



KY-A-Syst for the Home
Environmental Stewardship
for Homeowners

Improving Yard and Garden Care

Teaching Guide

Introduction:

A lush green yard with flowers and shrubs does not conjure up thoughts of potential pollution problems, but the average homeowner uses 10 times more chemical fertilizer and pesticides per acre than farmers use on farmland. If these products are applied improperly, they can cause serious pollution. Wells and nearby lakes and streams can be affected when chemicals run off yards and gardens.

It is important for landowners to do soil tests before applying fertilizer or lime. These tests will tell the homeowner exactly how much is needed for good plant growth. Pesticides may be even more dangerous than fertilizer, and they are often improperly used when the plant problem is not insects or disease. Make sure it is pests that are causing the problem, and use the least toxic chemicals that will eliminate the pests. Don't spray just before a predicted storm as chemicals have a greater chance of being carried off the yard with storm water runoff.

Areas of bare soil in gardens, lawns and building sites are prone to soil erosion. Erosion can be reduced by planting ground cover vegetation, using mulch or applying landscape fabric. Building terraces or retaining walls on slopes will also prevent or slow erosion. It is important to choose the right landscaping plants for the site and to water them slowly and deeply.

Composting produces organic fertilizer and soil enriching material. It is an excellent way to handle leaves, grass clippings and yard wastes. Fruit and vegetable kitchen wastes can also be added.

Focus on Children:

Children are more susceptible to environmental threats because their bodies are still developing and growing. They are especially at risk for poisoning from chemicals like pesticides. Children spend more time outdoors close to the ground where they may be exposed to pesticide fumes and other contaminants. It is important to restrict children, pets, and toys from areas where pesticides or chemicals are being sprayed. Children need to be taught that pesticides and other hazardous chemicals are harmful. In addition to risks from pesticides, children are also at a higher risk for illness caused by toxins in their water. This results from the fact that their nervous, respiratory and immune systems are still developing. We can impact our children's risk to exposure to pesticides and water toxins by improving our yard and garden care practices.

Lesson Purpose and Objectives:

Purpose: This lesson is designed to help homeowners become familiar with improved methods of caring for your yard and garden.

Objectives: This lesson guide contains a lot of information about taking care of your yard and garden. It may be difficult to cover all the material in one session. Therefore, you are encouraged to select a program based on the type of audience you are serving and their needs. It is best to select and focus on *only two or three* of the following objectives.

Understand the importance of doing soil tests in your lawn and garden before applying fertilizer.

Become knowledgeable about non-chemical or low-toxicity ways to control pests.

Learn how to reduce soil erosion by using the proper plants, eliminating bare areas, and covering sloping ground with vigorous ground cover.

Determine the proper way to construct a backyard compost pile for grass clippings, yard waste, and fruit and vegetable scraps.

Become familiar with the proper way to water your lawn, including manner, time of day, and amount.

Other (Please list in the space below):

Suggested Resources & Materials:

The following items are available for your use in teaching this lesson. Select and use resources according to your program focus and needs. Resource materials are available from the ENRI Resource Center, 233 Scovell Hall, University of Kentucky unless otherwise noted. County agents should request these items in advance.

Publications & Fact Sheets

Numbered-series Extension publications available through order entry :

- *Soil Testing: What It Is and What It Does* AGR-57
- *Lawn Fertilization in Kentucky* AGR-53
- *Principles of Home Landscape Fertilization* ID-72
- *Selecting the Right Grass for Your Kentucky Lawn* AGR-52
- *Trees, Shrubs, Ground Covers, and Vines for Kentucky Landscapes* HO-61
- *Timing Control Actions for Landscape Insect Pests* ENT-66
- *Disease Management in the Home Lawn* ID-105
- *Home Composting: A Guide to Managing Yard Waste* HO-75
- *Understanding Pesticide Labels & Labeling* ID-100

Suggested Resources & Materials: (cont'd.)

Videos (Available through the Ag. Communications video library.)

