

GROW

LEXINGTON!

**Community Garden
Resource Manual**



Compiled by Jim Embry 3/10/09

Sustainable Communities Network

Bluegrass Partnership For a Green Community



Table of contents

1. Preface-Restoring Local Food Systems	3
2. Local Food Getting Involved	7
3. Bluegrass Partnership for Green Community	9
4. Lexington Community Garden	12
5. What is a Community Garden	13
6. Starting a Community Garden	14
7. Vegetable Planting Guide	20
8. Companion Planting	21
9. Edible Flowers	23
10. Container Gardening	26
11. Composting	27
12. Rain Barrels and Rain Gardens	32
13. Resources	33
14. LFUCG Support	34
15. Grants and resources	35
16. Links and web information	36
17. Advocacy groups	38

Questions or comments of content to:

Jim Embry

Sustainable Communities Network

859-312-7024



embryjim@gmail.com...This document available on-line at: *www.sustainlex.org*

PREFACE

Restoring Local Community Food Systems

The United States was once home to a wealth of local food systems that supplied most of the food people needed from relatively nearby. In a process that still continues today, those locally-adapted systems have been steadily dismantled in favor of a centralized model that requires large-scale monocultures, the massive use of chemical inputs, fewer farmers and ever more transport. This shift is now a worldwide phenomenon that benefits the huge agribusiness and supermarket corporations that increasingly control the world's food supply. For local communities, economies, and ecosystems, however, this process has been disastrous. There is an urgent need for a shift in direction - to strengthen local food economies, thereby providing a cascade of benefits for consumers, farmers and the environment in both North and South. If you want to create a more sustainable society, a good place to start is by helping to rebuild your local food economy: food is something everyone, everywhere, needs every day, which means that even relatively small changes in the way it is produced and marketed can have immense effects. And since eating is a natural part of daily life, we all have frequent opportunities to make a difference.

In recent decades, the efforts of countless individuals, organizations, and government agencies have been devoted to addressing the problems in Kentucky's food system. Though many small victories have been won, the overall picture continues to deteriorate. The food system remains heavily dependent on toxic agricultural chemicals, fossil fuels, and food crops with an extremely narrow genetic base. Irradiated and genetically engineered foods line the shelves of supermarkets, even though neither technology has been proven safe. The number of small and medium-sized farms continues to decline, and farmworkers are still impoverished, their working conditions abysmal. Giant corporations are consolidating their control over every segment of the food system, pushing out smaller producers, processors, and retailers. Despite a growing obesity epidemic, many Kentuckians are unable to put enough food on the table.

Strengthening local food economies around the world would protect small farms, businesses, and local jobs; it would allow food to be produced in ways that nurture rather than destroy the land; and it would provide everyone with enough to eat — food that is as healthy and nutritious as possible.

Rebuilding local food economies means, most of all, shortening the distance food travels from the farm to table. This doesn't mean putting an end to all trade in food, or doing without oranges and bananas in cold climates. It simply means limiting the needless transport of food by trying to meet as many of our basic needs as possible, closer to home.

Many urbanised people have lost touch with the sources of their food, and may not realize that the distance their food travels has been steadily increasing. In the US, the average pound of food now travels 1,500 miles before it reaches the dinner table, and the distance continues to grow.

Much of this transport is needless: every day, identical commodities pass in opposite directions, criss-crossing the globe. The 'logic' of the global economy leads the US and other nations to import hundreds of thousands of tons of staple foods each year, while simultaneously exporting roughly the same amount. In an era of dwindling fossil fuel reserves and rising CO2 emissions, this is both senseless and wasteful. But it is a trend that is accelerating as governments systematically promote a single, globalized food system.

Within that food system, farming is merely an industry, and food just another commodity. A misplaced emphasis on 'efficiency' leads crops to be grown on huge farms specializing in one crop, while animals are raised by the millions in closely confined conditions on factory farms. Along with the needless transport of food, the use of heavy equipment, toxic agrochemicals and genetically modified seeds takes a heavy toll on the environment, and belies any claim to efficiency.

These trends do not benefit farmers. 'Free trade' policies are forcing them to compete with farmers on the other side of the world, many of whom work for a pittance. At the same time, they are being squeezed between the huge agribusinesses that supply their inputs and those that buy their production. As a result, small farmers are going bankrupt all over the world, and rural communities are being drained of life. For US farmers, suicide is now the leading cause of death.

The quality of our food, meanwhile, is declining. Hormones and antibiotics are given to animals to make them grow rapidly, and to keep them alive under inhumane factory conditions. Heavily processed global foods have been so stripped of flavor and aroma that chemical compounds designed to fool our senses must be added. Still others are added as preservatives to artificially extend shelf life, and foods may be irradiated with the same end in mind. Already, roughly two-thirds of the products on US supermarket shelves contain genetically-modified ingredients.

Further globalizing and industrializing our food supply is foolhardy and reckless. More sensible by far would be to shift direction, and instead support more localized food production and marketing. Such a shift would bring immense benefits:

- Local food means fresher food, which in turn means healthier food. Fresh organic vegetables are on average ten times more nutritious than conventional supermarket vegetables.
- Marketing locally reduces the number of middlemen, and therefore increases farmers' incomes. It also helps to cut prices, giving even low-income groups access to fresh affordable food.
- Local food systems lead to stronger local economies by providing jobs, supporting local shops, and keeping money from being siphoned off by distant investors and corporations.
- Local food systems encourage farmers to diversify their production, thereby making it easier to farm organically. Intercropping and rotations can replace dangerous pesticides, while on-farm waste like manure and crop residues can replace chemical fertilizers.
- By reducing the need for expensive inputs, farm diversification keeps more money in farmers' pockets. And unlike mono-cultural farmers, those who diversify are less susceptible to heavy losses from pest infestations or abnormal weather conditions like droughts or unexpected frosts.

- Reliance on smaller farms increases overall productivity, since smaller farms are more productive per acre than larger farms. A shift towards smaller farms would thus provide more food, and better food security worldwide.
- Smaller-scale, diversified farms serving local markets also provide better conditions for farm animals than large factory farms. There is less crowding, less dependence on long-distance transport, and less need for antibiotics and other drugs.

How can a shift towards the local happen? It is important to realize that government policies now systematically promote the global food system, and those policies need to change. ‘Free trade’ treaties, subsidies for long distance transport, relaxed anti-trust laws, hidden export subsidies, and much more, all work to support global producers and marketers at the expense of smaller competitors.

Shifts in policy alone, however, will not be enough. In addition, a multitude of small and local steps will be needed to re-create and nurture healthier food systems. And for several years now, people have been taking those steps, experimenting and succeeding with direct marketing systems, including farmers markets, consumer co-operatives, community farms, and CSAs, urban agriculture, community gardens at schools, hospitals, houses of worship, parks and empty lots.

Nonetheless, we in the North are a long way from re-establishing more localized food systems. It is helpful to keep in mind a tremendously hopeful point: even today, the majority of people in the world, mostly in the South, still live on the land, growing food for themselves, their families and their own communities.

It is important that we do what we can to ensure that the economic and social structures on which those rural people depend are not further undermined. Insisting that people in the poor parts of the world devote their labor and their best land to feeding us does not ultimately benefit them. Feeding ourselves as much as possible while assisting the people of the South to diversify their economies — enabling them to feed themselves before they think about feeding us — would be the equitable thing to do.

“Globalisation is really a code name for corporatisation. It’s an attempt by the largest corporations in the world, and the largest banks in the world, to re-engineer the world in such a way that they won’t have to pay decent wages to their employees, and they won’t have to pay taxes to fix potholes and to maintain parks, and to pay pensions to the old and handicapped.”

— Paul Hellyer, former Deputy Prime Minister of Canada

As things stand today, part of every dollar we spend on global food — and a sizeable portion of our tax dollars — pays for food transport, packaging, advertising, processing, artificial flavors, chemical preservatives and toxic agrochemicals, as well as research into still more industrial food technologies. In return we’re getting poor quality food, a degraded environment and rural communities sapped of life. Is this how we want our money spent? If not, we should be resisting the further globalization of food by pressing for policy changes, and by buying local, organic foods whenever possible.

Take back the food system

To take back the food system for communities, farmers, and consumers, and create a more just, democratic and sustainable food policy requires action at all levels - from Congress to neighborhoods. Change begins to happen when people are able to act in concert and identify the kinds of coalitions that can make change possible.

For the food system, the process for making change has begun. Join us!



GROW LEXINGTON!

A thriving local community food system is the foundation of creating a sustainable city. Grow Lexington is a movement towards local self-reliance grounded in rural and urban agriculture, food and environmental literacy, food policy council and other elements of a thriving local food system.

