable)**
   - Name of Garbage Service:
   - Account Number:
   - Fee:
   - Name of Account holder:
   - Payment Schedule:
6. **Compost Delivery (if applicable)**
   Name of Garbage Service:
   Account Number:
   Fee:
   Name of Account holder:
   Payment Schedule:

7. **Mulch Delivery (if applicable)**
   Name of Garbage Service:
   Account Number:
   Fee:
   Name of Account holder:
   Payment Schedule:

8. **Portable Restroom (if applicable)**
   Name of Garbage Service:
   Account Number:
   Fee:
   Name of Account holder:
   Payment Schedule:

9. **Information of organizations associated with the community garden.**
   (Insert spreadsheet with names, phone numbers, emails, mailing addresses, Relationship to garden)

10. **For the Garden**
    a. City Councilmember & Phone:  
    b. Neighborhood Association:

11. **Contact information for all the gardeners**
    (Insert spreadsheet with names, phone numbers, emails, mailing addresses, plot numbers)

12. **Garden Contact Information**
    Garden Mailing Address:
    Garden Phone number:
    
    Garden Email:
    Who is in charge of checking the e-mail:
    
    Website:
    Website Host (Name of Company):
    Contact Name for Website Host:
    Contact information for Website Host:
    
    Social Media
    Facebook:
    Twitter:
    Instagram:
    Other:
Community Garden Health and Safety Policy

(INSERT DATE)

This safety policy is intended to demonstrate that the (INSERT NAME) Community Garden recognizes our responsibility to conduct our gardening activities in a reasonable manner and to maintain reasonably healthy and safe conditions in the (INSERT NAME) Community Garden.

For the purposes of this policy, any reference to the (INSERT NAME) Community Garden, “the garden” or “the garden site” means the general boundaries of the garden.

1. Adult gardeners are responsible for their own safety. Children of gardeners are expected to be under the control of their parent(s) or guardians(s) when at the garden site. Do not allow children to run in the garden or play on the roadway to the compost site. Young children should be escorted across the roadway if they are going to the nearby playground or to the portable toilet on the compost site.

2. If you see a hazard, unsafe condition, or situation that could result in injury or ill health, take the appropriate action. Eliminate the hazard or unsafe condition only if you are able to do it safely and are comfortable taking the action to correct the hazard or unsafe condition. Otherwise, notify the garden organizer as soon as possible.

3. Rototillers, lawn mowers, power weed trimmers, wood chippers, chainsaws, or other power equipment will be operated in the garden only by individuals over the age of 16 who own the equipment or have themselves leased the equipment for use. These individuals use this equipment at their own risk.

4. The use of chemical herbicides, pesticides, and fertilizer is allowable only with the consent of the garden group and with strict adherence to all safety precautions pertaining to the product. These products may not be stored or mixed on garden site.

5. Be aware of your surroundings. Avoid being in the garden alone. Avoid secluded areas with high vegetation. If individuals or groups of people taunt, bother, or seem threatening, leave the situation immediately.

   o For life threatening or other significant incidents, call 911 immediately. Also, call the garden coordinator.

   o For minor, non-emergency, incidents gardeners can notify (INSERT NAME) Police dispatch at (INSERT PHONE NUMBER). Also, contact the garden coordinator as soon as possible.

6. Do not leave garden tools at the garden site. They should be taken away from the garden when a gardener leaves the (INSERT NAME) Community Garden.
7. No fires or fireworks will be used on the (INSERT NAME) Community Garden site.

8. Drugs or alcohol shall not be consumed on the garden site.

9. Urination and defecation on the open ground is not allowed.

10. Gardeners agree to hold harmless the (INSERT NAME) Community Garden volunteer organizers and work leaders, their partnering organizations and their employees, Board Members, Officers, Volunteers and other persons and land owner(s) garden(s) from any liability, damages, loss, injury or claim that occurs in connection with association with the (INSERT NAME) Community Garden.

Checklist provided by Totem Town Community Gardeners, April 2007, St. Paul, MN thru Twin Cities Garden Works
Building Community Support

Creating a Garden Team
Growing Communities Principles
Participatory Approach
Nurturing Leadership
Elements of a Well-Planned Meeting
Asset Mapping

Recruitment
Neighborhood Associations
How to Organize a Planting Party
How to Organize a Community Harvest Celebration

Creating a Garden Team
(Information adapted from *The Chicago School Garden Initiative*)

The success of your garden is dependent upon the members involved. It is important to have a team of people (not just one!) involved in the planning, organization, and execution of your project. This team should be diverse collection of people each with his or her own role in the project. The following suggested team make-up can give you ideas about what roles need to be filled.

**The Facilitator**
This is often the person who initiated the project. His or her first responsibility is to recruit the other team members. The facilitator must participate in planning, enlist and motivate the other team members, approve events and activities of the team, enlist support of the community, and help with fundraising. He or she may also have to handle other leadership responsibilities that crop up with respect to the garden. In a school setting, this person would most likely be the principal or teacher. In a community garden setting, this person may be the city Urban Garden Program Coordinator who oversees the gardens but is not directly responsible for the individual projects.

**Garden Coordinator**
Typically, the coordinator works closely with the facilitator in establishing the core team and serves as the liaison to the collaboration. This individual organizes regular meetings with the team and takes the lead for making plans. Because of this relationship, he or she usually oversees things relating to the physical garden, and so it is helpful if this person has some gardening experience. He or she also attends necessary meetings and passes on information to the rest of the team. In a school setting, this person is the main teacher in charge of the garden. In a community garden setting, this person is the community garden leader.
Placing Day Leader
The garden installation and planting is a large-scale event and requires one person to take charge of coordinating the day’s activities. The Garden Coordinator could do this, but experience has shown that delegating this job to another individual eases the burden on the Coordinator. The Planting Day Leader works ahead of time to promote pre-planting activities such as getting seeds started and acquiring materials. He or she must secure access to a water source and tools and work out a planting schedule.

Resource Leader
It is the resource leader’s job to help distribute and store garden materials including plant materials, tools, informational materials, etc. This person should also find ways to supplement the materials as necessary.

Fundraiser / PR Leader
Additional funds will be needed to sustain the garden. A team member needs to seek sources of funding from local, state, and national agencies. This might begin with seeking donations from neighborhood businesses and organizing a school fundraiser. The individual who accepts this responsibility will probably work closely with the facilitator and garden coordinator and usually assume the lead role in publicizing garden successes, as this task is part of effective fundraising.

Growing Communities Principles
These principles are designed to help you create a successful community gardening experience through which your community can grow and develop. They can help promote a participatory style of community organizing that grows from a community’s self-defined interests and skills.

- Engage and empower those affected by the garden at every stage of planning, building, and managing the garden project.
- Build on community strengths and assets.
- Embrace and value human differences and diversity. Promote equity.
- Foster relationship among families, neighbors, and members of the large community.
- Honor ecological systems and biodiversity.
- Foster environmental, community, and personal health and transformation.
- Promote active citizenship and political empowerment.
- Promote continuous community and personal learning by sharing experience and knowledge.
- Integrate community gardens with other community development strategies.
- Design for long-term success and the broadest possible impact.
Participatory Approach
(Information from “Growing Communities Curriculum”)
http://www.communitygarden.org/acga-store.php

A participatory approach is one in which those affected by decisions are part of the decision-making process. This process involves engagement by affected parties in the planning, implementation, on-going maintenance, and evaluation stages of a project. In order to implement a participatory approach, you should take the time to meet with the people involved in your project throughout the entire process. People will feel more involved in the project and take more ownership which may then lead to greater participation and an overall better result.

Design Print

**Initial Meeting**
- Determine a schedule for the project
- Identify goals and a vision
- Find out who your stakeholders are (a stakeholder is anyone that affects or is affected by the outcome of the project)
- Discuss issues and/or concerns that the planners have regarding the project
- Stakeholder Workshop – Issue Identification
- Discuss the goals of the project with stakeholders
- Find out what the stakeholders see as issues or concerns regarding the project and implementation (a short survey may be useful)
- Inventory/Analysis of Site Features
- Soils, vegetation, slope, surface water, utilities, transportation, climate, etc.

Make a plan that accounts for all issues and concerns, input from stakeholders, site features, and goals of the project. Make sure that you continue to involve stakeholders in the planning and implementation processes by holding regular meetings to update everyone on progress and problems.