- *Soil Sampling for Home Gardens and Landscapes* (VHO-1022)
- *Fertilizing Landscape Plants* (VHO-0406)
- *Safely Applying Pesticides in Lawns and Gardens* (VET-0431)
- *A Homeowner's Guide to Outdoor Pesticide Safety* (VET-0419)
- *Integrated Pest Management -Horticulture* (VHO-0414)
- *Integrated Pest Management for Home Landscapes* (VHO-1397)
- *Efficient Water Management in the Landscape* (VHO-0394)
- *Managing Yard Wastes* (VHO-0415)
- *Backyard Composting* (VHO-0638)

Other: (Please specify below.)

Suggested Teaching Techniques and Activities:

Select only those activities that will help you teach the lesson. Limit selection according to your program focus, audience, and length of lesson.

- Use the transparencies to give an overview of yard and garden care issues and strategies. Encourage discussion as you present the information.
- Have the participants read the Ky-A-Syst for the Home publication *Improving Yard and Garden Care*. Ask them to go back through the publication and answer the questions in the boxes. Suggest they record all B and C responses and list changes they plan to make from information in the publication or from other sources. They can do this on the Action Checklist on Page 4. Encourage them to set target dates for taking action. Suggest that they review the checklist from time to time to see if any responses have changed.
- Discuss the importance of performing soil tests before fertilizing yards and gardens. Use the video *Soil Sampling for Home Gardens and Landscapes* as part of the program. Obtain a handout from the local Cooperative Extension Office about how to take a soil sample and submit it. Fill out a sample information sheet about the area where the sample was obtained. Stress that homeowners frequently use too much fertilizer and could save money by having soil tests.
- To focus on fertilizer use, show the video *Fertilizing Landscape Plants*. Discuss fertilization techniques and emphasize the importance of following guidelines for applying fertilizer.

Suggested Teaching Techniques and Activities: (cont'd.)

- Show the video *Integrated Pest Management – Horticulture* or *Integrated Pest Management for the Home Landscape*. Talk about the option of first trying integrated pest management (IPM) before using more toxic alternatives. Review pesticide and pesticide management strategies for the home lawn and garden. Show pictures and discuss the role of beneficial insects.
- Show the video *Safely Applying Pesticides in Lawns and Gardens* or *A Homeowner's Guide to Outdoor Pesticide Safety*. Stress the importance of properly applying and storing pesticides and other chemicals. Bring in samples of lawn and garden pesticides, and teach the class how to read the labels and search for key words that indicate danger.
- Show the video *Managing Yard Wastes* or *Backyard Composting*. Obtain plans for building compost structures. Construct a small compost pile using vegetable waste, grass clippings, and straw. Bring with you a glass container with finished compost. Pass out the plans for compost structures.
- Show the video *Efficient Water Management in the Landscape*. After the video, go over the proper way to water your lawn and garden. Discuss principles for water-wise landscaping. Have someone from a local garden store bring in several species of flowers and shrubs that require little water.
- Other: (Please specify below.)

Suggested Evaluation Techniques:

Select the technique(s) best suited to the information you would like to obtain from your audience. Immediate evaluation will provide reaction to the presenter and program materials. Delayed evaluation will give a better indication of changed behavior and attitudes.

- ◆ At the close of the program, ask each participant to name *one* thing they learned from the lesson.
- ◆ At the end of the program, ask each participant to list something they will go home and do as a result of the lesson. Have them write the item on a piece of paper with their name and the date of the lesson. Save the papers and several weeks/months later survey the group to see if they actually did it.
- ◆ Hand out a copy of the *Help Us Serve You Better* evaluation form. Ask participants to complete the form and leave it in a specific place as they leave.

Suggested Evaluation Techniques: (cont'd.)

- ◆ Return to the group several weeks later and ask them to fill out the Follow-up Feedback Form and collect them as they leave. If you cannot return to the group in person, contact a representative number of the participants by phone and collect the data requested on the Follow-Up Feedback Form from each.

- ◆ Other: (Please specify below.)

Reporting Impacts (*Information for County Extension Agents*):

Use the following priority indicators and program accomplishment (PAC) codes when reporting impacts as a result of this program. Information taken from the FY01 PAC and priority indicators lists.

PAC Code 610 - Indicator:

- Number of individuals adopting practices that insure safe water.

PAC Code 640 – Indicator:

- Number of individuals adopting one or more practices related to conserving, sustaining, and / or protecting soil resources.

PAC Code 440 – Indicator:

- Number of persons who report practice changes related to safety.

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