Obesity. Poor Health. Family farms. Food safety. School meals. Food access. Immigrant rights. Peak oil. Global warming. World hunger.

Food ties it all together.

Food security: Strong, sustainable, local and regional food systems that ensure access to affordable, nutritious, and culturally appropriate food for all people at all times.

•



Local Food Systems: Getting Involved

Each of us can be a meaningful part of restoring and strengthening our local food systems through the many roles we play:

As Citizens

Let us re-empower ourselves as citizens in our communities! Strong local policies can address shortcomings in state and federal policies, which often do not take into account the unique conditions of local areas. Steps toward local participation include:

- working to elect people who champion sustainable local agriculture,
- getting to know our city council members and local county supervisors,
- encouraging the integration of local foods and their distribution into city planning, and
- starting local food policy councils.

As Consumers

We can make a significant difference simply by purchasing food directly from local producers and processors instead of multinational companies. We can encourage restaurants and grocery stores to buy locally and directly from farmers by asking for local products, and help build direct links between farmers and the rest of the community through Community Supported Agriculture (CSA) and other buying club initiatives. (See for example <http://www.farmtocity.org>) For local food sources in your area, visit <http://www.localharvest.org>.

As Entrepreneurs

There are many ways to help foster our local food economies. We could start a farmers' market, help a local farm establish a Community Supported Agriculture (CSA) program, develop local processing facilities, start a community kitchen, develop urban agriculture initiatives or invest in our local food economy.

As Community Organizers

Strong communities facilitate the local control of food. Help revitalize the web of community life by forming alliances and pooling of resources, reviving local community centers and granges, organizing neighborhood events such as local food meals, supplying educational slideshows or posters, or simply starting conversations about local food with friends and neighbors.

As Artists

Food is a central element of culture and can bring incredible joy to our lives. When we prepare a beautiful meal, it can inspire and heal our spirits as well as our bodies. A landscape of locally grown food also has an aesthetic dimension that conveys real beauty and vibrancy. Exploring the art of food is a great way to appeal to and engage people in their local food system.

As Philosophers

Rethinking our own actions and how they fit into the bigger picture can help us live more in line with our values. Asking questions is effective in planting the seed of awareness. Asking storeowners, restaurants, and grocery produce managers where their food comes from can build awareness of, and support for, local food in subtle and powerful ways.

The broad movement to decentralize food and agriculture into locally owned and operated enterprises is gaining momentum. Many individuals, businesses, and organizations are working to guarantee an accessible and affordable supply of healthy, fresh food from regional sources. Local control of food and agriculture helps farmers stay in business and strengthens local economies by keeping more money circulating locally. It also reduces the ecological impact of industrial- scale food production and distribution.

To strengthen the movement for local control, alternative policy frameworks and food system models are necessary. In addition to these positive structures, it is important to counter the many threats to local food systems, such as further industry consolidation and policies written to favor global agribusiness.

Real Food for everyone

Everyone should have access to real food that is -

- Fresh
- Affordable
- Locally produced
- Free from pesticide residues
- Provides a fair income to farmers
- Free from genetically modified ingredients

Bluegrass Partnership For a Green Community in partnership with Sustainable Communities Network
<http://bluegrasspartnership.org>, www.sustainlex.org

*In 2005 the University of Kentucky, Lexington-Fayette Urban County Government and Fayette County Public Schools have formed the **Bluegrass Partnership for a Green Community**, an initiative aimed at stimulating greater regional commitment to environmental issues by government, schools, businesses, private citizens and young people.*

Since 2005 additional partners have joined this collaboration and include such groups as: Bluegrass Community & Technical College, Bluegrass PRIDE, Kentucky Division of Renewable Energy and Energy Efficiency, Kentucky Environmental Education Council, **Sustainable Communities Network**, Cool Cities, Bluegrass Green Expo and many others. Everyone is encouraged to join a Team!

BLUEGRASS PARTNERSHIP for a GREEN COMMUNITY now includes ten project teams: 1) Green Buildings, 2) Reduce Reuse Recycle, 3) Green Purchasing, 4) Environmental Education, 5) Transportation, 6) Outreach & Communication, 7) Water & Stormwater, **8) Foods & Sustainability**, 9) Green Space & Sustainability, 10) Greening the FEI Games.

Sustainable Communities Network was founded in 2005 as a community-based non-profit organization. Sustainable Communities Network is dedicated to contributing to the development of the theory and practice of sustainable living. SCN seeks to provide the ideas, programs and tools that inspire community members to bring about systemic changes in all of our institutions that are necessary to create sustainable cities.

In 2007 Sustainable Communities Network agreed to facilitate the Food & Sustainability Team 2008 Initiatives

- Co-sponsored Events
 - March Green Schools Summit.... Green Schools Community Forum
 - July-Community Garden Tour.....October- Closing the Food Gap Conference
 - HOBY-Hugh Obrian Youth Leadership Mural Project
- Support of community Garden Projects
 - Winburn, Booker T Washington, Dunbar, London Ferrill, Nelson Ave, Southland Community-Hill nDale Park, La Roca/Arlington School, Yates Elementary,
- Speaking Engagements
 - Bryan Station High School, Hadassah, Maxwell Presbyterian Church, Unitarian Church, Black Church Coalition, UK Classes, Transylvania classes, Georgetown College, BCTC, HOBY, Frankfort 4-H, Local Farms Healthy Food
- Participation in Conferences
 - Community Farm Alliance-Frankfort, SARE- Kansas City, Local Farms Healthy Food- Louisville, Governors Conference on Environment, Terra Madre-Italy

- Media coverage KET Connections/Renee Shaw, WUKY radio, ACE Weekly special issues-Green Schools, Community Gardens, Closing the Food Gap, Lexington Herald Leader, TV-27 Noon News, Smiley Pete Publications
- Grant writing....USDA Community Food Projects, PFY, Mayors Youth Employment
- Food assessments--UK, CFA.....Food Assessment Website .Winburn Rain Garden

Bluegrass Urban Garden Society(BUGS)

BUGS is a subcommittee of the BGP GC Food and Sustainability Team which is facilitated by Sustainable Communities Network. BUGS was formed in October 2008 at the Closing the Food Gap Conference. BUGS aspires to 1) provide structure and resources for greater coordination and collaboration among all the people, agencies, institutions that are involved with community gardening and urban agriculture, 2) inspire, educate and promote community gardening and urban agriculture as an essential part of a sustainable community Foods System.

BUGS initiatives for 2009 include: community gardening workshop March 14, School Garden Workshop April 18 & June 10, develop seed and plant exchange programs, establish gardens in city parks, 4th of July Parade Garden group, support all garden initiatives, organize Lexington Community Garden Tour on July 30, attend the American Community Gardening Association Conference .



Our Mission

BUGS is a organization dedicated to the continued growth and success of community gardening in the city of Lexington and across Kentucky. BUGS has four major mission goals:

- increase public access to community gardens and community gardening resources
- develop outreach, education, and service-learning programs to promote sustainability of community gardens
- ensure that underserved groups, including youth, seniors, and low income Lexington citizens, have equal access to community gardening opportunities
- cultivate political support for community gardening through networking, advocacy, and activism

Our Vision

- A thriving local foods system grounded in sustainable rural farms and producers linked to urban agriculture
- Through citywide and statewide advocacy, we help others to envision and support a thriving network of community-based gardens accessible to people of diverse ages, abilities, and cultural backgrounds linked to thriving local farmers and producers.
- Through partnerships with Master Gardeners, nonprofit organizations, parks and recreation departments, schools and colleges, and civic and faith-based groups, we work to empower people through gardening.
- Through the www.sustainlex.org web site, we share information and resources, locally and globally, to foster a supportive climate for community gardening.
- Through local and statewide workshops, trainings, and networking, we offer technical assistance to individuals and groups working to establish sustainable community gardens.
- Through garden-based education and outreach programs, we help the people of our city and state build self-reliance and interdependence through community gardening.
- Through support of anti-hunger initiatives, we encourage gardeners to give back to the community by sharing their garden produce, skills, knowledge, and dedication with others.
- Through collaborative projects, we envision a local food system where more people experience the rewards of gardening and become healthier through improved diets, exercise, and positive social interactions.
- Garden resource centers developed in each council district
- School gardens established in every school and integrated throughout the curriculum
- Therapeutic gardening programs recognized as vital part of judicial, substance abuse, detention facilities and other restorative community programs.