Participatory Design Activity
You’ve found a great space for a new community garden and know many people interested in helping you, but where do you start? How do you plan a garden that meets all of the diverse needs of your group? How do you create the best form and function without moving precious plant material around over and over? How will you create a space that everyone can enjoy and allow for the conditions of your site? By making a mini 3D model of your garden you can arrange small pieces in many different configurations to come up with the best solution for your garden and have a good time doing it!
Here’s how to get started:

ORGANIZING:
The more the merrier! Make sure you’ve considered everyone who might use your community garden. What are the needs of your seniors? Children? Parents? Principal? Do teachers want to use your garden as a science lab or a creative writing place? Who will sustain the garden during the summer months? Do neighbors want to grow food? Who will do maintenance? Be sure to include everyone’s perspectives, as this will affect the design and how your space is used. Also remember the more people involved, the less one person gets stuck doing all the work.

FACT FINDING:
You will need to take a close look at all the conditions of your site. This may seem overwhelming at first but a little thought about each of the following questions will save you a lot of labor in the long run!
- What is the neighborhood character surrounding your space? Is there a lot of traffic circulating and making noise? Are there any legal restrictions for the area?
- What is the topography of the space? Where does it slope or grade? Where are potential erosion spots?
- What is the climate of the area? What are the sun, shade, wind, shadows, and sun angles during different seasons that will affect plant growth and survival?
- What is your drainage like? Does water stand in certain areas and run off quickly in others? Where is your water source?
- What is the condition of your soil? Are there hard clay areas or spots with rock or gravel?
- What are the existing structures surrounding your space? Do you need to create structures to enhance a view or protect your plantings? Are there existing trees, shrubs, or perennials? Where is there a need for pedestrian pathways? A place to sit down is always important.

GENERATING IDEAS:
The sky’s the limit when you’re making a mini model! It’s fun to make a wish list, a dream garden, with a swimming pool, an antique rose garden, an elaborate jungle gym, perhaps a gazebo with cold beverages, or a hedge maze. It’s fun to make an entire mini 3D model version of impossibilities. Who knows, someone in your group may know how to build the thing you’ve been dreaming about. For inspiration try to visit places like the Botanical Center, the Neal Smith Prairie Learning Center, the test gardens at Meredith, neighborhoods where you know you enjoy the landscaping, or cut out pictures of garden ideas you like from those garden magazines that are piling up, and organize them into a notebook. Working with your mini model will help you generate ideas as well.

MAKE THE MODEL!
1. Start with the lid of a paper box or a large box with low sides, or the sides cut down to about 2 inches. This will represent the base of your model. If you have a diagram or plat of
survey from the city of your space, you can use it as a map and tape it down in the bottom of the box.

2. Small items you may have around the house can be used as model pieces to represent parts of your garden. Here are some suggestions: For soil: dirt, of course! Fill your box with about 1 inch; try to imitate any slope you may have or want to create. Pathways: sand, small pebbles, aquarium rock Structures: small pieces of cardboard, sticks or bark. Trees and shrubbery: pine cones, small toys, spoons of thread, small clippings of real plant material Small plant vegetation: acorns, seeds, pine needles, small pebbles, dried pasta

Nurturing Leadership

(Information from Cultivating Community: Principles and Practices for Community Gardening as a Community-Building Tool by Karen Payne and Deborah Fryman)

Encourage leadership to emerge
Garden projects offer gardeners a way to become active in their neighborhoods. Garden organizers must recognize and encourage opportunities for participants to problem-solve for themselves and create independently. Every phase of a garden project has a place for individual creativity. On a group and neighborhood level, community garden development should encourage cooperative leadership and decision making.

Utilize existing strengths
A community garden project offers a chance of put neighbors’ skills to use in flyer design, cookie baking, phone calling, clean up, public speaking, workshop instruction, taking meeting notes, tool shed organizing, asking for donations – the list is almost limitless. When people receive credit for the diverse skills they bring to the project, they are honored and gratified to be able to give back to their neighborhood.

Divide tasks
When community gardeners share tasks among as many individuals as possible, they create opportunities to develop individual and shared leadership and confidence in taking on more responsibilities.

Balance product with process
A community garden as a ‘finished product’ is a desirable community resource. But even more important are the benefits gained from individual and community growth during the process of planning, creating and maintaining a garden. When garden groups set up a decision-making process that encourages people to share responsibilities and develop leadership, communication, and organizing skills, this does more than simply enrich individuals. These skills build leadership within the garden, and in turn they contribute to long-term garden viability and further neighborhood improvements.
Create opportunities for presentations
Provide gardeners an opportunity to make presentations about their projects to groups within and outside their neighborhood. These opportunities help develop leadership, improve their public speaking and networking skills. Presentations can boost self-confidence and strengthen community connections.

Create mentoring opportunities
When participants with special skills teach what they know, they build leadership skills as they share their knowledge. Group members who serve as mentors build confidence as they share information. Those they assist benefit by learning something new from a friend.

Provide networking and training opportunities
Training can also help participants learn how to create networks beyond the neighborhood and put people in touch with existing resources. Offer opportunities to learn something new and to refine skills to increase people’s interest, investment, and ownership. Learning activities need not, and should not, be limited to horticultural and practical topics. A leadership development program can support personal growth and education goals. For instance, formally and informally, garden groups can help their members master skills in everything from facilitating meetings and public speaking to project planning and fundraising. Empower emerging leadership and build invaluable skills.

Elements of a Well-Planned Meeting
(Growing Communities Curriculum by Jeanette Abi-Nader, Kendall Dunnigan, and Kristen Markley)

Tips for Effective Facilitation:
● Consider seating arrangement (circle of chairs, tables to work at, etc.)
● Welcome people
● Go over the agenda – Ask for changes and time limits
● Do substantial introductions (appropriate to group size)
● Define your role as facilitator
● Explain the Guidelines for Discussion
● Explain the decision-making process
● Invite participation (ask for it before the session begins)
● Make eye contact
● Use first names
● Use humor
● Use various facilitative tools and methods
● Trust the wisdom of each participant
● Change your position/move around the room
● Use visuals
● Record people’s responses on a flip chart
● Avoid responding to each comment
● Give time for people to answer
● Don’t lecture
● Give positive feedback
● Respect difference of opinion
● Empower people to speak and express themselves
● Seek commitments from people
● End session with overview and follow-up coordination
● Use evaluations
● Thank people for their work
● Pass out material after discussions

Suggested Guidelines for Meeting Discussion

● Listen to others
● Don’t interrupt
● Ask clarifying questions
● Welcome new ideas
● Start on time
● Disagree with ideas, not people
● Treat every contribution as valuable

Asset Mapping
Asset mapping is a term that refers to the process of finding ways to connect with a wide variety of people and groups in your community that may be able to provide you with resources. Asset maps can help you create a visual display of the various assets within your community and can prompt you to discover new ways to connect with groups. Be creative in looking for groups to work with. Almost everyone has something to offer!

Five Categories of Assets:

1. Individual gifts – Identify the specific talents and skills and put those skills to work to build the community.

2. Associations – Small formal or informal groups of people working together for a common goal (including shared interests). The basic community organization for empowering individuals and mobilized their capacities. An association is an amplifier of gifts, talents and skills of individual community members.

3. Institutions – Local government, businesses and community organizations have resources and knowledge which can be drawn on.

4. Land and Buildings – Ecology and infrastructure such as an elementary school with after-hours meeting space, open space for gardens, parks for meetings and celebrations, etc.
5. The local economy – Local businesses and lending organizations can donate, publicize, and support community work in a myriad of ways.

Recruitment

People are motivated by their own self-interest, personalize the target. The task in organizing a community garden project is to find ways to make the issues and benefits involved in community gardens relevant to the life and experience of each participant. A person must be able to see a potential benefit or harm to themselves if the project succeeds or fails. The simplest way to find out what matters to folks is by asking. Knowing who people are, what they want, and how they may wish to contribute will not only save time throughout the organizing process, but may determine whether the project succeeds at all.

Paper doesn’t organize people, people do. A million announcements via the mail will never substitute for a single direct contact. Asking a neighbor about his or her skills, interests and views, serves several purposes. It provides the information needed to build a strong and relevant project. It strengthens your relationship with the person and that person’s with the project. It gives that person a sense of power in the project and thus greater connection. A personal invitation to a meeting is about 10 times more likely to get the person to a meeting. When people are asked why they don’t participate in community projects, many people say it is because nobody has asked them to participate.

Look within your organization. The best place to find volunteers is within your organizations or neighborhood. Ask other teachers, neighbors, co-workers, etc. for their help.

