Compost for Soil Health

- Recycle leaves, grasses and non-meat kitchen scraps.
- Compost piles need oxygen, moisture and nutrients.
- Supply oxygen by turning the pile with a pitchfork.
- Allow rain to provide moisture, and add water during dry spells. Cover the heap during heavy rain—compost should be damp, not soggy.

Compost Many Materials

- Leaves, grass clippings, straw and shredded wood
- Old plants and potting soil.
- Coffee grounds, tea leaves and non-meat scraps.

Don't Compost Some Materials

- Weeds and diseased plants.
- Pet waste.
- Meat scraps that will attract animals.

Conserve Water

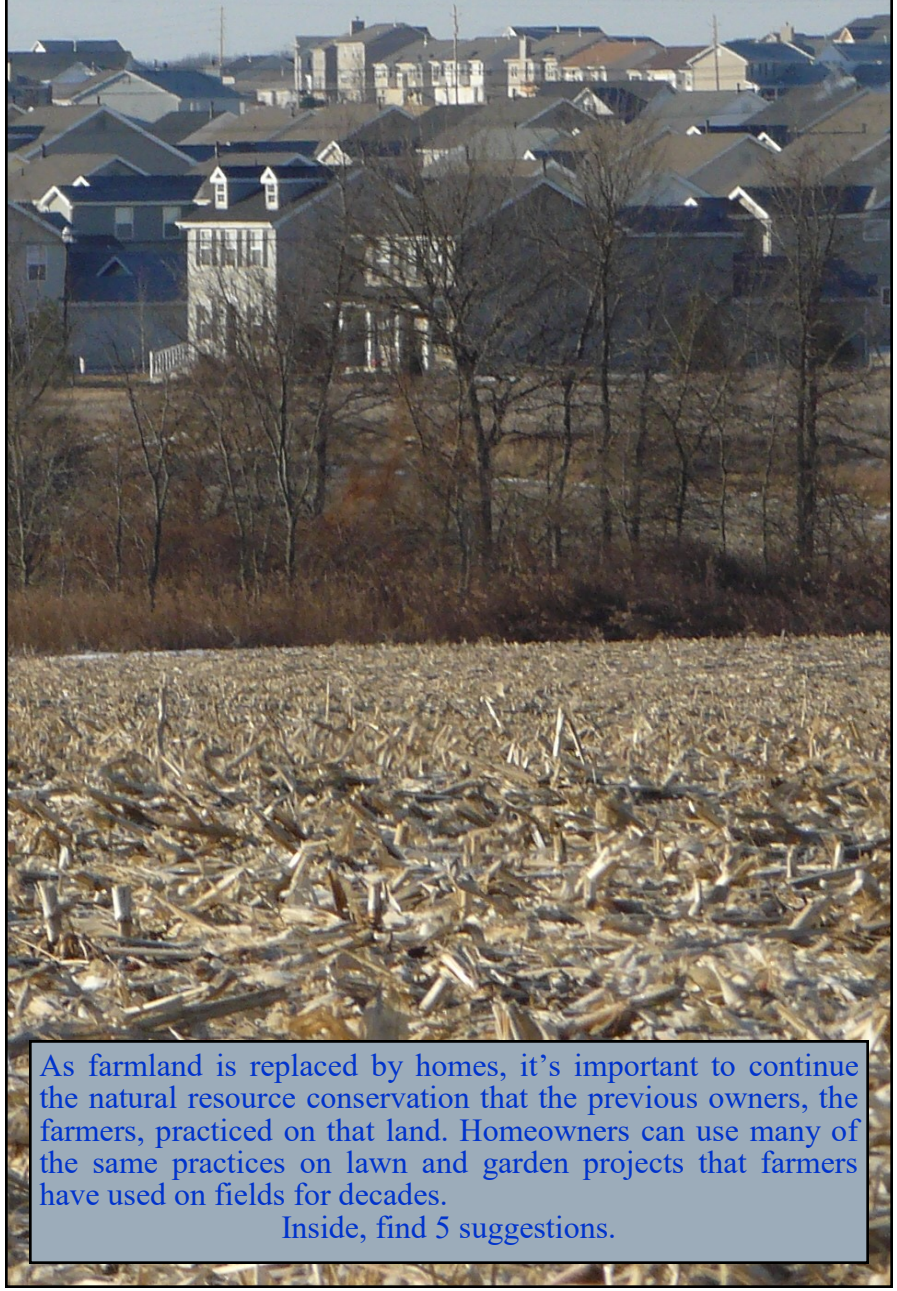
- Choose grasses that do not need a lot of water. (tall fescue is drought and pest resistant)
- Use native and drought tolerant plants.
- Plant a rain garden where your home's downspouts empty into the yard.
- Use mulch to retain moisture and avoid evaporation.
- Water lawns infrequently, but deeply.
- Water early in the morning. Watering at night may encourage disease.
- Don't apply water faster than it can be absorbed.
- Check the soil in the flower bed before watering. Wilting plants may be a sign of too much water. If the soil is moist and cool four inches deep, don't water.