For more information or to join a Project Team of the Bluegrass Partnership

Contact: Carol Hanley
Director of Education and Communication
Tracy Farmer Center for the Environment
University of Kentucky
107 Dimock Bldg.
859.257.3780
859.333.8248 (cell), chanley@uky.edu

For more information, to join the Food & Sustainability Team, Sustainable Communities Network and BUGS...or to get help with your community garden effort:

Contact:
Jim Embry
Director, Sustainable Communities Network
www.sustainlex.org, embryjim@gmail.com, 859.312-7024

Lexington Community Gardens

THE GARDENS...

Community gardens can be found at several locations in Lexington. These locations can be broadly described as school, youth, demonstration, accessible, business or neighborhood gardens. Some locations are a combination of these garden types.

School Gardens

School gardens help to enrich the curriculum at a few local public and private schools. School administrators, teachers, and parents generally maintain these locations. As they are intended to help teachers with their environmental and natural science classes, these gardens contain all sorts of vegetables and flowers, and are used for a variety of different activities. School gardens include:

Booker T. Washington Academy,
Mary Queen School,
Yates Elementary School
Community Montessori School,
Eastside Vocational School....greenhouse and
horticultural classes
Martin Luther King Academy....fruit orchard



Youth Gardens

Youth gardens provide children and youth with educational and community building activities. Unlike school gardens, youth gardens are not operated by the staff of a specific school but a neighborhood community center or youth facility. They include:

Winburn Community Art Garden at Community Action Council
Day treatment Center
Family Care Center
Nelson Ave Art Garden
Black and Williams Center

Neighborhood/Community Gardens

Al's Bar/Stellas Garden 6th St near Limestone.
Woodland Park...flowers
Duncan Park...flowers
The Rock La Roca United Methodist Church
Southland Community Garden...Hill N dale Park
London Ferrill Community Garden



Demonstration Gardens

Demonstration gardens educate the public about the importance of urban agriculture, while providing gardeners with valuable information.

UK Arboretum

Accessible/Senior Gardens

Accessible/Senior gardens provide space for gardeners with special needs and the elderly. These garden plots are often in the form of raised beds that allow individuals with wheel chairs and walkers to garden.

Ballard Place 2nd St
Senior Citizens Center
Ashland Terrace

What is a community garden?

Very simply, it is:

Any piece of land gardened by a group of people.



It can be urban, suburban, or rural. It can grow flowers, vegetables or community. It can be one community plot, or can be many individual plots. It can be at a school, park, house of worship, hospital, or in a neighborhood lot. It can also be a series of plots dedicated to "urban agriculture" where the produce is grown for a market.

Benefits of Community Gardens:

- Improves the quality of life for people in the garden
- Community building tool -Provides a catalyst for neighborhood and community development
- Stimulates Social Interaction and opportunities for intergenerational and cross-cultural connections

- Produces fresh, nutritious fruits and vegetables in urban areas for community or food bank use
- Improves and uses vacant and unsightly lots
- Provides a safe learning space for children and adults
- Reduces stress and improves mental health of community members
- Beautifies and enriches neighborhoods and enhances their sense of identity

- Provides a space for spiritual connections with the Earth
- Encourages Self-Reliance
- Produces Nutritious Food Reduces Family Food Budgets
- Reduces city heat from streets and parking lots
- Enables exposure and connection to nature and the cultivation of environmental stewardship
- Reduces Family Food Budgets
- Reduces city heat from streets and parking lots

- An opportunity for children to get dirty, squeal, play, work and discover
- Conserves Resources
- Creates opportunity for recreation, exercise, therapy, and education
- Reduces Crime
- Preserves Green Space
- Creates income opportunities and economic empowerment
- Provides a space for artistic and creative expressions

Starting a Community Garden

There are many ways to start a community garden. Whether you're working with friends, neighbors, or a local organization, there are many things you'll want to consider before you ever dig the first hole.

This fact sheet is designed to give many different groups the basic information they need to get their gardening project off the ground.

1. Form a Planning Committee
2. Choose a Site
3. Prepare and Develop the Site
4. Organize the Garden
5. Insurance
6. Setting up a New Gardening Organization
Organizational Considerations | Bylaws
7. How to Manage Your Community Garden
Sample Guidelines and Rules | Application Form
8. Troubleshooting
Children's Plots | People Problems and Solutions
9. Resources
Horticultural information | Seeds | Bedding plants



FORM A PLANNING COMMITTEE

- Determine if there really is a need and desire for a garden.
- What kind of garden--vegetable, flower, trees, a combination?
- Who will the garden serve--youth, seniors, special populations, people who just want an alternative to trash?

- If the project is meant to benefit a particular group or neighborhood, it is essential that the group be involved in all phases.
 - Organize a meeting of interested people.
 - Choose a well-organized garden coordinator.
 - Form committees to accomplish tasks: Funding & Resource Development; Youth Activities; Construction; Communication.
 - Approach a sponsor. A sponsor is an individual or organization that supports a community garden. Site sponsorship can be a tremendous asset. Contributions of land, tools, seeds, fencing, soil improvements or money are all vital to a successful community garden. Some community gardens can provide most of their provisions through fees charged to the membership; but for many, a garden sponsor is essential. Churches, schools, citizens groups, private businesses, local parks and recreation departments are all potential supporters. Community Development Block Grants are sometimes available through your municipality.
 - Make a list of what needs to be done.
 - Find a garden site.
 - Obtain lease or agreement from owner.
 - Decide on a mailing address and central telephone number(s). Try to have at least 3 people who are very familiar with all pertinent information. Form a telephone tree.
 - If your community garden has a budget, keep administration in the hands of several people.
 - Choose a name for the garden.
-

CHOOSE A SITE

- Identify the owner of the land.
 - Make sure the site gets at least 6 full hours of sunlight daily (for vegetables).
 - Do a soil test in the fall for nutrients & heavy metals.
 - Consider availability of water.
 - Try and get a lease or agreement which allows the space to be used at least for 3 years.
 - Consider past uses of the land. Is there any contamination?
-
- Make sure the site gets at least 6 full hours of sunlight daily (for vegetables).
 - Do a soil test in the fall for nutrients & heavy metals.
 - Consider availability of water.
 - Try and get a lease or agreement which allows the space to be used at least for 3 years.
 - Consider past uses of the land. Is there any contamination?
 - Is insurance something you need to consider?
-

PREPARE AND DEVELOP THE SITE

- Clean the site.
- Develop your design.
- Gather your resources--try to gather free materials.
- Organize volunteer work crews.
- Plan your work day.

- Decide on plot sizes, mark plots clearly with gardener's names.
 - Include plans for a storage area for tools and other equipment, as well as a compost area.
 - Have a rainproof bulletin board for announcing garden events and messages.
 - Arrange for land preparation--plowing, etc--or let gardeners do their own prep.
 - Will the garden be organic?
-
- Lay out garden to place flower or shrub beds around the visible perimeter. This helps to promote good will with non-gardening neighbors, passersby, and municipal authorities.
 - insurance something you need to consider?

ORGANIZE THE GARDEN

- Are there conditions for membership (residence, dues, agreement with rules)?
- How will plots be assigned (by family size, by residency, by need, by group-- i.e., youth, elderly, etc.)?
- How large should plots be (or should there be several sizes based on family size or other factors)?
- How should plots be laid out?
- If the group charges dues, how will the money be used? What services, if any, will be provided to gardeners in return?
- Will the group do certain things cooperatively (such as turning in soil in the spring, planting cover crops, or composting)?
- When someone leaves a plot, how will the next tenant be chosen?
- How will the group deal with possible vandalism?
- Will there be a children's plot?
- Will the gardeners meet regularly? If so, how often and for what purposes?
- Will gardeners share tools, hoses, and other such items?
- How will minimum maintenance (especially weeding) be handled both inside plots and in common areas (such as along fences, in flower beds, and in sitting areas)?
- Will there be a set of written rules which gardeners are expected to uphold? If so, how will they be enforced?
- Should your group incorporate and consider eventually owning your garden site?

SETTING UP A NEW GARDENING ORGANIZATION

Many garden groups are organized very informally and operate successfully. Leaders "rise to the occasion" to propose ideas and carry out tasks. However, as the workload expands, many groups choose a more formal structure for their organization.

A structured program is a means to an end. It is a conscious, planned effort to create a system so that each person can participate fully and the group can perform effectively. It's vital that the leadership be responsive to the members. Structure will help an organization to last; it will promote trust; it will help your group grow and create new opportunities for leaders to develop.

If your group is new, have several planning meetings to discuss your program and organization. Try out suggestions raised at these meetings and after a few months of operation, you'll be in a better position to develop bylaws or organizational guidelines. A community garden project should be kept simple as possible, whether large or small.