Hold a social event for recruitment. Through a social event such as a garden party, planting party, or harvest celebration, you can draw attention to your garden and raise awareness. While people are there, ask them about their interests and talents and follow-up on this information.

Pair a garden discussion with other events. Use the opportunity created by another gathering to discuss your garden. If people are already assembled for another meeting or social event, half the work has been done for you. Use this captive audience. See “Asset Mapping” section of this publication for examples of groups to talk to.

Neighborhood Associations

Your neighborhood association can be a useful resource for your garden. They can be a source of support, recruitment, advertising, and even supplies. In Waterloo for more information about your neighborhood association, call the Waterloo Community Development Office at (319) 291-4429.
How to Organize a Planting Party

Spring planting is an exciting time in the garden. Hosting a planting party is a great way to invite people to your garden, enjoy a beautiful spring day together, and get the work done.

**Pick a day.** Choose an alternate rain date too. You may want to coordinate your party around Earth Day (April 22), Arbor Day (last Friday in April), May Day (May 1), Cinco de Mayo (May 5), National Teacher's Day (May 7), or Mother's Day (May 12) a mother-child planting activity would be fun! Some dates to remember: May 10 is considered the frost-free date in Des Moines, when it is safe to plant out all warm-weather plants (tomatoes, peppers, etc.), the free annuals for those who requested them will be available in May. The Great Perennial Divide pick-up day is also in May for those participating.

**Send out postcards.** Let kids design the cards. Invite friends, volunteers, parents of children who work in the garden, other staff who have not been involved in the garden in the past, master gardeners (contact Black Hawk County Extension and Outreach program at 319.234.6811), local government officials, potential partners, community leaders, funders, neighbors…the more the merrier when there is work to be done. Assign jobs to individuals ahead of time to ensure their participation in the event, like inviting the principal to hand out name tags and run the introduction game.

**Have a plan.** Before everyone is standing around waiting for your orders, make a plan on paper and make several copies so that people can take one with them while they are working in different parts of the garden. Do you need your guests to help out with spring clean up, layout the garden, spread mulch or compost, make paths, till, design row markers, create a trellis, or do an art project?

**BYOT?** Do you have enough tools for everyone (especially trowels, shovels, hoes, and gloves)? Or do they need to bring their own? Round up everything else you will need that day: seeds, seedlings, compost, wood chips, granular fertilizer, row markers, pens, watering cans, hoses, access to water turned on, twine, and a camera.

**Get to Know Each Other.** Provide name tags for everyone. Bring the whole group together and introduce people to each other with a short game to get acquainted. Make up a short scavenger hunt, try human bingo, or have participants choose a favorite plant that starts with the same letter as their first name.

**Team Work.** Working together in small groups allows people to get to know each other and get work done in all areas of the garden at the same time. Pair up groups of children with 1-2 adults.

**Eat, drink and be merry.** Provide your guests with beverages and a nourishing snack for all of their hard work. Make sun tea or peppermint tea the day before and have lots of water available. Fresh fruit, yogurt, or granola bars are a satisfying snack.
Invite them back. Wasn’t that a lot of fun! Give your guests opportunities to help in the garden in the future. Think through volunteer areas needed and post a sign-up sheet. Have a harvest party or other informal garden party in the summer or fall so that your guests can see how their plantings have grown.

By Stephanie Petersen, Polk County Extension Horticulturist.

How to Organize a Community Harvest Celebration

Mix Well for Best Results

Purpose: To share the harvest with the whole community, to celebrate the children’s accomplishments in the youth garden, to raise awareness and gain publicity for your garden project.

Discovery Question: How can we include the larger community harvest-time activities?

Materials: A season’s worth of harvested crops, invitations, crafts from summer activities, storytellers, dancers, musicians, etc.

Procedure:

1. Choose a date and rain date (very important) for the harvest festival. Borrow chairs, tables, and utensils from a school, church or senior center.

2. Have the children design invitations and posters using the garden’s logo, and distribute to family, friends, and businesses that donated goods and services, as well as farmers who came to lecture, the local media, etc.

3. Have children sign up to bring a potluck dish (appetizer, entrée, salad, and dessert) using as many garden-grown ingredients as possible. If you have access to a kitchen during the program, prepare make-ahead dishes, like casseroles that can be frozen, preserves, pickles, dried fruits, and vegetables.

4. Decorate with dried flowers, corn stalks, autumn leaves, photos, and artwork the children made during the program: make centerpieces for the tables from garden produce.

5. On the day of the celebration, have participants and guests finish up harvesting and preparing the garden for winter.

6. Have craftspeople work with produce to make holiday harvest gifts.
7. Arrange a program of music, stories, and dance. Schedule a time for the children to share experiences, read stories and poems about the garden, and a time for parents to share their appreciation.

8. Sell copies of the garden cookbook to raise money for next year’s program.

9. Eat, drink and be merry!
Gardening Planning
Things to Do in Your Garden Year-Round

Sample Annual Timeline

January
- Gardens Open for Re-application with existing gardeners

February
- Gardens Open for New Applicants (Fill any plots that were not renewed)
- Make new garden map
- Meetings with gardeners as needed
- Map out partners and potential donors
- Set-up gardening dates and community building garden events such as harvest party

March
- Free seeds distributed by various agencies to low-income and seniors.
- Fundraise
- Annual Spring Meeting/Orientation in the garden to review garden rules
- Take pre-season photos

April
- Deliver tools, wood chips, compost & other supplies
- Create job descriptions & recruit volunteers to help prepare the garden
- Work Day to spread compost, lay woodchip paths, and install new structures
- Begin planting cool season crops, weather dependent, soil temps should be in mid-60's (lettuce, peas, cabbage, etc.)

May
- Continuing photographing garden through seasons

Work Day
- May 15
  - First day to plant warm season transplants, weather permitting, all chance of frost is past (tomato, peppers, vine crops, etc.)

May-October
- Monitor plots & reassigned as necessary
- Encourage gardens to take extra produce to local food pantry

June
- Re-assign unclaimed and/or uncared for plots
- Work Day (Week before Tour)
- Host a Garden Tour to raise funds for your garden
July
- Work Day
- Continuing photographing garden through seasons

August
- Harvest Party & Work Day

October
- Fall Clean-up of weeds, stakes, twine, garbage, dead plants

November
- Clean off plots
- Evaluation
- Send Thank you Notes to volunteers, partners and donors
- Create final garden report (summary, budget, photos, resources & success stories)

December
- Edit Garden Agreement if necessary & translate into needed languages
- Reassess Garden Rules, review safety and health policy and safe practices

Things to Do in Your Garden

January
Keep a gardener’s calendar or journal to remember good planting dates, when different insects became a problem or when and how much you harvested. Also track your design & expenses.

List who was involved in the garden, how, when and where. Include any photos, flyers & news clippings.

To better your gardening knowledge with little money, go to the library and pick up an arm full of books, videos and class schedules. Contact Black Hawk County Extension 319.234.6811 for gardening information, Master Gardener and other gardening classes.

Start seeds of basil, parsley, sage, or your favorite herbs in small pots. Place them in a sunny window and harvest as needed. The fresh herbs are more delicious and cheaper than store-bought.

Check overwintering cannas, dahlias and gladioli. Remove any that are rotting.

Turn houseplants weekly to prevent uneven growth. Do not use softened water.
Keep adding kitchen scraps (no meat or dairy products though) and fireplace ashes to the compost pile. Give it a turn and see the steam, which means your pile is breaking down nicely. It may need a little extra water during a dry winter.

**February**

Start seeds of onions and leeks indoors at the beginning of the month. By mid-Feb, start seeds of cool-weather crops such as broccoli, cabbage, cauliflower, Swiss chard and parsley indoors. Seedlings can be transplanted outdoors in early April.

Cold frames and floating row covers allow you to plant vegetables weeks earlier than usual. If you have a cold frame, plant radishes, spinach and lettuce in there this month.

Make new trellises, planters, cold frames, plant supports or any other outdoor structures for your garden. This is also a good time to repair broken tools from last year.

Save your ashes! Wood ashes can be added to your compost pile or to your beds in the spring, if soil tests shows Ph below 6.5.

Force branches of pussy willow, apple, plum, forsythia, redbud, or magnolia mid-February for indoor bloom. Prune off a branch and bring indoors in a vase of water.

Test left-over garden seed for germination by placing 10 seeds between moist paper towels or cover with a thin layer of soil. Keep seeds warm and moist. If less than 6 seeds germinate, then new seed should be purchased.

