

The Kentucky Extension Master Gardener Program

An Introduction

Edited by Sharon Bale, Extension Floriculture Specialist, and Richard Durham, Consumer Horticulture Specialist and State Master Gardener Coordinator.

Contents:	
The Start of Extension.....	2
How does the system work?.....	3
Idea Sources for Programs	4
Current Conditions	6
What can you do for the Cooperative Extension Service?	6
The Extension Master Gardener Program	7
Expectations for Extension Master Gardener Volunteers.....	10

In the mid-19th century, there was a political movement calling for the creation of agriculture colleges. The movement was led by Jonathan Turner, a professor at Illinois College.

In 1853, the Illinois Legislature adopted a resolution calling for the Illinois congressional delegation to work toward enacting a bill that would create the land-grant system. They thought a congressman from the eastern part of the country would have better luck getting this type of legislation through Congress, so Rep. Justin Smith Morrill of Vermont was recruited to introduce the bill.

Unlike the original proposal, the Morrill bill allocated land based on the number of senators and representatives each state had in Congress. Under the act each eligible state would receive 30,000 acres of federal land—either within or contiguous to its boundaries—for each member of Congress the state had according to the census of 1860. The land was to provide a financial base for the funding of these schools.

The original bill passed in 1859, but was vetoed by President James Buchanan. In 1861, the bill was resubmitted with an amendment that included military tactics as well as engineering and agriculture. Many of the Southern states did not support this type of legislation, but because they began to secede from the United States, the bill was passed and signed into law by President Abraham Lincoln in July of 1862. The Southern states that seceded were not given access to the federal land.

The purpose of the land-grant colleges was, “without excluding other scientific and classical studies and including military tactic, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and profession in life.”

After the Civil War, this land-grant opportunity was extended to the former Confederate states and to states created after 1862. If a state did not have enough federal land to meet the requirement for funding, the state was issued “script,” which meant that the state could select federal lands in other states to create funding for these schools.

The Morrill Act of 1862 authorized “separate but equal” facilities for African-Americans. Mississippi and Kentucky were the only two states to provide this type of education. The proposed second Morrill Act was aimed at the former Confederate states. It required each state to show proof that race was not a requirement

for admission or to create a separate land-grant institution that would admit African-Americans. This bill was passed in 1890. Although cash was granted for these institutions instead of land, they have the same legal standing as the 1862 land-grant schools. Sixteen African-American land-grant colleges were established throughout the South and are known as 1890 land-grant institutions. In Kentucky, the University of Kentucky is the 1862 land-grant school and Kentucky State University is the 1890 land-grant school.

Congress soon realized that to be effective, the educational function of land-grant universities must be supplemented with research capability. Consequently, it passed the Hatch Act in 1887. This act provided for the establishment of facilities where colleges could conduct research into agricultural, mechanical, and related problems faced by rural citizenry. Congress also saw a need to disseminate the knowledge gained at the land-grant colleges to the general public, farmers and homemakers being the initial focus.

The Start of Extension

Extension had its beginnings in the movement to improve agricultural production. Seaman Knapp's successful use of the demonstration method on Louisiana farms in the fight against the cotton boll weevil

served as the model for legislation. The Cooperative Extension Service was created by the federal government in 1914 by the passage of the Smith-Lever Act. Section 2 of that Act, which was in effect as of June 23, 1972 (U.S.C. 341 et seq.), says:

“Cooperative Agricultural Extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics and subjects relating thereto to persons not attending or resident in said colleges in the several communities, and imparting information on said subjects through demonstrations, publications, and otherwise and for the necessary printing and distribution of information in connection with the foregoing, and this work shall be carried on in such manner as may be mutually agreed upon by the Secretary of Agriculture and the State agricultural college or colleges or Territory or possession receiving the benefits of this Act.”