Bylaws are rules that govern the internal affairs of an organization: they are officially recorded by the State or Province in which your organization resides. They are required when you form a nonprofit corporation, but are useful even if your group is a club or a group of neighbors. Many battles are won simply because one side has more pieces of paper to wave than the other. It's helpful to look over bylaws from other similar organizations if you are incorporating. Guidelines and Rule are less formal than Bylaws, and are often adequate enough for a garden group that has no intention of incorporating.

Organizational Considerations:

- What is your purpose? What are your short and long-term objectives?
- How are decisions to be made? Who chooses leaders and how?
- How will work be shared? Who does what?
- How will you raise money? Membership dues, fund raising, grants, sponsors?
- Are you open to change? Flexibility is important when goals and members change. Do you want to be incorporated or act as a club?

What goes into formal Bylaws:

- Full official name of organization and legal address.
- Organizing members, names and addresses.
- The (brief description of the) purpose, goals and philosophy of the organization.
- Membership categories and eligibility requirements.
- Membership dues, how much and when paid.
- Specify when and how often regular or special meetings of the membership are to be held, as well as regular and annual meetings of the board of directors.
- State what officers are necessary, how they are chosen, length of term, their duties and how vacancies are filled.
- Organizational dissolution processes
- State special committees, their purpose and how they operate.
- Establish a system so that bylaws can be rescinded or amended, maybe by a simple majority. State any official policies or practices: e.g.. garden group will avoid the use of hazardous substances; group will agree to keep all adjacent sidewalks in good repair and free of ice and snow in season; group will make all repairs necessary to keep equipment, fences and furniture in good order and repair.
- Include a Hold Harmless clause (sample):
"We the undersigned members of the (name) garden group hereby agree to hold harmless (name owner) from and against any damage, loss, liability, claim, demand, suit, cost and expense directly or indirectly resulting from, arising out of or in connection with the use of the (name) garden by the garden group, its successors, assigns, employees, agents and invites."

HOW TO MANAGE YOUR COMMUNITY GARDEN

In order to offer a high quality community garden program, good management techniques are essential. Included in this fact sheet are the main ideas to consider in management, along with many different ways to carry them out.

Having written rules is very important with older groups as well as new gardens, since they spell out exactly what is expected of a gardener. They also make it much easier to deal with challenges as they arise.

Sample Guidelines and Rules

Some may be more relevant to vegetable gardens than to community flower gardens or parks. Pick and choose what best fits your situation.

- I will pay a fee of \$___ to help cover garden expenses.
- I will have something planted in the garden by (date) and keep it planted all summer long.
- If I must abandon my plot for any reason, I will notify the garden leadership.
- I will keep weeds at a minimum and maintain the areas immediately surrounding my plot if any.
- If my plot becomes unkempt, I understand I will be given 1 week's notice to clean it up. At that time, it will be re-assigned or tilled in.
- I will keep trash and litter out of the plot, as well as from adjacent pathways and fences.
- I will participate in the fall cleanup of the garden.
- I will plant tall crops where they will not shade neighboring plots.
- I will pick only my own crops unless given permission by another plot user.
- I will not use fertilizers, insecticides or weed repellents that will in any way affect other plots.

TROUBLESHOOTING

Vandalism is a common fear among community gardeners. However, the fear tends to be much greater than the actual incidence. Try these proven methods to deter vandalism:

- Make a sign for the garden. Let people know to whom the garden belongs and that it is a neighborhood project.
- Fences can be of almost any material. They serve as much to mark possession of a property as to prevent entry, since nothing short of razor-wire and land mines will keep a determined vandal from getting in. Short picket fences or turkey wire will keep out dogs and honest people.
- Create a shady meeting area in the garden and spend time there.
- Invite everyone in the neighborhood to participate from the very beginning. Persons excluded from the garden are potential vandals.
- Involve the neighborhood children in learning gardens. They can be the garden's best protectors. (see below.)
- Plant raspberries, roses or other thorny plants along the fence as a barrier to fence climbers.

- Make friends with neighbors whose windows overlook the garden. Trade them flowers and vegetables for a protective eye.
- Harvest all ripe fruit and vegetables on a daily basis. Red tomatoes falling from the vines invite trouble.
- Plant potatoes, other root crops or a less popular vegetable such as kohlrabi along the side walk or fence.
- Plant the purple varieties of cauliflower and beans or the white eggplant to confuse a vandal.
- Plant a "vandal's garden" at the entrance. Mark it with a sign: "If you must take food, please take it from here."

Children's Plots

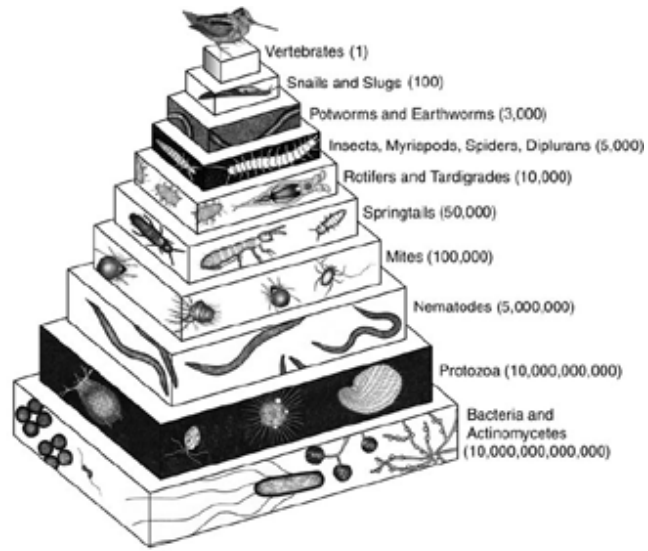
- Children included in the garden process become champions of the cause rather than vandals of the garden. Therefore your garden may want to allocate some plots specifically for children. The "children's garden" can help market your idea to local scout troops, day cares, foster grandparent programs, church groups, etc.



- Consider offering free small plots in the children's garden to children whose parents already have a plot in the garden.

People Problems and Solutions

Angry neighbors and bad gardeners pose problems for a community garden. Usually the two are related. Neighbors complain to municipal governments about messy, unkempt gardens or rowdy behavior; most gardens can ill afford poor relations with neighbors, local politicians or potential sponsors. Therefore, choose bylaws carefully so you have procedures to follow when members fail to keep their plots clean and up to code. A well-organized garden with strong leadership and committed members can overcome almost any obstacle.



Preparing the Soil

An ideal garden soil has a 10- to 12-inch loamy surface layer overlying a well-drained subsoil. This type of soil can retain large amounts of water but still drains well after a rain. After spring preparation, it stays crumbly and workable without becoming hard and crusted. It should have enough minerals for optimum growth, and the pH should be between 6.2 and 6.8.

Few sites available for the home vegetable garden will match the ideal in all respects. However, most soils can be modified to provide more favorable growing conditions. Soil improvement is really a long-term process, often taking several years. The poorer the soil, the longer it will take to get optimum production from it. However, vegetable crops will tolerate variable soil conditions and still produce fairly well.

After a fertile garden is established, continue amending the soil so that it will stay fertile and workable. Since most gardens must be in the same location year after year, building up a rich soil is essential.

The Soil Test

After deciding on your garden site, take a soil sample and have it tested, preferably in October or November. Use the soil test as a guide as you try to establish a satisfactory fertility level. The standard test measures soil acidity (pH), available phosphorus, potassium and, if requested, calcium, magnesium and zinc. The test results help determine fertilizer and lime requirements.

To take a soil sample, push a spade 7 inches into the soil and throw the soil aside. Take another 1-inch slice of soil from the back of the hole the full depth of the hole. Remove all the soil but the center 1- to 2-inch-wide core. Place this core of soil in a clean bucket.

Repeat the procedure in different spots to get a representative sample of the whole garden and to get about 1 pint of soil. Mix the composite sample well and put it on some paper to dry for about two days at room temperature. Then take it to your county Extension office for analysis. The cost of the soil test, which varies with the number of elements tested, will be returned to you many times over in savings of fertilizer and in the production of high

Soil pH—Why Is It Important?

The term pH stands for the relationship of hydrogen ions (H⁺) to hydroxyl ions (OH⁻). A soil pH reading indicates on a logarithmic scale the concentration of ions held to soil particles and organic matter. A pH scale ranges from 0 to 14, with pH 7.0 being neutral. Readings below 7.0 indicate a soil is "acid," and readings above 7.0 indicate "alkaline" soil conditions. Most of the plants we grow in our home gardens require a soil which is slightly acid.