Where and what are you going to plant this year? Consider planting for continuous harvest, rotating where crops were planted last year to prevent disease, and shady areas of your garden. Graph your garden layout in order to get the proper plant spacing. Check out the computer program at the Botanical Center that helps in designing gardens.

**March**

Although you can get established seedlings later on, you can start inside onions, leeks, broccoli, cabbage & cauliflower from seed early in the month. Mid-month, start petunia, celosia, periwinkle, nicotiana, peppers, eggplant, and parsley from seed. At the end of the month plant tomato seeds.

If you have a cold frame or other season extending devices, plant lettuce, spinach, and radishes now for spring salads in a couple of months.

Prune fruit trees, raspberries, currants and gooseberries and grape vines this month.

Fertilize asparagus and rhubarb with organic fertilizer this month.
Make sure the perennial beds are very clearly marked so they are not tilled or buried with compost. Make sure all dead debris is cleaned out of your perennial bed.

Clean out birdhouses before the new tenants arrive later this spring.

Using plant materials like onion skins, beets, coffee, carrot tops, tea, calendula petals, cabbage leaves, spinach, or turmeric dye eggs. Be experimental. [http://www.kidsgardening.org/node/5361](http://www.kidsgardening.org/node/5361)

April
In early April, start tomatoes and pepper plants indoors from seed and set out unprotected plants in mid-May. With season extending devices, put out tomatoes, peppers and other heat-loving plants mid-month.

Take a soil test after frost disappears.

Plant seedlings of broccoli, cauliflower, cabbage, Brussels sprouts, leeks, chives, tarragon, parsley, sage, thyme, oregano, potatoes and onion sets outdoors in mid April.

Plant directly in the soil, seeds of peas, carrots, lettuce, spinach, radishes, turnips, beets, greens, endive, Swiss chard, and other cool-loving crops. Plant radishes, lettuce and spinach every 2 weeks until hot weather strikes in June.

Dig new gardens when weather permits. Be careful about digging and working the soil when it’s wet. You will end up with large clods that dry into rock-hard clumps.

Pick rhubarb! Select thick, brightly colored green or red stalks in the center of the plant. Pull and snap the stalks below the ground. Discard leaves; they contain poisonous compounds and should not be consumed. Stalks can be stored in the refrigerator for up to 2 weeks. Stop harvesting in Mid June.

May
May 15 is the average last day of frost in the Cedar Valley. Avoid planting warm season plants like tomatoes, peppers, basil and eggplant until that date or use season extending devices if planting earlier than May 15.

Allow foliage of spring-blooming bulbs to remain in place after flowers fade. Leaves manufacture the food reserves, which are stored in the bulb for the next year’s blooms. All types of vegetable plants and flowers can be planted outdoors this month. Plant something new this year!

Pinch chrysanthemums and annual flowers such as petunias, snapdragons and marigolds to keep them compact and well-branched.
Plant beans and sweet corn every two weeks to extend the season of harvest.

Thin seedlings of earlier planted crops such as carrots, beets, lettuce and spinach. Add the thinnings of these baby vegetables to a salad.

Post your sign. Naming the space can reduce vandalism and create a sense of ownership.

Place cages or stakes around tomatoes at planting time. They will grow quickly and you will not disturb the root system as much if done then. Cages are stronger and less work to maintain.

**June**

Lettuce, radish and spinach will bolt (send up a long seed stalk) this month. When it bolts, the leaves become bitter, so pull plants and compost. Plant another crop in its place. Stop cutting asparagus and rhubarb.

Another planting of squash, sweet corn, beans and cucumbers can be made. In the latter part of June, start seeds of broccoli and cauliflower in a small bed. The transplants will then be planted in Mid July for fall harvest.

Assign specific people specific jobs to take care of areas that are shared such as a communal herb garden or pathways, etc.

All gardens in plot based community gardens should be planted. Re-assign plots that have yet to be tended. Warn gardeners that have plots that become excessively weedy.

**July**

Now that the hectic period of planting is over, it’s a good time to make a log and a map of what you’ve planted. And then keep records of how various things did in each location. It will help next year, especially in remembering where to rotate crops next year.

Keep an eye on pest problems, especially cabbage loopers on broccoli and cabbage, flea beetles on eggplant, tomatoes, potatoes or peppers, bean beetles, squash bugs and cucumber beetles. All of these can be managed with homemade or purchased insecticidal soap. Spray plants thoroughly in the morning or late afternoon when the insects are most active.

Weed your garden diligently. It’s far easier to control weeds when they’re small and sparse.

Plant a 2nd crop of beets, radishes, chard, snap beans, summer squash, and cucumbers. Keep the seeds and young seedlings watered. Replant areas where spring crops have been harvested and removed.
Keep up on harvesting. Leaving mature fruits on the plant signals it to stop production and can attract four-spotted sap beetles. Remove plants from the garden when they are through producing.

Plants bloom in order to set seed and reproduce. So remove spent flowers from marigolds, dahlias, zinnias, geraniums, and petunias. Plants will continue to branch out and produce more flowers.

Now is a good time to call area greenhouses and garden centers for plant and seed donations. It's ok to plant those bargain plants, just keep them well watered because their roots will be smaller.

**August**

Plant a second crop of radishes, beets, peas, lettuce, spinach, kale, parsley, mustard greens, turnips, rutabagas and other cool weather crops early this month. Keep the seeds well watered in the hot weather.

Harvest onions after the tops yellow and fall over, then cure them in a warm, dry, well-ventilated area. The necks should be free of moisture when fully cured after about a week.

Pick beans, tomatoes, peppers, and squash often to encourage the plant to keep producing. Allow some peppers to remain on the plant later this month so that they will turn yellow or red, making them sweeter.

**September**

Plant spring-flowering bulbs, such as tulips and daffodils, beginning in late September. Planting them too early may cause them to sprout top-growth. However, plant them at least four to six weeks before the ground freezes for good root formation.

Dig and store tender flowers for winter storage. Gladiolus corms should be dug when leaves begin turning yellow. Caladiums, geraniums, and tuberous begonias should be lifted before killing frost.

Dig canna and dahlia bulbs after heavy frost. For all, brush dirt off, allow to air dry, then pack in dry peat moss or vermiculite, and store in a cool location, like a basement.

Plant, transplant or divide peonies, daylilies, iris and phlox.

Harvest crops such as tomatoes, peppers, eggplant, melons and sweet potatoes before frost, or cover plants with newspaper, blankets, garden cloth, (not plastic) to protect them from light frost.

Remove plant debris from the garden to protect next year's planting from disease and insect build-up. Compost plant refuse and shredded leaves. Do not compost heavily-diseased plants, throw them away instead.
Sow a cover crop such as buckwheat, winter rye, hairy vetch or oats to add nutrients to the soil and prevent soil erosion over the winter.

October
Store leftover garden seed in its packets in tightly sealed glass jar in a refrigerator.

Add organics such as compost, manure, and shredded leaves or grow a cover crop as an organic fertilizer. You need to add nutrients back to the soil each year.

Leave perennials alone until spring, providing a food and shelter source for animals and birds, as well as winter interest. If you would rather clean up the garden now, cut down stems after the first frost. Cut peonies to the ground now.

Expect the first frost in the first two weeks of October. First frost can come as early as Sept. 15. Tender plants can be protected from the first few frosts with sheets or blankets. If you don't protect them, harvest all the warm season crops now.

To extend the harvest season for lettuce, spinach, greens and other cool-loving crops, cover in early Oct. with cold frames or other season-extending devices.

Make sure all tools are cleaned and inventoried. Make a list of what tools you need for next year.

Plant spring-flowering bulbs and garlic all month. Try a new bulb that you have not grown before. Remember, it is ok to plant them underneath deciduous trees because they will bloom before the tree leaves-out in the spring.

Remove plant debris from the garden to protect next year's planting from insect and disease build-up. Compost plant refuse, but discard heavily diseased or infected plant material.

November
A cover crop of winter rye and buckwheat can still be planted if it's done as early in the month as possible

Have you planted your spring-flowering bulbs? If not, do this before the ground freezes. Pot paperwhites and narcissus for forcing indoors.

Mulch perennials and strawberries after the ground freezes. Shred your leaves and garden debris to use as mulch. Apply 6-8 inches deep. Continue to remove weeds from the garden. They will be there in the spring if you leave them or seeds left will produce more weeds next year. Place all leaves and dead, annual and perennial foliage in the compost pile. Turn and water the compost pile to keep it working.
Repair and clean garden tools with 3 in 1 oil to prevent rust. Drain and bring in all of your garden hoses.