The 1940s and 1950s began a period of rapid technological advancement in American agriculture. Farmers improved their competitive position primarily through the adoption of improved management practices, the expansion of their resource base, and increased efficiency. This led to production surpluses and a heavy reliance upon agricultural production in international trade and development assistance. With an abundance of reasonably priced food supply pretty much assured, national attention, and to some extent the

concern of Extension, in the 1960s shifted to the problems of urban, low-income, and minority residents.

At the same time, there was a substantial reduction in the size of the farm and rural population. In 1910, approximately 35 percent of the U.S. population were classified as farmers; and, until 1940, almost one-quarter of the population were farmers. Since that time, the farm population has declined to less than three percent of the population. A similar decline occurred in the rural portion of the population. At the

turn of the century, more than 50 percent of the nation's population lived in a location defined as rural. In 1980, fewer than 30 percent did. As these rural and farm residents relocated in metropolitan centers, they carried with them an awareness of what Extension did for them in rural areas, setting the stage for an urban clientele.

The Cooperative Extension Service takes information generated by research scientists and presents it to the public in layman's terms. This concept is called technology transfer and it is what Cooperative Extension is all about—providing up to date, unbiased, scientifically based information to the public in a manner they can understand.

How does the system work?

The Cooperative Extension Service is a partnership between the United States Department of Agriculture (USDA), State Cooperative Extension Services, land-grant universities, 1890 institutions and county government. Funding for Cooperative Extension Service is provided by federal, state, and local governments. Policy considerations, program development and program emphasis is developed through cooperative efforts. In fact, the Extension Service is very much a grass-roots organization, often focused on local issues.

The components of Cooperative Extension include:

Federal

- United States Department of Agriculture
- Secretary of Agriculture
- Supports research through research grants
- Cooperates in setting policy and focusing issues

State

Land-Grant Institutions

University of Kentucky—University supervises the extension program throughout the state.

- Scott Smith, Dean, College of Agriculture and Director of Land Grant Programs
- Jimmy Henning, Associate Dean and Director for Extension

1890 Institutions

Kentucky State University—Extension efforts are focused on the urban environment and small farms.

- Dr. Tefero Tsegaye, Dean, College of Agriculture, Food Science, and Sustainable Systems and Director of Land Grant Programs
- Assistant Director of Cooperative Extension Service for 1890 Programs

State Extension Specialists

Extension specialists exist from most academic disciplines, including agricultural economics, communications, biosystems and agricultural engineering, plant and soil sciences, animal and food sciences, entomology, forestry, 4-H youth development, human environmental sciences, horticulture, plant pathology, community and leadership development, and rural and economic development. Within the Department of Horticulture, there are state specialists for youth programming, consumer horticulture, woody plants, fruits, greenhouse crops, vegetables, annuals, and perennial flowers. Specialists take research information and provide it to county agents, growers, consumers, youth, policy makers, and other clients.

Local

County Agents

The county staff (usually agriculture and natural resources, family and consumer sciences, 4-H/Youth development agents, and in some cases, horticulture agents with support staff) develop their own programs and, when necessary, rely on state specialists to

provide them with specific content information for their educational programming needs. A local Extension council is formed for each county. These councils are made up of local citizens who determine program priorities. They then support the county staff in their efforts to deliver relevant, high quality programs to people of the county.

Volunteers

For strategic planning to be successful and for there to be a unified approach to societal concerns or issues, volunteers serving on planning/advisory councils help to focus programming on the needs of traditional and new clients and concentrate resources in a few areas of major concern. When there is adequate volunteer commitment and support, large numbers of impactful programs can be supported by a small team of Extension agents. This is where volunteers such as Extension Master Gardeners can serve a critical role in extending Extension programming to a wider audience.

Program Planning

The Secretary of Agriculture has delegated responsibility for program planning to the Extension staff within the Department of Agriculture. General boundaries of programs that were expected over the past twenty years have been periodically defined by “scope” reports developed by a committee established by the USDA Extension administrator and directors of Extension. Such reports usually are published every ten years or so. They provide historical evidence of how policy changes relate to what is appropriate for federal funding under the Smith-Lever Act.