The soil's pH is very important because it directly affects soil nutrient availability (Figure 3). Plant roots can only absorb nutrients after they have been broken down into certain ion forms. Only at certain pH ranges can sufficient amounts of these nutrients be broken into these ion forms. When the soil's pH is out of this range, the nutrients are "tied up in the soil." By adjusting the pH, we make sure that the plants we grow can use the fertilizers and available nutrients in the soil to their fullest potential. Most vegetables in a garden prefer growing in soil with a pH between 6.2 and 6.8.

Autumn is an excellent time to have your soil tested. You can then make any adjustments of pH needed with lime-

Organic Matter

Add organic matter to the soil each spring and fall. You can also add it as mulch during the growing season and as a green manure or cover crop during or after the growing season. Adding organic matter is the most beneficial treatment for improving and maintaining your garden soil. It loosens and improves the drainage and aeration of heavy clay soils while increasing the moisture-holding ability of very light, sandy soils.

Besides helping the soil structurally, organic matter favors a buildup of organisms which in turn helps make available nutrients that were previously held in the soil in unusable forms. The organic matter itself provides nitrogen and other nutrients as it decays.

The type of organic matter you should add will depend on what materials are most available. Some sources are manure, composted leaf mold, grass clippings and pine bark humus. .

Preparing a New Garden Site

As soon as the soil is workable in the spring, turn over the sod of a new garden site by plowing, rototilling or hand spading. Prepare the soil at least 8 inches deep.

Increase this depth each year until you reach 10 to 12 inches. Do not work the soil when it is very wet because you can damage its structure by compacting it. If the soil crumbles readily rather than sticking together, you can proceed safely.

Continue to work the plot until the coarse, lumpy texture is replaced with a fine, granular one suitable for a seedbed. Do not overwork the soil to a powdery fine condition which will cause surface crusting. After you have appropriately tilled the soil, add organic material and fertilizer as recommended.

If you want raised beds, throw the soil from the paths into 3- to 4-foot-wide beds after adding organic matter and the recommended fertilizer. This extra soil plus the added organic matter will raise the beds a few inches higher. If you like, boards or stones can hold the soil in place.

For the last preparation step, rake the soil surface smooth and lay off rows. Now you are ready to plant seeds or set transplants.

Organic Fertilizers

Commercial organic fertilizers are just as effective as conventional fertilizers in supplying necessary plant nutrients though they are often more expensive, harder to find and often act more slowly than commercial fertilizers. The preferred manner for certified organic growers to address plant nutrition is to start with a soil management plan that includes the extensive use of compost, crop rotation and cover cropping (see pages 20-22). Once the nutrient contributions of applied compost and turned in cover crops are calculated, then commercial organic fertilizers, preferably from a local source, could be used to "fill the gap" between what has been provided and what a future crop may need.

VEGETABLE PLANTING GUIDE

Compliments of **FAYETTE SEED**

LAWN AND GARDEN SUPPLIES LEXINGTON, KENTUCKY

(859) 255-3334

Name of Vegetable	Time to Plant	Seed Planting Depth (inches)	Dist. Apart in Rows (inches)	Distance between rows (inches)	Approx. Seeds/Plants for 00 ft. row
Asparagus Crowns	March 15-May 15	6-8	15-18	30	75
Beans, Bush	May 1 -August 10	1 - 1 1/2	2	30	1 lb.
Beans, Lima	May 10-July 16	1 - 1 1/2	3-4	30	1 lb.
Beans, Pole	May 1-July 15	1 - 1 1/2	3-4	30	1/2 lb.
Beets	March 15-August 10	1/4 - 1/2	2-3	18	1 oz.
Broccoli Plants	March-April/Aug-Sept. 10		18	30	70
Bussell Sprout Plants	March-April/Aug-Sept. 10		18	30	70
Cabbage Plants	March-April/Aug-Sept. 10		18	30	70
Cantaloupe	May 1 -July 1	1/2 - 1	24-36	60	1/2 oz.
Carrots	March 15- August 15	1/4 - 1/2	2-3	18	1/2 oz.
Cauliflower Plants	March-April/Aug-Sept. 10		18	30	70
Celery	April-June 15	1/2 - 1	6-8	30	1/4 oz.
Chard, Swiss	March 15-July 15	1/4 - 1/2	6-8	30	1 oz.
Collards	March-April/Aug.	1/4 - 1/2	2-4	24	1/4 oz.
Collard Plants	March-April/Aug-Sept. 10		12	24	100
Corn, Sweet	April 20- August 1	1-2	8-10	30	1/4 lb.
Cucumbers	May 1-June	1/2- 1	24	30	1/2 oz.
Eggplant Plants	May 1-June		24	30	50
Garlic Sets (cloves)	March 15-May	1 1/2	6	12	200 cl
Kale	March-April/Aug-Sept. 10	1/4-1/2	8-10	24	1/4 oz.
Kohlrabi	March-April/Aug-Sept. 10	1/4-1/2	4	18	1/4 oz.
Lettuce, Bibb Plants	March-April/Aug-Sept. 10		12-18	24	70-100
Lettuce, Head Plants	March-April/Aug		12-18	24	70-100
Lettuce, Leaf Seed	March-April/Aug	1/4-1/2	1/2	8-12	1/4 oz.
Mustard	March-April/Aug-Sept. 10	1/4-1/2	3	18	1/4 oz.
Okra	May 1-July 15	1	18	30	2oz.
Onion Plants	March 1-May		6	12	200
Onion Sets	Feb 15-June 15	1	2-3	12	3Qts.
Parsley	March-April/Aug	1/4-1/2	3-6	12	1/4 oz.
Parsnips	March-June	1/2	2-3	18	1/2 oz.
Peas	Feb. 15- April/August	1	2	30	1 lb.
Pepper Plants	May 1 -June		18	30	70
Potatoes, Seed	March 15-July 1	4-6	8-10	30	10lb.
Potato, Sweet Plants	May 1-June 15		12	30	100
Pumpkins	May 1 -July 1	1	96	96	1/2 oz.
Radish	Mar. to May/Aug-Sept. 10	1/4	2-3	12	1 oz.
Rhubarb Crowns	March 15-May 15	4-6	24-30	48	40-50
Rutabaga	March-July	1/2	6-8	18-30	1/2 oz.
Spinach	April/Aug-Sept. 10	1/4 - 1/2	2-3	12	1 oz.
Squash	May-July	1	24-36	48-60	1/2 oz.
Tomato Plants	May 1 -June		24-36	36	40-50
Turnips	Mar.-Apr./Aug.-Sept. 10	1/2	3-4	12	1/2 oz.
Watermelons	May 1-June	1	72-96	96	1 oz.

COMPANION PLANTING

Table 1. COMPANION PLANTING CHART FOR HOME & MARKET GARDENING (compiled from traditional literature on companion planting)

CROP	COMPANIONS	INCOMPATIBLE
Asparagus	Tomato, Parsley, Basil	
Beans	Most Vegetables & Herbs	
Beans, Bush	Irish Potato, Cucumber, Corn, Strawberry, Celery, Summer Savory	Onion
Beans, Pole	Corn, Summer Savory, Radish	Onion, Beets, Kohlrabi, Sunflower
Cabbage Family	Aromatic Herbs, Celery, Beets, Onion Family, Chamomile, Spinach, Chard	Dill, Strawberries, Pole Beans, Tomato
Carrots	English Pea, Lettuce, Rosemary, Onion Family, Sage, Tomato	Dill
Celery	Onion & Cabbage Families, Tomato, Bush Beans, Nasturtium	
Corn	Irish Potato, Beans, English Pea, Pumpkin, Cucumber, Squash	Tomato
Cucumber	Beans, Corn, English Pea, Sunflowers, Radish	Irish Potato, Aromatic Herbs
Eggplant	Beans, Marigold	
Lettuce	Carrot, Radish, Strawberry, Cucumber	
Onion Family	Beets, Carrot, Lettuce, Cabbage Family,	Beans, English Peas

	Summer Savory	
Parsley	Tomato, Asparagus	
Pea, English	Carrots, Radish, Turnip, Cucumber, Corn, Beans	Onion Family, Gladiolus, Irish Potato
Potato, Irish	Beans, Corn, Cabbage Family, Marigolds, Horseradish	Pumpkin, Squash, Tomato, Cucumber, Sunflower
Pumpkins	Corn, Marigold	Irish Potato
Radish	English Pea, Nasturtium, Lettuce, Cucumber	Hyssop
Spinach	Strawberry, Faba Bean	
Squash	Nasturtium, Corn, Marigold	Irish Potato
Tomato	Onion Family, Nasturtium, Marigold, Asparagus, Carrot, Parsley, Cucumber	Irish Potato, Fennel, Cabbage Family
Turnip	English Pea	Irish Potato