St. Charles County Soil & Water Conservation District

St. Charles County

If you would like more information, call the St. Charles County Soil and Water Conservation District at (636) 922-2833, ext. 3.

Homeowners Have Important Role in Soil and Water Conservation



As farmland is replaced by homes, it's important to continue the natural resource conservation that the previous owners, the farmers, practiced on that land. Homeowners can use many of the same practices on lawn and garden projects that farmers have used on fields for decades.

Inside, find 5 suggestions.

Deal with Pests

Farmers observe plants in their fields regularly to keep ahead of insects and weeds. Both natural and chemical controls are used when pests are discovered. Pesticides should not be your first choice.

Physical Controls

- Remove weeds and insects by hand, including leaf-eating caterpillars, sawflies and beetles (done early and often, this might be enough to gain the upper hand)
- Use protective row covers to form a barrier over vegetables and protect them from insects.
- Stop cutworms by wrapping foil around the base of young plants.
- Use water to wash away pests (even a little soapy water is fine—try dish soap)

Recruit Beneficial Insects

- Some insects are good and will keep the bad ones away. Plant native plants and flowers that attract beneficial insects. Avoid insecticides.
- Lacewings and ladybugs help control aphids, mealy bugs and some scales.
- Beneficial nematodes help control borers on ornamentals.
- Predatory mites help control spider mites

Prevent Problems

- Grow plants that are native to your area. They will be hardier because they are naturally adapted to this environment.
- Use plants that are disease and pest resistant.
- Provide homes for birds and bats.
- Choose plants that flower and bear fruit at different times of the year.
- Rotate vegetables each year to cut down on the risk of disease and insect problems.
- Plant vegetables, herbs, and flowers all in the same area to attract beneficial insects.
- Regularly remove diseased plants, weeds and plant litter.

Pesticides Only as a Last Resort

- Never blanket spray an area. Read directions and apply pesticides only where needed. (These chemicals can harm pets and children)
- Use insecticidal soaps to kill spider mites, white flies and scale insects.
- Spray horticultural oils on plants during the dormant season to kill over-wintering insects, mites and their larvae.

Use Fertilizers

Healthy plants need healthy soil. Many homeowners already realize the benefits of fertilizer, but often apply too much, too often, or at the wrong times. Fertilizer that is not used properly usually ends up as a pollutant in our streams which can be disastrous for aquatic life.

Test Your Soil

- It's easy! Farmers use soil tests to find out what is needed in the soil to nurture a certain crop. Homeowners can do likewise by sending a soil sample to the University of Missouri Extension Center. Visit the Univeristy of Missouri Extension website at extension.missouri.edu/stcharles/homegarden.shtml or call 636-970-3000.

Educate Yourself

- Most fertilizers have three numbers on the packaging. Those numbers stand for nitrogen, phosphorus and potassium.
- Nitrogen is for leafy plant growth. Phosphorous is for root, flower and fruit production, and potassium is for hardiness and disease resistance. The soil test will show what is already present in your soil.

Use Fertilizer Wisely

- Fall is the best time to fertilize lawns.
- Read the package directions and remember—the numbers are in order and refer to nitrogen, phosphorous and potassium. For example, if the package says 20-15-15, then that fertilizer bag contains 20% nitrogen, 15% phosphorous, and 15% potassium. Buy only what your soil test says you need.
- Never get fertilizer on sidewalks or driveways. It will wash into the nearest waterway with the next rain.

Stop Soil Erosion

A well-planned backyard will prevent soil and nutrients from washing into nearby waterways. Farmers use grassed waterways, buffer trees and shrubs, and cover crops to help keep the soil in place. Homeowners should:

Protect Bare Soil

- Cover bare soil with new vegetation
- Use mulch or wood chips in heavy traffic areas where vegetation cannot be reestablished.
- Use a splash block at downspout outlets.
- Place stones at pipe outlets to slow down rainwater runoff.
- Stabilize steep terrain with terraces of wood or railroad ties.
- Plant trees, shrubs and ground covers as a buffer around your yard and in bare areas to help soak up nutrients & reduce runoff.
- Use raised beds. The framed garden will hold the soil in place.

The University of Missouri website has a large quantity of good information for homeowners. Check it out at extension.missouri.edu