The law also requires that “before the funds herein provided shall become available to any college for any fiscal year, plans for the work to be carried on under this Act shall be submitted by the proper officials of each college and approved by the Secretary of Agriculture.”

Each state must provide one statewide plan with various specific research and program directives, and those plans must be agreed to by the USDA Extension Service before a state can receive federal funding.

Idea Sources for Programs

Three main sources of Extension programs have emerged.

Research/academic disciplines—The campus department and the USDA research branch were historically a main source of what would be emphasized in the Extension programs. Early specialists were guided by what departments viewed as important information for farm families. In the 1930s and 1940s, for example, there was considerable concentration across the United States in introducing farmers to hybrid seed corn and in improved seed/cuttings for other crops that were developed through Experiment Station Research.

The first state plans of work were primarily developed within departments based upon the best judgment of the research, resident, and instruction faculty as to what areas should be emphasized.

Researchers and administrators at land-grant universities and the USDA have continued to view disseminating research findings and encourage their use as a main role of the Extension system.

Grass-roots planning—However, as the Extension service moved to county locations, leaders became much more aware of the vast differences among counties across the country and even within a given state. The people in some counties were much farther ahead in relation to knowing and following recommended practices. Some were much farther behind. Before the advent of television, communities and counties were fairly isolated. As the academic field of adult education developed in the 1940s and 1950s, one of the cardinal principles was that education was much more likely to be successful if programs were based upon needs.

In many states, during the 1950s and 1960s emphasis was placed on each county Extension Service developing an individual county plan—in consultation with local people—based on identifying the greatest needs.

State plans of work often were a composite of individual county plans. Campus departments assisted counties by providing information to Extension agents and leaders about areas where they saw developing needs. USDA held annual Outlook Conferences that briefed state staff on emerging problems and economic changes. But the county plan was sacrosanct in many states. Each county in consultation with local people established what Extension agents in that county would focus upon for the next year.

Community development became an important fourth program area with Extension Services in Kentucky and several other states, adding county positions or encouraging other agents to increase programming in such areas.

Because needs among clientele differ, Extension programs at the local level have become more diverse. In Kentucky, projects available to 4-H members went from about 20 projects which focused on farming and homemaking to more than 250 that included any area which would help a young person learn and develop life skills.

With the help of media and volunteers, county Extension agents and state Extension specialists stretched their resources to cover a multitude of subjects each year. Although several states encouraged agents to focus on at least one intensive project that concentrated resources on a specific area for several months, most agents preferred to take the cumulative route. They found themselves acting as generalists, responding to a host of local questions and needs. They preferred to cover all areas a little bit each year with the expectation that over a five- or six-year period substantial practice changes would occur in all areas.

Societal Needs—Societal needs have always been present as one source of programming but have not always been recognized as a dominant influence. Research often has been stimulated by major social problems—scarcity of food, need to conserve soil, etc. Grass-roots planning often yielded programs that not only met individual needs of clients but were directed toward common needs that were held by a larger group. Many counties were fortunate enough to have wise leaders who could influence others on planning committees to see beyond their own immediate needs and to encourage programs like land use planning and zoning.

Thus, over the years, Extension programs carried on in any county or state have been influenced to different degrees by research, individual client needs, and the needs of society.

Current Conditions

Two major factors affect the nature of Extension programs and the way those programs are decided.

- Rural families not only make up a smaller percentage of the U.S. population, but because a greater share of the nation's food supply comes from other countries, the broader population is no longer dependent upon the American farmer. Rather than dominating American society as was the case when Extension started in 1914, farmers and rural communities have become a small minority struggling to maintain programs established by Congress and state legislatures.
- The pool of tax dollars has diminished at national, state, and local levels; and competition for those dollars is vastly increased.