Edible Flowers

Common Name	Botanical Name	Comments
<u>Angelica</u>	Angelica archangelica	May be skin allergen to some individuals. Good with fish and the stems are especially popular candied. Tastes like: celery-flavor.
<u>Anise Hyssop</u>	Agastache foeniculum	Tastes like: sweet, anise-like, licorice
<u>Apple</u>	Malus species	Eat in moderation; may contain cyanide precursors. Tastes like: delicate floral flavor
<u>Arugula</u>	Eruca vesicaria	Tastes like: nutty, spicy, peppery flavor
<u>Basil</u>	Ocimum basilicum	Tastes like: different varieties have different milder flavors of the corresponding leaves. Tastes like: lemon, mint..
<u>Bee Balm</u>	Monarda species	Used in place of bergamot to make a tea with a flavor similar to Earl Grey Tea. e.
<u>Borage</u>	Borago officinalis	Taste like: light cucumber flavor..
<u>Burnet</u>	Sanguisorba minor	Tastes like: faint cucumber flavor, very mild..
<u>Calendula*</u>	Calendula officinalis	Tastes like: poor man's saffron, spicy, tangy, peppery, adds a golden hue to foods
<u>Carnation</u>	Dianthus caryophyllus (aka Dianthus)	Tastes like: spicy, peppery, clove-like
<u>Chamomile*</u>	Chamaemelum nobile	Tastes like: faint apple flavor, good as a tea

<u>Chicory*</u>	Cichorium intybus	Buds can be pickled.
<u>Chives: Garden</u>	Allium schoenoprasum	Tastes like: mild onion flavor..
<u>Chives: Garlic</u>	Allium tuberosum	Tastes like: garlicky flavor
<u>Chrysanthemum: Garland*</u>	Chrysanthemum coronarium	Tastes like: slight to bitter flavor, pungent
<u>Citrus: Lemon</u>	Citrus limon	Tastes like: waxy, pronounced flavor, use sparingly as an edible garnish, good for making citrus waters
<u>Clover</u>	Trifolium species	Raw flowerheads can be difficult to digest.
<u>Coriander</u>	Coriander sativum	Pungent. A prime ingredient in salsa and many Latino and Oriental dishes. Tastes like: Some palates detect a disagreeable soapy flavor while others adore it..
<u>Cornflower*</u>	Centaurea cynaus (aka Bachelor's Buttons)	Tastes like: sweet to spicy, clove-like
<u>Dandelion*</u>	Taraxacum officinalis	Tastes like: very young buds fried in butter taste similar to mushrooms. Makes a potent wine.
<u>Day Lily</u>	Hemerocallis species	Many Lilies (Lillium species) contain alkaloids and are NOT edible. Daylillies may act as a laxative. Tastes like: sweet, crunchy, like a crisp lettuce leaf, faintly like chestnuts or beans
<u>Dill</u>	Anthum graveolens	.
<u>English Daisy*</u>	Bellis perennis	Tastes like: tangy, leafy
<u>Fennel</u>	Foeniculum vulgare	Tastes like: sweet, licorice flavor. e .
<u>Fuchsia</u>	Fuchsia X hybrida	Tastes like: slightly acidic
<u>Gardenia</u>	Gardenia jasminoides	Tastes like: light, sweet flavor
<u>Gladiolus*</u>	Gladiolus spp	Tastes like: similar to lettuce
<u>Hibiscus</u>	Hibiscus rosa-sinensis	Tastes like: slightly acidic, boiled makes a nice beverage
<u>Hollyhock</u>	Alcea rosea	Tastes like: very bland, nondescript flavor
<u>Honeysuckle: Japanese</u>	Lonicera japonica	Berries are highly poisonous. Do not eat them!
<u>Hyssop</u>	Hyssopus officinalis	Should be avoided by pregnant women and by those with hypertension and epilepsy.
<u>Impatiens</u>	Impatiens wallerana	Tastes like: very bland, nondescript flavor
<u>Jasmine: Arabian</u>	Jasminum sambac	Tastes like: delicate sweet flavor, used for teas.
<u>Johnny-Jump-Up</u>	Viola tricolor	Contains saponins and may be toxic in large amounts. Tastes like: sweet to bland flavor
<u>Lavender</u>	Lavendula species	Lavender oil may be poisonous.. Tastes like: floral, slightly perfumey flavor
<u>Lemon Verbena</u>	Aloysia triphylla	Tastes like: lemony flavor, usually steeped for tea

<u>Lilac</u>	<i>Syringa vulgaris</i>	Tastes like: lemony, floral, pungent
<u>Mallow: Common</u>	<i>Malva sylvestris</i>	Tastes like: sweet, delicate flavor
<u>Marigold: Signet</u>	<i>Tagetes tenuifolia</i> (aka <i>T. signata</i>)	Tastes like: spicy to bitter
<u>Marjoram</u>	<i>Origanum majorana</i>	.
<u>Mint</u>	<i>Mentha</i> species	.
<u>Mustard</u>	<i>Brassica</i> species	Eating in large amounts may cause red skin blotches..
<u>Nasturium</u>	<i>Tropaeolum majus</i>	Buds are often pickled and used like capers. Tastes like: sweet, mildly pungent, peppery flavor
<u>Okra</u>	<i>Abelmoschus aesculentus</i> (<i>Hibiscus esculentus</i>)	Tastes like: similar to squash blossoms
<u>Pansy</u>	<i>Viola X wittrockiana</i>	Tastes like: very mild sweet to tart flavor
<u>Pea</u>	<i>Pisum</i> species	Flowering ornamental sweet peas are poisonous.
<u>Pineapple Guava</u>	<i>Feijoa sellowiana</i>	Tastes like: similar to the ripe fruit of the plant, flavorful
<u>Primrose</u>	<i>Primula vulgaris</i>	Birdseye Primrose (<i>P. farinosa</i>) causes contact dermatitis. Tastes like: bland to sweet flavor
<u>Radish</u>	<i>Raphanus sativus</i>	Tastes like: milder, sweeter version of the more familiar radish heat
<u>Redbud</u>	Cercis canadensis	Tastes like: mildly sweet
Rose	Rosa rugosa or R. gallica officinalis	Tastes like: sweet, aromatic flavor, stronger fragrance produces a stronger flavor. Be sure to remove the bitter white portion of the petals. Rose hips are also edible (see Rose Hips Recipes).
<u>Rosemary</u>	<i>Rosmarinus officinalis</i>	Tastes like: pine-like, sweet, savory. Me
<u>Runner Bean</u>	<i>Phaseolus coccineus</i>	Tastes like: nectar, bean-like
<u>Safflower*</u>	<i>Carthamus tinctorius</i>	Another "poor man's saffron" without the pungent aroma or strong flavor of the real thing
<u>Sage</u>	<i>Salvia officinalis</i>	Sage should not be eaten in large amounts over a long period of time. Tastes like: varies by type..
<u>Savory: Summer</u>	<i>Satureja hortensis</i>	.
<u>Scented Geranium</u>	<i>Pelargonium</i> species	Citronella variety may not be edible. Tastes like: varies with differing varieties from lemon to mint..
<u>Snapdragon</u>	<i>Antirrhinum majus</i>	Tastes like: bland to bitter flavor
<u>Society Garlic</u>	<i>Tulbaghia violacea</i>	Tastes like: a very mild garlic flavor
<u>Squash Blossom</u>	<i>Cucurbita pepo</i> species (aka Zucchini Blossom)	Tastes like: sweet, nectar flavor..
<u>Sunflower*</u>	<i>Helianthus annuus</i>	Tastes like: leafy, slightly bitter. Lightly steam petals to lessen

		bitterness. Unopened flower buds can be steamed like artichokes.
<u>Thyme</u>	Thymus vulgaris	Tastes like: lemon, adds a nice light scent..
<u>Tuberous Begonia</u>	Begonia X tuberosa	ONLY HYBRIDS are edible. The flowers and stems contain oxalic acid and should not be consumed by individuals suffering from gout, kidneystones, or rheumatism. Further, the flower should be eaten in strict moderation. Tastes like: crisp, sour, lemony
<u>Violet</u>	Viola species	Tastes like: sweet, nectar
<u>Yucca</u>	Yucca species	Only the petals are edible. Other parts contain saponin, which is poisonous. Large amounts may be harmful. Tastes like: crunchy, fresh flavor
Flowers to Avoid	Some flowers in <i>particular</i> to be avoided (but not a complete list) are: azalea, crocus, daffodil, foxglove, oleander, rhododendron, jack-in-the-pulpit, lily of the valley, and wisteria.	
*Only the petals of these composite flowers are edible. The pollen of composite flowers is highly allergenic and may cause reactions in sensitive individuals. .		