**December**
If possible, turn your pile. You may see steam, which indicates it is still hot and decomposing. Bring kitchen waste and ashes from your fireplace to the pile.

Design your green space for year-round color and interest. Evaluate your winter aesthetics. Does your community garden need an evergreen hedge or some tall prairie grasses that could double for a living fence? Benches, arbors and art in the garden can be nice focal points with a layer of snow. Some varieties of shrubs and crabapple trees with their fruits will provide color and food for wild birds.

This is a good time to make repairs to tools, compost bins, fencing, water systems, benches, and so on.

Keep watering newly planted trees and perennials from this fall’s Perennial Divide until ground freezes. The plants may not have leaves, but the roots need water to get well established.

Mulch orchard trees, shrubs, roses and other perennials, once the ground has frozen. Pile shredded leaves, compost, wood chips or other natural mulch 2 inches high to prevent plants from “heaving” when ground freezes and thaws. Snow is also a good insulator for plants.
Getting Answers to Your Gardening Questions

Iowa State University Extension Resources

General Resources
Land Records
Farmer’s Markets

Iowa State University Extension Resources

http://www.extension.iastate.edu/ can provide:
- Answers to your questions through the Hort Line
- Publications on Gardening
- Master gardeners to lead gardening classes or demonstrations
- Soil tests
- Nutritionists to do demonstrations or classes about preparing food from your garden and general nutrition through your County Extension
- 4-H programming

Iowa State University Extension

www.extension.iastate.edu/blackhawk/

Soil Testing

https://store.extension.iastate.edu/ItemDetail.aspx?ProductID=6184

Horticultural Hotline

http://www.yardandgarden.extension.iastate.edu/Hortline.htm

Master Gardener Program

http://www.mastergardener.iastate.edu/

Horticulture and Home Pest News

http://www.ipm.iastate.edu/ipm/hortnews

ISU Plant Disease Clinic

http://www.ent.iastate.edu/pidc/

Iowa Insect information

http://www.ipm.iastate.edu/ipm/iiin/

ISU Vegetable

http://www.extension.iastate.edu/yardgarden/vegetables/
http://www.extension.iastate.edu/Publications/PM819.pdf

Yard and Garden Column

http://www.yardandgarden.extension.iastate.edu/VegetablesHerbs/
**List of Garden Resources from ISU Extension**

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**Native Plants**

- Iowa's Plants Series - Iowa's Spring Wildflowers [September 1994]
- Iowa's Plants Series - Iowa's Summer and Fall Wildflowers
- Iowa's Plants Series - Benefits and Dangers of Iowa Plants
- Iowa’s Plants Series-Iowa’s Trees [September 1994]
- Iowa’s Plants Series - Seeds, Nuts, and Fruits of Iowa Plants
- Iowa’s Plants Series - Mushrooms and Nonflowering Plants

**Fruit**

- Selling Fruits and Vegetables [April 2002]
- Pruning Raspberries [January 2013]
Vegetables and Herbs
RG-201 Integrated Pest Management for Vegetable Gardens [April 1999]
PM 731 Harvesting and Storing Vegetables [Revised December 2002]
PM 1893 Cilantro (English & Spanish) [April 2003]
PM 1895 Tomatillos [April 2003]
PM 1896 Cole crops [June 2009]
RG 801 Growing & Using Basil [April 2006]

General Resources
National Gardening Association
http://www.garden.org

Iowa Network for Community Agriculture (INCA)
http://www.growinca.org

Iowa Dept. of Agriculture and Land Stewardship
http://www.iowaagriculture.gov

Growing for Market
http://www.growingformarket.com

Iowa Fruit & Vegetable Grower’s Association
http://www.ifvga.org

American Community Garden Association
http://www.communitygarden.org

Gardening Tips & Techniques
http://www.gardeningmatters.org

Ohio State University Gardening Information
http://ohioline.osu.edu/lines/hygs.html

Ohio State University Container Gardening
http://ohioline.osu.edu/hyg-fact/1000/1254.html

Northwest Ohio Community Garden Resource Guide
http://lucas.osu.edu/topics/horticulture/CGmanual.pdf

Compost
http://mwatoday.com/residential/compost_it.aspx
Land Records

If you are interested in starting a community garden, one of the first things that you need to know is who owns the land you want to use. You can find this and other detailed information about the property you are interested in at the Black Hawk County assessor’s website http://www.co.black-hawk.ia.us/depts/bhentry.htm.

Farmer’s Markets

You can buy fresh produce as well as market your own garden produce at various farmers’ markets in the Cedar Valley and the surrounding area. Here is a listing of the possibilities. Visit http://www.uni.edu/ceee/local-foods/buy-fresh-buy-local/buyfreshbuylocal for a list of your local farmers markets.

Supplies

Water
Contact Cedar Falls Utilities at (319) 268-528 or Waterloo Water Works at (319) 232-6280 to request a water meter.

Wood Chips
Tree removal companies will often drop off wood chips if they are removing trees in your neighborhood area.

Compost
Contact city hall for information about compost. Waterloo City Hall can be reached at (319) 291-4323. Cedar Falls City Hall can be reached at (319) 273-8600.

Plants/Seeds
You can try calling a garden center for donated vegetable plants, especially after prime selling season.
Garden Supply Wish List
Some of the basic items you will need for your project.

Tools
Hand trowels
Spading forks
Hoes
Shovels
Spade
Garden rake
Wheel barrow
Pruning shears

Supplies
Compost
Woodchips
Tomato cages
Hay bales
Garden markers
Gloves
Tape measure
Twine

Construction
Cold frame
Compost bin
Bench
Shed
Trellis

Irrigation
Garden hoses
Soaker hoses
Watering cans
Water meter
Soil Testing

If you are interested in the quality of your soil, you can take a soil test after the frost disappears in the spring. Your local extension office can provide you with bags and forms for submitting garden soil samples for testing or click on the link below. A test will tell you soil pH, organic matter, and other information essential to garden success. This information can be used to determine what types of fertilizer you should be using for vegetable production. For information on submitting a soil sample view form ST11 on the Iowa State University Extension and Outreach Store at https://store.extension.iastate.edu/ItemDetail.aspx?ProductID=6184 or call 319-234-6811.

*Please note that you do not need a special bag to send in your samples. You may substitute with two Ziploc bags. Seal your sample and place inside second Ziploc for double seal and to prevent contamination. If sending more than one sample, please make sure your packages are secured so samples don’t mix.

Gardening with Children

When you talk to adult gardeners, many began the hobby as children, and then there are those who swear off gardening forever because of the chore it was when they were small. If you like to garden and would like to welcome children into your world of flowers and vegetables, there are some things to keep in mind while you explore together. According to the National Gardening Association’s Parents Primer, if you want a child to love gardening, the best things you can do, in order of importance, are the following:

1. Show them how much you love gardening just by reveling in your own garden every day.

2. Surround them with great gardens. That doesn’t mean a show place. It may mean a messy, riotously colored cottage garden; decorative little getaway; or colorful pots of flowers. (Remember that everything is bigger through kids’ eyes.)

3. Give them good gardening experiences. These will be great memories in years to come.

4. Give children their own little space, even if it’s just a pot on the patio. Having their own place to garden will give them pride of ownership. It is important to recognize that kids’ gardening priorities are different than adults. You can help make a child’s gardening experience a success by:
   - Letting kids choose what to plant. Offer guidance and make sure there are some sure-success plants among their picks. But if they want broccoli, roses, and zinnias, why not?
   - Relax your standards. Crooked rows or weeds as pets are fine.
   - Transplanting and planting seeds is obviously fun, but so is pulling weeds and watering. Try to keep positive and have a good time, but recognize when they have had enough.
- Leave room for digging in the dirt. Look for worms and create bug houses out of sticks.
- Model the message that some insects are beneficial & very interesting. They may enjoy making a collection of squash bugs.
- It’s okay to do behind-the-scenes maintenance of kids’ gardens. Don’t expect kids to do all the watering and pest patrol.

5. Excite their senses!

*Smell it!* Fragrant plants will forever bloom in a child’s memory. Grow heliotrope, sweet peas, roses, peonies, and lilacs. Show them which plants to rub between their fingers and they’ll never forget lavender, pineapple mint, lemon balm, rosemary, basil, and scented geraniums.