There is continuing pressure on Extension to:

- Show that its programs are important to American society as a whole and benefit people beyond its direct clientele
- Show substantial impact from money invested
- Show substantial efforts on major problem areas nationwide

For example, water purity is of keen importance to all Americans. Our health and safety from major illness and disease depend upon the quality of water. The agricultural industry (farming, processing, and packaging) is one source of pollutants. Because of Extension's direct focus on farming, the Cooperative Extension Service puts considerable emphasis on those practices that increase the purity of water. Extension administrators are encouraging counties and states to concentrate some of their programming resources on water quality and other areas that are of major concern to society in general.

Cooperative Extension is constantly challenged to be a dynamic educational organization. This challenge forces Extension to be contemporary, progressive and visionary.

What can you do for the Cooperative Extension Service?

Volunteer workers are one of the most important and unique aspects of the Cooperative Extension Service. This is in keeping with Extension's philosophy that active citizen participation in planning and implementation insures program success. As an Extension Master Gardener, you will join this family of volunteers.

The Extension Master Gardener Program

The Extension Master Gardener Program was created to meet an increase in requests from home gardeners for horticultural information. This increase derives primarily from the urban and transient nature of modern American life. Fifty years ago, an Extension agent dealt with the questions of a few hundred farm families. In many regions, however, land that once constituted a single farm now encompasses several subdivisions, increasing the number of families an Extension office must serve. In addition, many of these families are unfamiliar with the grasses, shrubs, trees, and diseases that comprise the microenvironment of their new home. They often will call their local Extension office for advice on what to plant and how to care for it.

Consequently, the Extension Master Gardener Program was created in 1973 in the state of Washington. Since then it has spread nationwide. Master Gardeners have become a vital part of Extension's ability to provide consumers with up-to-date, reliable knowledge so they can enjoy and protect the plantings around their homes. Master Gardening also has become a fun and useful volunteer activity that has given its participants a sense of community spirit, accomplishment, and intellectual stimulation.

Today, nearly 100,000 Extension Master Gardener volunteers are active in all 50 states and the District of Columbia. These programs seek to engage diverse audiences both as volunteers and through outreach efforts. Local agents, advisory councils and volunteer leaders are committed to offering programs that serve all people regardless of race, color, age, sex, religion, disability, or national origin.

Your Responsibility as an Extension Master Gardener

When you enter the Extension Master Gardener Program, you are entering into a contract. In essence, you agree that in return for the training you receive, you will volunteer a predetermined number

of hours back to Extension. Failure to complete this obligation means you are not entitled to wear a Master Gardener badge, nor participate in Master Gardener activities.

Upon completion of your training, you have one year to complete the agreed-upon volunteer service commitment, also called payback time. This time requirement varies from one Extension unit to another.

After you complete your payback time, you may choose to continue with the Extension Master Gardener Program. Numerous people have worked as Master Gardeners for years and contributed substantial amounts of time to Extension. To be considered an active Master Gardener, however, you must agree to volunteer a minimum number of hours annually. This requirement varies from unit to unit, so ask your Extension agent about the requirements in your local program. If you choose not to continue in the program, you may not thereafter represent yourself as a Master Gardener.

Time Sheets—Time sheets are one method that can be used to keep track of the hours of time you volunteer as a Master Gardener. Turn these in on a regular basis, preferably every month. Some agents may appoint a Master Gardener to keep track of this information. Some agents have developed online methods of reporting volunteer hours. Whatever the method of reporting your time, don't be lax; the reported hours are used in county progress reports, and you deserve recognition for your efforts.

Use of the title "Extension Master Gardener"—The title "Extension Master Gardener" should be used only by individuals trained in a Cooperative Extension Service program. The title is valid only when used by an active Extension Master Gardener who is participating in a program approved by an Extension agent. When an individual ceases to be active in the Extension Master Gardener program, their designation as an Extension Master Gardener ceases.