Container Gardening





Composting Guidelines

Compost Materials

Almost any organic material is suitable for a Compost pile. The pile needs a proper ratio of carbon-rich materials, or "browns," and nitrogen-rich materials, or "greens." Among the brown materials are dried leaves, straw, and wood chips. Nitrogen materials are fresh or green, such as grass clippings and kitchen scraps.

Mixing certain types of materials or changing the proportions can make a difference in the rate of decomposition. Achieving the best mix is more an art gained through experience than an exact science. The ideal ratio approaches 25 parts browns to 1 part greens. Judge the amounts roughly equal by weight. Too much carbon will cause the pile to break down too slowly, while too much nitrogen can cause odor. The carbon provides energy for the microbes, and the nitrogen provides protein.

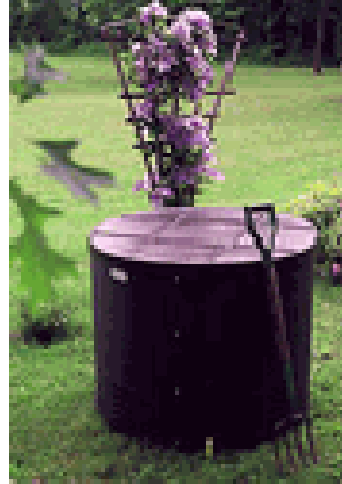
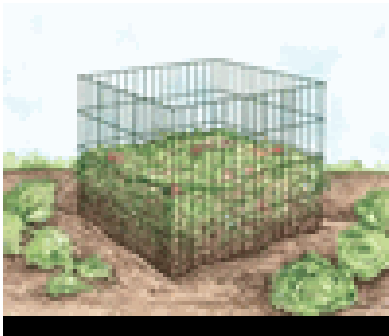


Leaves represent a large percentage of total yard waste. If you can grind them in a gas or electric leaf shredder or mow over them, they will reduce in size making them easier to store until you can use them in the pile, and they will decompose faster - an issue with larger leaves. They are loaded with minerals brought up from the tree roots and are a natural source of carbon. A few leaf species such as live oak, southern magnolia, and holly trees are too tough and leathery for easy composting. Avoid all parts of the black walnut tree as they contain a plant poison that survives composting. Eucalyptus leaves can be toxic to other plants. And avoid using poison oak, poison ivy, and sumac.

Pine Needles need to be chopped or shredded, as they decompose slowly. They are covered with a thick, waxy coating. In very large quantities, they can acidify your compost, which would be a good thing if you have alkaline soils.

Grass Clippings break down quickly and contain as much nitrogen as manure. Since fresh grass clippings will clump together, become anerobic, and start to smell, mix them with plenty of brown material. If you have a lot of grass clippings to compost, spread them on the driveway or other surface to bake in the sun for at least a day. Once it begins to turn pale or straw-like, it can be used without danger of souring. Avoid grass clippings that contain pesticide or herbicide residue, unless a steady rain has washed the residue from the grass blades.

The Compost Bin



What is Composting?

Composting is nature's way of recycling leaves, grass clippings, vegetable trimmings and other organic materials and converting them into a valuable soil enricher. The composting process conserves natural resources and reduces solid waste by recycling valuable nutrients that otherwise would be wasted.

Why Using Composting is Great:

Using compost yields faster-growing, sturdy, disease resistant plants. Incorporating compost into the soil improves aeration and drainage and makes the soil loose and easy to work. Compost also provides a balanced slow release source of nutrients. Adding compost encourages beneficial organisms to stay in the soil, which in turn suppresses disease organisms.

How to Compost:

The composting process requires four ingredients: organic matter, bacteria, water and oxygen.

Organic Matter inside the bin.

2 PARTS BROWN

BROWN – CARBON (dry) materials include:

Fall leaves, dry grass and plant material, sawdust (NO CHEMICALLY TREATED WOOD),

wood ash (NO CHARCOAL), straw & hay, newspaper (SHREDDED NO SHINY COLORED

PAPER), rice or cocoa hulls, finished compost - dirt.

TO.....

1 PART GREEN - Nitrogen (wet) materials include:

fresh grass clippings, vegetable scraps,(MUST BE BURIED 6 inches or more) coffee grounds / tea leaves, egg shells, sod, cottonseed, soybean meal.

Bacteria

Bacteria and fungi are largely responsible for the composting process. Since beneficial

bacteria, fungi and many other decomposers always live in soil and vegetable matter,

their presence is assured.



Water

Water is essential to composting, the pile should be about as wet as a squeezed sponge. If it is too soggy and waterlogged, the bacteria and other beneficial organisms will not get enough air. Lack of moisture will delay the process.

Oxygen

Oxygen is vital because composting is essentially and aerobic (in the presence of air)

process.

Bacteria require oxygen to live and multiply. If air is not sufficient anaerobic bacteria will

take over and unpleasant odors and poor quality compost will result. **TURNING and**

MIXING gets oxygen into the pile. **THE MORE A PILE IS TURNED THE FASTER IT WILL HEAT UP AND BREAK DOWN.**

TROUBLESHOOTING

CONCERN	POSSIBLE CAUSES	SOLUTION
ROTTEN ODOR	Too much water	TURN PILE, Add leaves, sawdust, straw
	Compaction	TURN PILE
AMMONIA ODOR leaves	Too much green	Add BROWN materials: etc.
LOW PILE TEMPERATURE larger (under 100 F)	Pile too small	Make pile
	Insufficient moisture	Add water
	Poor aeration Lack of greens	TURN PILE Add greens: weeds, grass, etc
TOO HIGH TEMPERATURE (above 140 F)	Pile too large	Make pile smaller
	Not enough ventilation	TURN PILE

Vermi-, Worm Composting

Vermicomposting is a system for turning food waste into potting soil with the help of worms.

What do I need?

- An aerated container
- Bedding such as shredded newspaper
- Moisture and proper temperature
- Small amount of soil
- Redworms (*Eisenia fetida*)

What do I do?

Bury your organic kitchen waste in the worm bin. Bacteria and other organisms break it down and worms eat the food waste, bedding, and bacteria. They turn it all into humus--nutrient-rich food for growing healthy plants

Doesn't it smell?

Odor is minimal if you don't overload the system. Worms in a 16"x19"x12" bin can process 2-3 pounds of garbage a week. Capacity of a 20" x 24" x 12" bin is up to 5 pounds of garbage a week.

How long before I have worm castings to feed my plants?

Plan on about six months from the time you set up your bin. You will bury garbage every week. As the worms process the garbage and bedding, the contents of the bin will turn dark brown. You can then harvest the vermicompost (compost produced through the action of worms) in a variety of ways to use on your plants and in your garden.

Do I have to keep buying new worms?

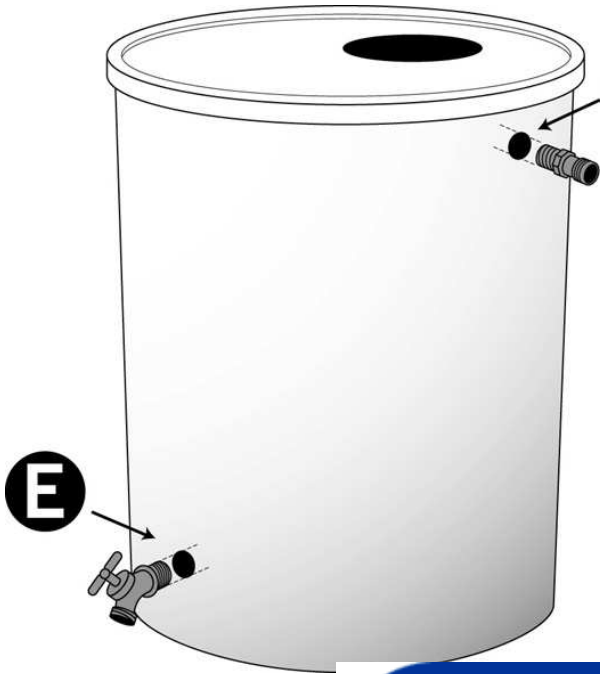
If you treat them right they will reproduce. You will find cocoons in your bin from which baby worms will hatch. After several months, you may have twice as many worms. You can use them to go fishing, or help a neighbor set up a bin, or just leave them in your bin. Overpopulation will not be a problem.

Do people really DO this?