*Touch it!* Textured plants are irresistible. Fuzzy woolly thyme and lambs’ ears, the prickly coneflower and strawflowers, Hen and chicks, and the delicate maidenhair fern and columbine

*Taste it!* Snacking while hanging out in the garden is great fun. Cherry tomatoes, Sugar Snap peas, mint, strawberries and edible flowers like pansies and nasturtiums are a treat.

*Watch it grow big!* Kids like extremes. Grow huge flowers and tiny vegetables: sunflowers and cherry tomatoes. Unique varieties of common vegetables are fun for adults as well as children: purple carrots or beans, white pumpkins, striped beets, rainbow chard, and ‘Easter egg’ radishes just to name a few.

**Guidelines for Gardening with Children**

- Keep it simple
- Keep an open mind
- Select appropriate plants
- Avoid discouragement
- Plan activities for immediate and delayed gratification
- Garden organically
- Excite the senses
- Avoid poisonous and sharp plants
- Encourage exploration
- Include wildlife and water features
- Maintain a patient and tolerant attitude
- Have fun!!!!!
Fun Plants to Grow with Children

- Morning glories
- Pansies
- Johnny Jump Ups
- Nasturtiums
- Snapdragons
- Radishes
- Cleome
- Sunflowers
- Potatoes
- Strawflowers
- Zinnias
- Mexican hat
- Blanket flower
- Larkspur
- Herbs: mint (apple, chocolate), lemon grass, cilantro, basil, oregano
- Lambs ear
- Butterfly attracting plants: Monarda, butterfly weed, salvia, coneflowers, Liatris

Youth Gardening Resources

Composting in schools
http://compost.css.cornell.edu/schools.html
http://www.epa.gov/osw/conserve/composting/index.htm
http://unicycler.com/go_green/schools/how_to_start_a_compost_program

National Gardening Association
http://www.garden.org

NGA Kid’s Gardening
http://www.kidsgardening.com

Texas A&M Horticulture for Kids
http://aggie-horticulture.tamu.edu/kindergarden/index.html

Maricopa County Community Gardens
http://ag.arizona.edu/maricopa/garden/html/youth/youth.htm

The Edible Schoolyard
http://www.edibleschoolyard.org/

The American Horticulture Society
http://www.ahs.org/gardening-programs/youth-gardening
Field Trip Ideas and Contacts

**Gardens:**

**Botanical Center**
909 East River Drive, Des Moines 50316
515-323-8902
[www.botanicalcenter.com](http://www.botanicalcenter.com)

**Iowa State University’s Reiman Gardens**
1407 Elwood Drive, Ames 50011
515-294-2710
[http://www.reimangardens.iastate.edu/](http://www.reimangardens.iastate.edu/)

**Clare and Miles Mills Rose Garden**
Greenwood Park, 4802 Grand Avenue
515-237-1432
[www.dmparks.org](http://www.dmparks.org)

**Cedar Valley Arboretum**
1927 E Orange Rd, Waterloo, IA 50701
(319) 226-4966
[cedarvalleyarboretum.org/](http://cedarvalleyarboretum.org/)

**Iowa Arboretum**
1875 Peach Ave., Madrid 50011
515-795-3216
[www.iowaarboretum.org/](http://www.iowaarboretum.org/)

**Master Gardeners Demonstration Garden**
92nd St. In Urbandale, near Valerius School
515- 263-2661

**Water Works Park-Arie den Boer Arboretum**
408 Fleur Dr., Des Moines, 50321

**Neal Smith National Wildlife Refuge**
- Prairie Learning Center
9981 Pacific Street, Prairie City 50288
515-994-3400
[www.tallgrass.org](http://www.tallgrass.org)
Compost and Landfill Facilities

Call the cities of Cedar Falls and Waterloo for information, compost and mulch are usually available for pick up and are sometimes available by delivery

- City of Cedar Falls: (319) 273-8600
- City of Waterloo: (319) 291-4301

Food Pantries
Northeast Iowa Food Bank
1605 Lafayette St, Waterloo, IA 50703
(319) 235-0507
www.northeastiowafoodbank.org/
Local Grants for Community Greening Efforts

**School Gardens**
https://foodcorps.org/get-involved/school-garden-grants

**Healthy Initiatives**
http://www.wellmark.com/foundation/apply/apply_for_funding.htm

**Iowa Science Foundation: Iowa Academy of Science**
http://www.iacad.org/research.html

**Iowa Arts Council: Iowa Department of Cultural Affairs**
http://www.iowaartscouncil.org/funding/overview.shtml

**Keep Iowa Beautiful Funds**
http://www.keepiowabeautiful.com/grants/beautification-grant

**Iowa Grants Guide: sponsored by University of Iowa Nonprofit Resource Center and Iowa Council of Foundations**
http://www.iowagrantsguide.org/

**Home Depot**
http://homedepotfoundation.org/page/applying-for-a-grant

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National Grants for Community Greening Efforts

National Fish and Wildlife Foundation Grants
http://www.nfwf.org

National Gardening Association: *Youth Garden Grants, Healthy Sprouts Awards, & Dutch Bulb Awards*
http://grants.kidsgardening.org/
Community Garden Fundraising Projects

Cutting Garden
A garden of annuals, perennials, herbs and shrubs that hold up well when cut for arrangements.

Advantages
- Most annual flower seeds are inexpensive to purchase and provide a lot of plants per seed packet
- Flowers add beauty to the garden and can even be grown within the vegetable garden
- They are as easy to grow as vegetables and require the same conditions, i.e. sunny location, average soil
- Perennials (including herbs) add permanent plantings to your garden
- Flowers are a valued and unique item at farmer’s markets and can be sold at a good profit.

Disadvantages
- Eye-catching flowers may be tempting to vandals, causing a loss of profits
- If you don’t sell all of the flowers, you can’t eat them, as you can with vegetables
- Need to pay taxes on non-consumable items

Resources
- Iowa State University Yard and Garden: Perennials
- Iowa Department of Agriculture and Land Stewardship

Unique Vegetables
Heirloom (vegetables that were grown in the 18th, 19th and early 20th centuries); vegetables not commonly sold at grocery stores (Mesclun lettuce mix); or specialty patches (pumpkin, gourds, strawberries, colored corn.

Advantages
- Heirloom seed can be saved from year to year eliminating the need to buy new seeds every year
- Heirloom and unique vegetables are currently popular and would be very marketable at a farmer’s market
- Heirlooms come in a wide range of colors, shapes and sizes i.e. striped tomatoes, purple beans
- Many heirlooms taste better
- Many heirlooms are more resistant to disease and pests, which reduces crop loss and is important for organic gardeners
Disadvantages
- Heirloom and specialty seeds are more expensive than hybrid seeds
- Need an adventurous customer base or the ability to educate customers

Resources
- Seed Savers Exchange
- Sand Hill Preservation Center

Garden Tours/Classes
Offer tours of the garden or classes and workshops in the garden.

Advantages
- Inexpensive to run, so you keep most of your profits
- Using readily available knowledge base
- Promotes garden and opens up the possibility of people sponsoring or donating to the garden

Disadvantages
- Advertising and printing costs
- Need to be able to market program

Fruit and Nut Trees
Trees or bushes that provide an edible crop of fruits or nuts.

Advantages
- Fruits and nuts are a unique item to sell at a farmer’s market
- Trees are beautiful permanent plantings
- Pest or disease attacks on nut trees are rarely lethal
- Could be a u-pick operation to lower labor input

Disadvantages
- Start-up money is necessary
- Nuts have to be cured (dried) for 1-3 months after harvesting
- Trees have to be 3-7 years old before they start producing a crop
- Nut trees need only to be pruned regularly, but fruit trees require a commitment to pruning, monitoring and maintenance

Value Added Garden Products
Products such as salsa or crafts

Advantages
- Greater profits, items worth more than if the individual ingredients were sold separately.

Disadvantages
- Need special permits for selling
- Need space to make and store the products
- Labor-intensive
**Honey** Product of honeybees

**Advantages**
- Boosts garden production
- Only requires a few hours of labor per year
- Can get as much as 100-200 lbs. of honey per hive, but 50 lbs. is average

**Disadvantages**
- Start up costs
- You **will** get stung; avoid beekeeping if you are allergic to bee venom
- Requires some knowledge and regular upkeep
- Must check local zoning laws; bees’ flyway must not interfere with livestock or people

**Resources**
- ISU Extension Publications - [Beekeeping](#)

Try selling the above products at farmer’s markets, restaurants, stores and at the agency sponsoring the garden.
Gardening Methods

Organic Gardening Basics
Square Foot Gardening
Companion Planting
Mulching
Composting
Gardening with Native Plants
Rain Gardens
Container Gardening
No-Till Gardening
Accessible Gardening

Organic Gardening Basics
(Information from organicgardening.com)

What does it mean to garden organically?

