

Upcoming Composting Workshops and Demonstrations



Pioneers Park Nature Center's backyard composting demonstration area

Each spring and fall as you clean-up your yards and gardens, there is always a large pile of leaves, grass clippings and other duff material to be removed. Instead of throwing it away, recycle it. One of the key components of good composting is brown or dried organic matter as well as green grass clippings. So, now is the time to utilize these materials in a compost pile.

Learn how to be successful with composting by attending a composting workshop or demonstration sponsored by UNL Extension in Lancaster County and the City of Lincoln Recycling Office. Attendees will receive a free compost bin or soil thermometer.

Composting Workshops are held at various Lincoln locations:

- April 14, Lancaster Extension Education Center, 444 Cherrycreek Road, 6:30 p.m.
- April 15, Eiseley Library, 1530 Superior Street, 6:30 p.m.
- Oct. 6, Gere Library, 2400 S. 56 Street, 6:30 p.m.
- Oct. 7, Eiseley Library, 1530 Superior Street, 6:30 p.m.
- Oct. 8, Anderson Library, 3635 Touzalin Avenue, 6:30 p.m.

Composting Demonstrations are presented at the Pioneers Park Nature Center's new backyard composting demonstration area. These demonstrations will show you how to be successful with backyard composting. You will see three types of composting bins and how to use them. Demonstrations will be held at 10 a.m. on April 25, May 16, June 20, Sept. 19 and Oct. 17.

Backyard Organic Gardens Need Work but Have Increased Benefits

Sarah Browning
UNL Extension Educator

Organic products are becoming more available in supermarkets, but that's no reason gardeners can't grow their own organic food.

Organic food is popular because it is grown using a sustainable land management system that improves the surrounding environment. Using organic inputs without insecticides, herbicides or commercial fertilizers, organic production reduces pesticide exposure to humans, groundwater and the environment.

For the home gardener, some of the best plants to grow organically are tomatoes, lettuce, cabbage and carrots.

In a backyard garden, growing food organically without pesticides can help preserve beneficial insects living in and around the garden. Ladybugs, lacewings, predatory mites and wasps and many other beneficial insects can be helpful against insects that damage vegetable crops. Ladybugs feed on aphids, which feed on plants, and certain kinds of wasps feed on tomato horn-worms, which eat through tomatoes.

Crop rotation, trap crops and using vegetable cultivar with resistance to certain insects and diseases are also important tools for controlling pest problems organically. Organic or "soft" insecticides such as horticultural oils also can be used in an organic system.

Row covers are another tool organic gardeners can use to protect plants from insect damage. This fine-spun, polyester fabric creates a physical barrier around plants, while allowing sunlight and water to get through. Row covers are particularly useful on plants that don't require pollination, such as lettuce, cabbage, carrots or



Judy Sedbrook, Colorado Master Gardener in Denver

Row covers can protect plants, such as lettuce, from insect damage.

potatoes. Only the leaves or roots of these plants are harvested.

The first thing to be considered when starting an organic garden is the soil. Organic doesn't just mean no pesticides, it also means not using any type of commercial fertilizer, so nutrients must be provided through other sources. Organic matter, cover crops that fix atmospheric nitrogen and manure are examples of soil amendments that can provide nutrients and improve soil structure. Cover crops, such as red clover, are grown in the garden then tilled back into the soil to improve soil fertility and drainage and increase beneficial insect habitat. When using manure, make sure the animals have not been fed or treated with antibiotics or other products that are not organic. The garden won't truly be organic if the manure isn't organic either.

Spring is a great time to plant cover crops for a new organic garden and fall is ideal to begin improving soil. Manure and organic matter added in the fall will begin to break down over the winter. By spring, the soil will be ready to go and planting can begin.

For more information about the standards for organically grown foods, visit the National Organic Program Web site at <http://www.ams.usda.gov/nop/indexIE.htm>.

Pre-emergent Herbicide Application Time

For annual grass control, apply pre-emergence herbicides prior to germination. The soil temperatures necessary for weed germination vary by species. For example, crabgrass germinates when soil temperatures are greater than 55 degrees F to 60 degrees F from 7 to 10 consecutive days and continues to germinate in soil temperatures to 95 degrees F. Goosegrass begins germination when soil temperatures are above 65 degrees F for several weeks and yellow foxtail germinates at soil temperatures

of 68 degrees F to 92 degrees F. Barnyardgrass germinates at soil temperatures between 72 degrees F and 90 degrees F. The optimum soil temperature for fall panicum germination is 80 degrees F.

Monitor soil temperature and apply a pre-emergence herbicide prior to reaching the weed germination temperature. This insures the herbicide will be in place before weeds begin to germinate.

—Don Janssen, UNL
Extension Educator

Act Early to Control Musk Thistles

Musk thistles are a pesky problem in many pastures. Farmers who had musk thistle infestations last year will soon be able to walk out in their fields and see the healthy thistle plants with their robust circular rosettes growing. Thistles can be especially troublesome after a drought.

The young, rosette stage of growth that comes before the plant flowers is an ideal stage for controlling the plants. Herbicides should be sprayed while the thistles are still in the rosette form. If sprayed early, very few plants will develop flowering stalks later in the season.

Several herbicides are recommended for effective musk thistle control. One of the most effective is Tordon 22K. Tordon 22K should be used with caution because it will also kill woody plants like trees. Another is 2, 4-D. When using 2, 4-D, it is



Musk thistle rosette stage

recommended a smaller amount be used and a small amount of Banvel should be added to the mix.

Some newer herbicides, such as Redeem, Grazon, Alley and Curtail also can help control musk thistles in pastures. As with any chemical product, be sure to read and follow label instructions carefully and be sure to spray for musk thistles at the proper time.

—Bruce Anderson, UNL
Forage Specialist

Study Shows Transplanted Trees Grow Better Without Grass Nearby

Research from K-State's John C. Pair Horticultural Center has quantified the effect of controlling grasses around newly planted trees. Jason Griffin, William Reid and Dale Bremer conducted a study to investigate the inhibition of growth of transplanted, seedling trees when lawn grasses were allowed to grow up to the trunk. There were five treatments including three with different species of grass. Those treatments were:

- Bare soil maintained with herbicides
- Area under tree mulched 3 inches deep
- Tall fescue allowed to grow under tree
- Bermudagrass allowed to grow under tree
- Kentucky bluegrass allowed to grow under tree

All treatments were applied to Eastern redbud seedlings as well as to pecan seedlings. All trees were fertilized according to recommendations and watered during the growing season with up to one inch of water if rainfall was deficient. At the end of two years, trees were measured and harvested. Data was taken on caliper (diameter) 6 inches above the ground, weight of above ground portions of the tree, leaf area and leaf weight.

There were no differences

in any measure between the mulched treatment and the bare soil treatment for either tree species. However, all measures showed very significant growth increases if lawn grasses were controlled around the tree. Specific results were:

- Caliper: Caliper measures 6 inches above the soil surface were twice as large for plots without grass than those with either fescue or bluegrass but was only 50% larger when compared to the bermudagrass plots.
- Top growth weight: Redbuds showed a 300% weight advantage for plots with grasses controlled than those without. Pecans showed a still very significant 200% increase.
- Leaf area and leaf weight: Leaf area was 200% larger in plots without grass competition and leaf weight showed a 300% increase.

The obvious conclusion one should draw from this study is, **grasses must be controlled under a newly transplanted tree if you wish to get the best possible growth.** How far from the trunk should the grasses be controlled? Try a minimum of 3 feet.

—Ward Upham, Kansas State
University Extension Associate