Extension Master Gardeners should not display credentials or give the appearance of being an Extension Master Gardener at a place of business unless that place

has been designated as an Extension Master Gardener Plant Clinic by the local Extension unit. The title “Extension Master Gardener” should not be used in a manner which implies Cooperative Extension Service endorsement of any product or place of business.

The title “Extension Master Gardener” should be used only when doing unpaid volunteer work for Extension. When experienced Extension Master Gardeners speak before groups on horticultural subjects, they may accept unsolicited reimbursements (such as reimbursements for expenses) or gifts. It is inappropriate, however, to seek speaking engagements for pay while participating in an authorized Extension activity and using the title “Extension Master Gardener.”

A word of caution—When you work as an Extension Master Gardener, you are acting as a representative of the Cooperative Extension Service. While Master Gardeners are covered by Extensions liability insurance when performing their volunteer duties the Master Gardener needs to be concerned that any information given to the general public should be factual and based on Cooperative Extension recommendations. Do not be afraid to say, “I do not know the answer to that question.”

One particular area of concern is pesticide recommendations. Master Gardeners know that the use of chemicals in the garden is usually a last resort. Under the amended Federal Insecticide, Fungicide, and Rodenticide Act (Federal Environmental Control Act of 1972), it is illegal to use a pesticide on a crop unless

the crop is listed on the label. The given rate of application on the label may not be exceeded. Fines and other penalties vary according to the laws broken. Please refer all pesticide questions to the County Agent unless you have been specifically told by the County Agent that a certain recommendation can be made.

Master Gardener Curriculum

The focus of local Extension programs can be diverse. As such, the Extension Master Gardener training program must maintain some flexibility and allow the County Agent to determine where emphasis should be placed. Although flexibility is desirable, it has been determined that all Master Gardener candidates must complete a minimum of training in certain core subjects (Table 1).

Upon completion of the core subject material the agent may require additional hours of training to address specific subjects such as propagation, woody plant material, or vegetables. The additional training hours and subject matter will be determined by the agent’s program and need for volunteer assistance.

Upon completion of the training program a candidate must pass a written final examination before they can be designated a Master Gardener. The final exam will consist of 100 total points possible. Seventy-five percent of the possible points will come from questions on material covered in the core curriculum. The remaining 25 percent of the points will come from questions developed by the County Agent and based on material covered in the additional training.

Table 1. Master Gardener Training

Core Subjects	Number of Hours Training Required
Cooperative Extension/Volunteerism	2 hours
Botany	6 hours with lab
Soils	4 hours with lab
Plant Pathology	4 hours with lab
Entomology	4 hours with lab
Pesticides/Pesticide Safety/ Environmental Issues	4 hours
Total	24 core hours of training

After the candidate has passed the written exam, they will receive a Kentucky Extension Master Gardener certificate and a Master Gardener name badge. They also will be asked to choose which volunteer activities they would like to perform in order to fulfill their commitment to the Master Gardener program. Volunteer activities including unsupervised work with vulnerable audiences requires background checks.

Transfer of Certification from other States

Master Gardener certification from other states will be honored at the discretion of the County Agent in charge of the program. The agent may accept the transfer of certification outright, or may require the Master Gardener to participate in one or more of the Master Gardener training sessions that may contain information of a state-specific nature. Kentucky certification will be granted once the Master Gardener has completed any needed training and performed 15 hours of volunteer service.

What Does a Master Gardener Do?

The local Extension agent will supply the Master Gardeners with a list of volunteer job descriptions (see the Sample Job Description). These jobs will be focused on the needs of that particular agent as well as the needs of the county. No volunteer will be asked to participate in an activity they do not feel comfortable doing, or are not physically able to do. The variety of jobs available should enable any volunteer to find an area in which to perform their payback time.