Worm composting is becoming more and more popular. It is the only way to recycle on-site, in your own home. You place food waste in your worm bin. The worms turn it into plant food. You



use the plant food to grow vegetables in your garden, or attractive flowers to delight your senses. If you compost your garbage with worms, you help the environment.



D Rain barrel

- ❖ Collect and store rain water runoff from your roof for later use
- ❖ Cuts down on water bill
- ❖ Reduce overflow into streams
- ❖ **Lowers city tax**

<http://www.kentuckypride.com/>



Rain Gardens

Rain gardens:

- ❖ help replenish groundwater.. recharge aquifers
- ❖ control runoff and trap pollutants that keep lakes and streams clean.
- ❖ Reduces city tax
- ❖ Beautifies the landscape, restores native plants
- ❖ Provides natural habitat



<http://www.bluegrassraingardenalliance.org/>

RESOURCES

Seeds and bedding plants

Fayette Seed, Good Foods Co-op, Farmer's Market, Eastside Vocational Center. Liberty Rd

Lowe's, Home Depot

Seeds of Change .PO Box 15700, Sante Fe, NM, .www.seedsofchange.com seed donation program gives organic seeds to organizations promoting learning and sustainable living through school, community garden projects.

Heirloom Tomatoes. Roger Postley at Lexington Farmers Market

East Side Vocational-Tech Horticulture Department

Heirloom seeds. The Rock/La Roca United Methodist Church

Horticultural information:

Fayette County Cooperative Extension Service

Fayette County Office
1140 Red Mile Place
Lexington, KY 40504-1172
Phone: (859) 257-5582
Fax: (859) 254-3697
Email:
DL_CES_FAYETTE@EMAIL.UKY.EDU

<http://ces2.ca.uky.edu/ces/>

Master Gardeners



Arboretum Demonstration and future Children's Garden

Designed by nationally renowned and award-winning landscape architect Herb Schaal with EDAW design company of Ft. Collins, Colo., the Kentucky Children's Garden will be a 1.85-acre outdoor learning environment where children ages 2 through 10 can discover plants and the environment. The location will also reserve an area for children to plant and maintain.

Local LFUCG support and Funding Opportunities

Neighborhood and Community Sustainability Grant

<http://www.lexingtonky.gov/index.aspx?page=1573>

To help create a sustainable community, we are pleased to announce that Neighborhood and Community Sustainability Grants are being made available for community projects which improve the environment. These grants will be awarded to support innovative programs that will result in a safer, cleaner, and healthier environment. Applications must be received by **3 p.m. March 31, 2009**.

Land Use from Parks & Recreation



Edible Gardens exist now in Hill N Dale Park and Flower garden at Woodland and Duncan Parks. Edible gardens at Castlewood and Coolavin Parks are being planned for 2009.

For mor information call: (859) 288-2960

Urban County Council funds: CDBG Funds, etc

Urban County Council members have been supportive of gardens in their district. They have provided funding, logistical support and have expedited communication within the government department.

Contact your council member and include them in your planning

Solid Waste Management provides free mulch



Grants and gardening support

American Community Gardening Association

1777 East Broad Street
Columbus OH 43203

<http://communitygarden.org>

1-877-275-2242 **Email**
info@communitygarden.org

Mission The Mission of the American Community Gardening Association is to build community by increasing and enhancing community gardening and greening across the United States and Canada. ACGA offers an annual conference held Aug 6-9 2009 in Columbus, OH



National Gardening Association



Youth Garden Grants Program

1100 Dorset St.

So. Burlington, VT 05403

Landscapes for Learning, Youth Garden Grants, and Kids Growing with Dutch Bulbs

300 youth gardens nation wide will each be awarded tools, seeds and garden products valued at \$750. Applicants must plan to garden with at least 15 children between the ages of three and 18 years. Both food gardens and beautification projects are eligible. Evaluation criteria include: leadership, educational and environmental programming, innovation, sustainability, need and community support.

www.garden.org, www.kidsgardening.com

Fiskars Project Orange Thumb

Garden Tools and Accessories

780 Carolina St

Sauk City, WI 53583 (800) 500-4849 www.fiskars.com

Garden groups can apply to receive up to \$1,500 in garden tools and \$800 in supplies.

Captain Planet

133 Luckie St, Atlanta, GA, 404-522-4215

www.captainplanetfdn.org

Links and Resources

Community Gardening

- [The American Community Gardening Association](#) is a clearinghouse for information and resource exchange for anyone affiliated with community gardeners and gardening.
- [Urban Agriculture Notes](#) features information and links to urban agriculture and community gardening projects around the world.

Gardening Programs

- [The American Association of Botanical Gardens and Arboreta](#) is the association for North American public gardens and their professional staff.
- [American Horticultural Society](#) provides sources of information on gardening and horticulture.
- [The National Gardening Association](#) is a nonprofit organization established to help gardeners, and to help people through gardening.
- [The Rodale Institute](#) works with people worldwide to achieve a regenerative food system that renews environmental and human health.

Youth Programs

- [Agriculture in the Classroom](#) is a program coordinated by the United States Department of Agriculture. Its goal is to help students gain a greater awareness of the role of agriculture in the economy and society.
- [Discovering the Food System](#) is a guided experiential learning program designed primarily for youth ages 12 to 18, and meant for anyone who is curious about food, and how it gets from farm to table.
- [The Junior Master Gardener Program](#) is a 4-H gardening project featuring curriculum for grades 3-8.
- [Kidsgardening.com](#) is a subsidiary of the National Gardening Association and offers a range of information and curriculum materials for anyone involved in youth gardening. The website is particularly suited for teachers and those involved in school gardens.
- [Kidsregen.org](#) is part of The Rodale Institute's Youth Educational Program. Its goal is empowering children to make healthy choices for the environment, and for themselves. Contains "Families" and "Educators" areas, including news, lesson plans, and downloadable activities.
- [Kids Growing Food](#) gets kids growing food at school. By digging into all aspects of food gardening, students learn directly about edible plants.
- [National 4-H Council](#) provides grants, establishes programs, designs and publishes curriculum and reference materials, and creates linkages fostering innovation and shared learning.

T

ADVOCACY ORGANIZATIONS:

This is a list of nonprofit organizations that support small family farms, initiate 'buy local' campaigns, extol the virtues of fresh, seasonal, locally-grown produce, and promote sustainable agriculture and related topics.

Center for Ecoliteracy

www.ecoliteracy.org

The Center for Ecoliteracy is dedicated to education for sustainable living by fostering a profound understanding of the natural world, grounded in direct experience.

Community Alliance with Family Farmers (CAFF)

www.caff.org

The Community Alliance with Family Farmers is building a movement of rural and urban people to foster family-scale agriculture that cares for the land, sustains local economies and promotes social justice.

Community Food Security Coalition

www.foodsecurity.org

The Community Food Security Coalition (CFSC) is a non-profit 501(c)(3), North American organization dedicated to building strong, sustainable, local and regional food systems that ensure access to affordable, nutritious, and culturally appropriate food for all people at all times.

Food Routes

www.foodroutes.org

The FoodRoutes Web site is a project of FoodRoutes Network (FRN). FRN is a national nonprofit organization that provides communications tools, technical support, networking and information resources to organizations nationwide that are working to rebuild local, community-based food systems. FRN is dedicated to reintroducing Americans to their food - the seeds it grows from, the farmers who produce it, and the routes that carry it from the fields to their tables.

National Farm to School Network

www.farmentoschool.org

The National Farm to School Network is a collaborative project with the goal of strengthening and expanding activities in states with existing programs and assisting others that do not yet have programs.

Organic Farming Research Foundation

www.ofrf.org

The Organic Farming Research Foundation is a non-profit whose mission is to sponsor research related to organic farming practices, to disseminate research results to organic farmers and to growers interested in adopting organic production systems, and to educate the public and decision-makers about organic farming issues.

Slow Food International

www.slowfood.com

Founded by Carlo Petrini in Italy in 1986, Slow Food is an international association that promotes food and wine culture, but also defends food and agricultural biodiversity worldwide.

Slow Food USA

www.slowfoodusa.org

Slow Food U.S.A. is a non-profit educational organization dedicated to supporting and celebrating the food traditions of North America.

The Food Project

www.thefoodproject.org

The Food Project is a launching pad for new ideas about youth and adults partnering to create social change through sustainable agriculture.

Worldwatch Institute

www.worldwatch.org

Founded by Lester Brown in 1974, the Worldwatch Institute offers a unique blend of interdisciplinary research, global focus, and accessible writing that has made it a leading source of information on the interactions among key environmental, social, and economic trends. Our work revolves around the transition to an environmentally sustainable and socially just society-and how to achieve it.