- Don’t use synthetic fertilizers or pesticides on plants
- Think of your plants as part of a whole system within Nature that starts in the soil and includes the water supply, people, wildlife and even insects
- Work in harmony with natural systems
- Minimize and continually replenish any resources the garden consumes
- Regularly add organic matter (compost) to the soil
- Choose plants suited to the site

How do I get healthy soil?

- Regularly replenish the nutrients your plants use
- Mix organic matter (preferably compost) into the soil whenever possible,
- Get a soil test - The results of your test will tell you the soil’s pH and what nutrients are out of balance. See “Soil Testing” section of this publication on page 52.
- Ideal garden soil is dark-colored, smells kind of sweet, compresses into a loose lump in your hand when moist, and is full of earthworms.

How can I control weeds without herbicides?

- Mulch: Blanket the ground around your plants with shredded leaves, straw, dry grass clippings, wood or bark chips, newspaper or other degradable material, and that layer of mulch will block light from reaching weeds and stop or slow their growth. (Mulch also conserves moisture and builds your soil as it decomposes.) See “Mulching” section of this publication page 65.
- Buy a good hoe designed for weeding, such as a stirrup or diamond style hoe, which allows you to slice off weeds below the soil surface.
- Make sure that weeds do not go to flower. They make hundreds, if not thousands, of seeds per plant, each of which could become a weed next year.
How can I manage insects without pesticides?

- Take some time to really watch what the insects are doing. Are they actually destroying the plant or just nibbling it a bit? Many plants can outgrow minor damage.
- Look for problems before they occur (check leaves for eggs and destroy them).
- **Horticultural oils, insecticidal soaps** and garlic and/or hot pepper sprays also work well against many pests. Try making a baking soda spray (baking soda and water).
- Encourage the natural predators of pest insects to hunt in your garden.
- Grow plants suited to the site and they’ll be less stressed out.
- Don’t let them be too wet, too dry or too shaded.
- Diversify your garden so pests of a particular plant won’t decimate an entire section of the garden.
- Make successive sowings, so that plants are at different stages. When the insects attack one plant, another is just sprouting.
- Grow plants with small blossoms like sweet alyssum and dill, which attract predatory insects who feed on flowers’ nectar between attacks on pests.
- Try barriers such as **row covers**, netting and plant collars for prevention.
- If you must take aggressive action try **Bacillus thuringiensis**, a naturally-occurring bacteria that disrupts the digestion of caterpillars and other leaf-eaters.

How can I control plant diseases without fungicides?

- Choose varieties that resist them—look on the tags at the garden center or in catalog descriptions for mention of disease resistance.
- Be sure to put those plants in the conditions they thrive in, because a stressed-out plant is more susceptible to disease.
- Plan your garden with enough room to accommodate full-grown plants, because water evaporates more slowly and air doesn’t circulate well among crowded plants.
- Water your garden beds deeply and then allow the top level of soil to dry out before watering again.
- If diseases do appear, remove affected leaves (or entire plants) from your garden as soon as possible.

Resources

- www.mosesorganic.org
- www.organicgardeningguru.com
- www.globalhealingcenter.com/natural-health/gardening-tips

Applicable ISU Publications

- PM 666 Weed Management in the Home Garden [June 2009]
- PM 683 Composting Yard Waste [March 2009]
- RG 201 Integrated Pest Management for Vegetable Gardens [April 1999]
- RG 206 Questions about Composting
- RG 207 Nonchemical Pest Control
- RG 209 Organic Mulches
- SUL 12 Using Mulches in Managed Landscapes
**Square Foot Gardening**

Consider using this system if you have minimal space to work with or want to maximize your yield from the space that you do have.

When people think of a garden, they typically envision lots of straight rows of vegetables separated by wide paths. In that garden, however much of the space is wasted on those paths that often fill with weeds. An alternative planting method could help you increase yields and spend less time weeding. Mel Bartholomew details the concept of “square-foot gardening” in his book with the same title. Bartholomew’s books detail the proper spacing for many plants.

A square-foot garden ideally consists of a 3 by 3-foot raised bed filled with lots of organic matter. The bed area can then be divided into 9 square-foot sections in which crops are planted according to their mature size. However, the concept can be reconfigured to work in your community garden by creating the 3 x 3-foot areas divided by wood chip paths, or connected together to make 3-foot wide rows. What it all really boils down to is the square-foot space and how big the plant gets. For example, a single square foot can accommodate 1 corn plant or 4 heads of lettuce or 9 bush bean plants or 16 radishes. For larger crops, you can go outside the lines and accommodate a single tomato in a 3 by 3-foot space, or broccoli in a 2 by 2-foot space.

Some benefits of using this system include: increasing yields in the same amount of garden space because it is better utilized; less weeding and watering because the proper spacing of plants creates a natural canopy which prohibits weed growth and holds moisture in the soil; water and nutrients are conserved by applying only to the areas that are planted; and succession planting is easier because you just have to fill in the empty square. Square-foot gardening is also an excellent way to apply math concepts in the school garden. Kids will enjoy seeing division, geometry, and measurement come to life in the garden.

**Companion Planting**

Some plants enhance each other’s growth when planted near each other while other plants actually interact antagonistically. Knowing these relationships can help you to design a garden with enhanced productivity. You can even learn to select for certain “weeds” that might help the growth of desirable plants. A variety of resources on this topic are available. For a start, try *How to Grow More Vegetables* by John Jeavons.

**Mulching**

Another thing you can do to minimize the amount of time you spend weeding and watering is apply mulch to your garden. By mulching around shrubs and trees, flower beds and the vegetable garden, you can save labor and help nurture your plants by limiting drought and weed stress.

- The main reasons to mulch include:
- Retain soil moisture
- Keep down weeds
- Add organic matter to the soil as the mulch breaks down over time
- Keep dirt from splashing on vegetables and flowers
- Prevent freezing and thawing in winter which is especially harsh on strawberries and perennials
- Keep potato tubers, carrot shoulders and onion bulbs covered to prevent development of green color and off flavors

There are many kinds of mulch materials to choose from. When deciding which one to apply, consider what kind of plants you are mulching and the availability and cost of the mulch material. Although rocks are considered mulch, you would not want to put them around tomatoes, but they would be proper around a shrub border. The cheapest, most readily available mulch materials that work well in all garden settings are shredded leaves (pile them up and run a mower over them a few times), shredded bark, wood chips, grass clippings (if they don’t contain chemicals), hay, straw, and compost. The City’s free compost works well. Bring a shovel and take it home in a bag or bucket. Black plastic has also become popular mulch used around tomatoes, peppers, and melons. It not only reduces weeds, but helps to keep the soil warmer around the plants. You can buy it by the roll in garden centers or catalogs.

Mulching your garden is the most time-saving thing that you can do and your plants will be healthier too. Be sure to lay the mulch down on soil that has already been weeded and to apply a 2”-3” layer. You will be happy you did.

Mulch choices at a glance

**Annual flower beds**
- Cocoa-bean hulls (costly)
- Grass clippings (free)
- Leaves (shred first)
- Pine needles (may make soil acidic)

**Perennial flower beds**
- Bark (breaks down slowly, attractive)
- Cocoa-bean hulls
- Pine needles
- Wood chips

**Raspberries**
- Corncobs (break up, breaks down slowly)
- Grass clippings
- Leaves
- Sawdust (decomposes quickly, may intake nutrients)
- Wood chips
Roses
Bark
Cocoa-bean hulls
Wood chips

Strawberries
Straw

Trees and Shrubs
Bark
Corncobs
Leaves
Pine needles
Sawdust
Wood chips

Vegetable gardens
Grass clippings
Leaves
Newspapers
Pine needles
Straw

Composting
Here’s what you need:

- Carbon-rich “brown” materials, like fall leaves, straw, dead flowers from your garden and shredded newspaper;
- Nitrogen-rich “green” materials, like grass clippings, plant-based kitchen waste (vegetable peelings and fruit rinds, but no meat scraps), or barnyard animal manure (even though its color is usually brown, it’s full of nitrogen like the other “green” stuff);
- A shovelful or two of garden soil; and
- A site that’s at least 3 feet long by 3 feet wide.

