



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

# Backyard Composting

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[www.idem.IN.gov](http://www.idem.IN.gov)

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## Description

### *What is composting?*

- Composting is the aerobic, oxygen-requiring, decomposition of organic materials by microorganisms.
- Bacteria start the process and are responsible for much of the decomposition work. Fungi, protozoans, earthworms, centipedes, beetles and millipedes assist in breaking down the plant tissues.
- During composting, the microorganisms consume organic matter and oxygen. Their metabolism gives off heat and gas, and results in a significant reduction in volume and mass of the organic materials.

### *What Can I Compost?*

- All yard trimmings can be used for composting. However, the use of treated yard debris or diseased or infested plants is not recommended.
- Yard trimmings such as leaves, grass clippings, weeds, thatch and the remains of garden plants make excellent compost.
- Other desirable additions to a compost pile include ground brush and kitchen scraps such as fruit and vegetable peelings, eggshells and coffee grounds that would otherwise be thrown in the garbage.
- Care must be taken when composting kitchen scraps. **Do not compost meat, bones and fatty foods such as cheese, salad dressing and cooking oil.** These foods ferment or putrefy, causing odors that can attract rodents and other pests. Only experts in composting should attempt to compost these materials.

## Environmental Impacts:

### *How Does Composting Help the Environment?*

- Yard trimmings and kitchen scraps use up valuable space in landfills.
- Organic materials make up 10 to 20 % of all household wastes. Because of their high moisture content, grass clippings also lower the efficiency of incineration systems.
- Compost added to the garden improves soil structure, texture, aeration and water retention.
- When mixed with compost, clay soils are loosened and the water retention of sandy soils improves.
- Mixing compost with soil also contributes to erosion control, soil fertility, proper pH balance and healthy root development in plants.
- The use of compost can also reduce the use of pesticides and chemical fertilizers in your yard.

## IDEM's Role:

- The Indiana Department of Environmental Management (IDEM) is responsible for protecting human health and the environment while providing for safe industrial, agricultural, commercial, and governmental operations vital to a prosperous economy.
- IDEM's Office of Land Quality registers or permits large scale composting operations. Backyard composting is encouraged by IDEM's Office of Pollution Prevention and Technical Assistance as an alternative to wasting valuable resources.

## Citizen's Role:

*What are the benefits of backyard composting?*

- Composting can save the homeowner time, energy, money (i.e. on fertilizers, pesticides, etc.) and can reduce the amount of waste going to our landfills.
- Composting is convenient. It's easier to compost yard trimmings than to bag and drag them to the trash can, curb or landfill.
- Composting turns yard trimmings into a resource. Good compost is expensive to buy, but free for the making. Money does grow on trees with home composting. You could also save money on garbage collection and recycling fees.
- Composting benefits soil and plants. Using compost helps your plants grow healthier and faster by keeping the soil loose and well drained.
- Grass clippings contain valuable nutrients that can generate up to 25 % of your lawn's total fertilizer needs. One-hundred (100) pounds of grass clippings can generate and recycle as much as three (3) to four (4) pounds of nitrogen, one-half to one (1) pound of phosphorus, and two (2) to three (3) pounds of potassium back to the lawn. These are the three (3) most important nutrients needed by lawns, and are commonly supplied in lawn fertilizers. Also, grass clippings do not contribute to thatch (an organic debris layer between the soil and live grass) since grass clippings are 75-85 % water and decompose readily.
- Compost used as a soil amendment should be applied and incorporated into the soil before planting crops, grasses, plants, etc. Apply 1-3 inches of compost to the soil surface and work it in to the soil to a depth of about 3-4 inches.
- In summary, by composting at home, you can help protect the environment, save money and improve your soil at the same time.

**More Information:**

- For more information on backyard composting, please visit IDEM's Web site at <http://www.recycle.IN.gov/>.
- For questions and concerns, feel free to call IDEM's Office of Pollution Prevention and Technical Assistance at (800) 988-7901.