The Extension agent is responsible for providing a number of job possibilities that can utilize the talents and expertise of the Master Gardener. In recent years, creative Master Gardeners and Extension agents have recognized that talents which citizens bring to the Master Gardener program can

be utilized in a variety of horticultural activities. Sometimes it just takes a suggestion to create a new area of Master Gardener activity. Don't be afraid to make suggestions.

Can a Volunteer be Fired?

Well, maybe reassigned would be a better term. For example, a particular Master Gardener may agree to fill the job as a tour guide for a demonstration garden. The tours are supposed to be conducted at 2:00 p.m. on Tuesdays and Thursdays. The particular Master Gardener turns out to be one of those people who always is running 15 minutes behind schedule. It is then the Extension agent's responsibility to discuss the matter with the Master Gardener and if necessary reassign the Master Gardener to a job that does not have such time constraints.

Sample Job Description

Job Title: Senior Citizen Community Garden

Volunteers Needed: Two

Major Objectives: To be event coordinator for the operation of the community garden

Responsibilities:

- Arrange weekly garden work sessions and assist members in running the sessions
- Help plan garden meetings, programs and events
- Help procure supplies and plant material for the garden
- Coordinate the planting and maintenance of the garden
- Generate publicity for garden activities

Training:

- One two-hour training
- Update meetings as necessary

Time Involved:

- Day time meetings
- Approximately 8 hours per month including meetings, garden visits and preparation
- 64 hours per volunteer

Length of Commitment: 8 months

Program Contact: County Agent

** This job in no way implies employment with the University.*

Expectations for Extension Master Gardener Volunteers

Kentucky residents place trust in the Kentucky Cooperative Extension Service to provide quality leadership and reliable, unbiased information. The opportunity to represent the Kentucky Cooperative Extension Service is a privileged position of trust that should be held only by those who are willing to demonstrate behaviors that fulfill this trust.

The primary purpose of these expectations for volunteers is to ensure the safety and well-being of all participants. Kentucky Cooperative Extension Service volunteers are expected to function within the guidelines of the Kentucky Cooperative Extension Service and its various organizations.

The following statements relate to the role of a volunteer with the Kentucky Cooperative Extension Service:

- I will represent the Kentucky Cooperative Extension Service by conducting myself with courteous manners and language, serving as a positive role model, and demonstrating reasonable conflict-resolution skills.
- I will abide by all applicable laws and Cooperative Extension Service rules, policies, and guidelines. This includes, but is not limited to, child abuse, fiscal management procedures, and substance abuse.
- I will accept supervision and support from salaried Extension staff or designated management volunteers.
- I will make all reasonable efforts to ensure that programs are accessible to all individuals regardless of race, color, age, sex, religion, disability, or national origin.

- I will participate in orientation and training related to the Extension Master Gardener Program, sponsored by the Kentucky Cooperative Extension Service.
- I will not consume or allow others to use alcohol or illegal drugs while involved in any Kentucky Cooperative Extension Service sponsored program.
- I will, when engaged in Kentucky Cooperative Extension Service activities, operate motor vehicles and other equipment in a safe and reliable manner and only with a valid operator's license. I will comply with all motor vehicle-related state regulations and laws including those regulating the proper use of seat belts for adults and youth.
- I will accept the responsibility to promote and support the vision, mission, and values of the Kentucky Cooperative Extension Service.
- I will conduct myself in a manner that is in the best interest of the Kentucky Cooperative Extension Service and will not use the volunteer position for purposes of private or personal gain.
- I will use technology in an appropriate manner that reflects the best practice in volunteer service to the Kentucky Cooperative Extension Service.

These expectations represent a contractual agreement between volunteers and the Kentucky Cooperative Extension Service.

I have read, understand, and agree to abide by these expectations for volunteers. I understand that suspension or termination of my position as a volunteer will result if I do not meet these expectations.

Signatures:

Volunteer: _____ Date: _____

Supervisor or Agent: _____ Date: _____