Here’s what to do:

- Start by spreading a several inch thick layer of coarse, dry brown stuff, like straw or cornstalks or leaves, where you want to build your pile.
- Top that with several inches of green stuff.
- Add a thin layer of soil.
  - Add a layer of brown stuff.
  - Moisten the three layers.
  - Continue layering green stuff and brown stuff with a little soil mixed in until the pile is 3 feet high. (If it takes a while before you have enough material to build the pile that high, don’t worry—just keep adding to the pile until it gets to at least 3 feet high.)
• Every couple weeks, use a garden fork or shovel to turn the pile, moving the stuff at
the center of the pile to the outside and working the stuff on the outside to the center
of the pile. Keep the pile moist, but not soggy. When you first turn the pile, you may
see steam rising from it. This is a sign that the pile is heating up as a result of the
materials in it decomposing. If you turn the pile every couple weeks and keep it
moist, you will see earthworms throughout the pile and the center of the pile turning
into black, crumbly, sweet-smelling soil. When you have enough finished compost in
the pile to use in your garden, shovel out the finished compost and start your next
pile with any material that hasn’t fully decomposed in the previous one. Do you need
a compost bin to compost? No. If the pile is at least 3 by 3 by 3 feet, it will have
enough mass to decompose in just a pile without a bin. Many gardeners buy or build
compost bins, however, because they keep the pile neat. Some are designed to
make turning the compost easier or protect it from soaking rains.

Applicable ISU Publications
PM 683 Composting Yard Waste [May 2013]
RG 206 Questions about Composting

Gardening with Native Plants
Gardening with native plants can provide many benefits. Generally, native gardens require
less maintenance than non-native gardens due to the fact that native plants are well-
adapted to the weather and soil conditions of Iowa. Native won’t need watering (even
during long, hot summers), but they can tolerate and even help absorb the rainfall we can
receive. Additionally, native plants are perennial and will therefore not need to be planted
year after year. Finally, native plants do not need to be fertilized or treated with herbicides
and pesticides like many non-native plants. Though some weeds may make their way into
your native garden, most will be able to be controlled through mulching and some regular
hand weeding. Their reduced maintenance makes native gardens an environmentally
friendly time-saving approach to beautifying your landscape. Native plants also encourage
native pollinators to call your garden home.

Use the following tips to start planning your native garden:
• Pick a sunny place in your yard. (Note: Some native plants do grow in shade, but
most prefer sun. If you only have shady spots, look for woodland plants.)
• Examine your soil to help you determine which plants you will need. If your soil is
wet year-round, pick wetland plants to go in your space. If you soil is sometimes wet
and sometimes dry, pick plants that grow in mesic soil. If your soil is always dry, pick
plants that grow in xeric soil.
• For ornamental gardens, use shorter plants and add a variety of textures and colors.
• Use a mix including mostly forbs (flowering plants) and add grasses later. Forbs will
be more “showy” and will make your garden look less “weedy” to the uneducated
Grasses are necessary to the establishment of your root base, but should be added in moderation.

When you get ready to plant your native garden, you can plant either seeds or plugs. For ornamental gardens, plugs are a better choice, because they will be easier to identify and weed around. Additionally, you can mulch around them to reduce weeds. If you are planting a large plot of natives, seed is a cheaper and easier option. If you plant your natives by seed, you will need to maintain your planting with a regiment of mowing (and maybe even burning) instead of hand weeding.

Planting a native garden is a beautiful way to make a contribution to the improvement of the environment. Use the resources listed here to start planning your native garden today!

Local Resources
 Iowa Natural Heritage Foundation-Native Pollinators
 Native Pollinators

Rain Gardens

What is a rain garden?
Rain gardens are strategically placed depressional areas landscaped with native vegetation to slow rain water and help it filter back into the ground.

Plant List

Container Gardening

(Information from Iowa Department of Agriculture and Land Stewardship
“Grow Iowa: Container Gardening Guide for All Iowans”

“In urban areas where space is limited and restricted, a container garden provides the flexibility to allow gardening to be successful. Even one large container can provide all the pleasure gardening has to offer. Almost every plant that can be grown in a traditional garden can be grown on a smaller scale in a container. Container gardens can be used to grow vegetables, flowers or herbs.”

Ohio State University Container Gardening
http://ohioline.osu.edu/hyg-fact/1000/1254.html

Top 10 Tips for Great Container Gardens
http://gardening.about.com/od/gardendesign/tp/ContainerGarden.htm

10 Common Container Gardening Mistakes Container
http://containergardening.about.com/od/containergardening101/a/10mistakes.htm
Tips on Organic Container Gardening
http://containergardening.about.com/od/interviews/a/PeteBottomley.htm

Don't let Your Container Garden Plants Drown
http://containergardening.about.com/od/containergardendesign/a/drainage.htm

Vegetable Container Gardening-Getting Started
http://containergardening.about.com/od/vegetablesandherbs/a/ContainerVeggie.htm

**No-Till Gardening**

A natural healthy soil structure is complex and exists of relationships between the soil and micro-organisms you can’t see. Under the surface of your garden natural processes are at work with bacteria, fungi, beetles and worms aerating and providing nutrients to soil. Tilling can compact your soils, disturb natural soil processes, damage these organisms and release carbon dioxide into the air. Leaving plant residue on land instead of tilling can help cover soil surface, conserve water and reduce erosion by 70-100 percent. Standing plant materials can provide shelter and food for wildlife. Most no-till gardeners use a thick layer of mulch between plantings which allows the water to pass through while reducing water evaporation. Any weeds that spring up in your mulch are easily pulled by hand while the soil is damp. When creating your garden, you may want to consider researching if no-till is for you.

**Earth Easy Solutions for Sustainable Living**
**Organic No-Till Gardening**
**Northeast Organic Farming Association of Vermont No-Till Gardening**
**Organic Gardening Winter Cover Crops**
**University of Illinois Cover Crops for Vegetable Gardens**
**National Association of Conservation Districts: Soil to Spoon Education Resources**

**Accessible Gardening**

(Information from: http://www.eatgreaterdesmoines.org/content/accessible-gardening and from Accessible Gardening for People with Disabilities by Janeen Adil and Accessible Gardening by Joann Woy)

Creating an accessible garden can allow you to include a wider variety of people in your gardening effort. Some suggestions for making your garden more accessible can be found below.

**Accessible Garden Containers**
**1. Raised beds** – Try growing vegetables that require a lot of weeding
**2. Boxes and pots** – Try growing bush-type peas, beans, cucumbers, kale, broccoli, lettuce, beets, carrots, onions, lettuce, leeks, turnips, kohlrabi, corn, or zucchini
3. Hanging baskets – Try growing cascading or trailing plants like nasturtiums and ivy geraniums, vegetables such as whippersnapper and tumbler hybrid cherry tomatoes, salad bush hybrid cucumbers, pot hybrid sweet peppers, or herbs such as rosemary

4. Table planters – Try plants listed under “Boxes and Pots.” Remember not to select plants with extensive root system.

5. Deep boxes, barrels, and tubs – Try using as miniature raised beds for flowers, vegetables, and herbs

Considerations for Creating an Accessible Garden

Water
Make sure that water is available, close to the garden site, and in a paved area so the ground does not get muddy. Place the spigot at 24 to 36 inches above ground and use hand levers (not round spigot handles) and snap connectors. Soaker hoses and mulch will also reduce watering needs in the garden.

Plants
There are many new varieties of plants that are appropriate for the accessible garden container. Look for plants listed as compact (e.g. "Pixie" tomatoes). Compact plants will typically be more suitable for container growing smaller and easier to reach if you use a wheelchair. Also look for tall plants or vines that reach a certain height, thus making them good choices for growing on poles, stakes, and trellises.

Paths
Garden path surfaces must be firm, smooth, level, and provide traction. The grade of the path should be between 5 and 8 percent. Provide direct routes throughout the garden. Use edge guides if you have ambulating and/or visual disabilities. Audible water features and wind chimes also help orient you through the garden. One-way traffic needs a five-foot minimum width to accommodate the turning radius of a wheelchair. Two-way traffic requires a seven-foot minimum width.

Tools
Gardening tools may present one of the biggest obstacles to persons with physical disabilities. It is difficult to use ordinary, full-sized shovels, hoes, rakes, and other implements if you are using a wheelchair, a power scooter, or a walker. If you have limited hand strength or mobility, using trowels, pruning shears, and other small tools can be awkward and even painful. Special tools for people with physical disabilities are available. Also, many common tools can be easily adapted for better use. Be creative! See pictures below for some ideas for adapting tools.

For more information, see Accessible Gardening: Tips & Techniques for Seniors and the Disabled by Joann Woy.