I keep It Green!
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Compost Bins

By: Lauren Reed, Morgan Quire, Danya Parker, Trae Jones, Kevin Saunders
Materials To Put In A Compost Bin

- Egg Shells
- Fruit And Vegetable Peel
- Straw And Hay
- Coffee Ground And Cinnamon
- Tea Bags
- Old Flowers
- Egg And Cereal Boxes
- Newspaper
- Toilet And Kitchen Roll Tubes
- Dried Lint
What Not To Put In A Compost Bin.

- Acidic fruit such as lemons, grapes, and tomatoes
- Cooked vegetables
- Meat
- Dairy items
- Grains
- Bread
- Fish
- Bones
Math of Composting

1. **Math of Composting**
   - **BROWN**
     - Leaves, stew, woody materials
   - **GREEN**
     - Grass, food scraps, manures
   - **COMPOST**
     - Elementary formula: 
       
     $$	ext{BROWN} + 	ext{GREEN} = 	ext{COMPOST}$$
   - **WATER**
     - Makes the mixture active
   - **AIR**
     - Provides oxygen for the decomposition process
     - Nutrients and microorganisms present in the air
   - **MACRO-ORGANISMS**
     - Earthworms, insects, etc.
   - **MICRO-ORGANISMS**
     - Bacteria, fungi, microbes

This diagram illustrates the process of composting, showing how various elements interact to create compost.
Methods Of A Compost Bin:

- **Container Composting** is a common style of small scale Composting using any of a wide variety of plastic, wood, masonry, or wire screen containers.
- Vented or closed sided **compost bins** each have proponents for the effect on air circulation and heat loss or retention in the compost.
Purpose Of A Compost Bin

• Past practices of biodegradable waste *disposal* not only remove valuable nutrients from the local bio-cycle, but rather then being buried in a landfill.

• Organic waste contains valuable nutrients that can contribute to the soil health in the immediate area of their production if recycled.
Why Compost?
With the composting methods described here, you can help the composting cycle work even better than it does in nature. The organic waste you put back into the environment can be used by other living things. This way, instead of going to a landfill or garbage-burning plant, your wastes become valuable resources.
Gardeners use compost. Compost allows the soil to hold more water and adds nutrients to the soil. Flowers, vegetables, trees, shrubs, house plants, lawns, and container gardens grow better in soil mixed with compost.
Yard waste and food scraps make up 20% to 30% of garbage!! Many landfills are filling up and closing. Finding places to put garbage is a big problem. By composting yard and kitchen waste, you send less garbage to landfills.
Composting provides an almost constant source of free fertilizer and soil conditioner. The organic materials in the compost help your plants grow by loosening the soil and allowing better root entry. The texture of compost improves the solid ability to hold water and can reduce your water bills. Compost has all the nutrients that plants require, unlike chemical fertilizers. Through regular use of compost you can greatly reduce or even get rid of the need for chemical fertilizers, pesticides and herbicides, which saves money and reduces contamination of our waterways and drinking water.
supplies needed
How to Make A Compost Bin?

- First Pick A Designated Area In Your Back Yard
- Measure The Ply Wood 1 24x12 Inch Top, 23x42 Inch Base, Two 16x24 Inch Sides And Two 16x42 Inch Sides.
Directions

- Choose a "pot" for baking your compost.
- Place kitchen and yard waste in the composting bin. Chop or shred the organic materials if you want them to compost quickly.
- Spread soil or "already done" compost over the compost pile. This layer contains micro-organisms and soil animals that do the work of making the compost. It also helps keep the surface from drying out.
- Adjust the moisture in your compost pile. Add straw or sawdust to soggy materials, or add water to a pile that is too dry. The materials should be damp to the touch, but not so wet that drops come out when you squeeze it.
- Allow the pile to "bake". It should heat quickly and reach the desired temperature (90 to 140 degrees Fahrenheit, or 32 to 60 degrees Celsius) in four to five days.
- Stir your compost as it bakes if you want to speed the baking time.
- The pile will settle down from its original height. This is a good sign the compost is baking properly.
- If you mix or turn your compost pile every week, it should be "done", or ready in one to two months. If you don't turn, the compost should be ready in six to 12 months.
Possibilities for your end product of Your Compost

You can use the mulch for your garden or potting soil for your plants. You can also make profit off of your compost by bagging it in bags and selling it for a relative price. Or you could donate it to a garden center, which I personally prefer.
Trouble Shooting Your Compost

- **Symptom**
  - Pile is wet and smells like mixture of rancid butter, vinegar and rotten eggs.

- **Problem**
  - Compost needs more air, it has too much "fresh" material (too wet or too much nitrogen)

- **How to Fix It**
  - Turn the pile and add dry material such as wood shavings, wood chips, or dry leaves. If pile is very wet provide drainage. If the odor must be stopped fast don't turn it. Bury it in soil or finished compost for a few months and start, another pile.
Trouble Shooting Your Compost.

- Symptom
  - Pile is not breaking down
- Problem
  - Pile is damp and sweet-smelling or pile is dry
- How to Fix It
  - Turn pile and add water until the pile is moist or add higher-nitrogen materials like green grass clippings or manure
Trouble Shooting Your Compost.

- **Symptom**
  - Pile is not warm enough or is warm only deep in the center of the pile (it should heat up to over 130 Fahrenheit)

- **Problem**
  - Pile is to small

- **How to Fix It**
  - Incorporate materials into a bigger pile or put them into a container
Trouble Shooting Your Compost.

- **Symptom**
  - Pile contains insects and larvae

- **Problem**
  - Meat, other animal products, and food have been added

- **How to Fix It**
  - Minimize pests burying food materials deep in the pile and keep the temperature of the pile high and it should have the dampness of a wrung-out sponge and any other insect in your pile is probably a harmless compositor.
Trouble Shooting Your Compost.

- Symptom
  - Fire Ants
- Problem
  - Pile is dry
- How to Fix It
  - Turn it and add water
  - A low-toxicity bait formulation can be used near but not in the pile
What Can I Do with My Compost.

★ Spread Compost on your garden before roto-tilling or turning the soil in the spring. Then mix the compost into the soil while roto-tilling or turning.

★ Place or bury compost in your garden between plant rows. The plant roots will grow into the compost and take up the nutrients.

★ In flower gardens, dig in compost around the plants.

★ Use compost as a mulch for shrubs, trees and plants.

★ When transplanting house plants, mix compost into the soil.
We help people who want to help the Earth, by teaching them how to create their own compost.

Our profit is not money but the feeling of knowing that people are getting involved with helping the community.

Thus, we are a non-profitable organization, and our only job is to teach.
If you or someone you know wants to get involved with helping the community by creating a compost, and you need advice, just call us at 1-800-com-post. That is 1-800-266-7678.
Members of I keep it Green

From left: Lauren Reed, Danya Parker, Morgan Quire, Kevin Saunders, & Trae Jones
TEAMWORK!!

Danya & Lauren working to put the compost together
Our Final Product Finished!!!

Our Compost Bin
Helping the Cause!
Morgan digging for the Compost
Trae working hard
Special Thanks!!

To The Bardstown Maintenance Men for providing us with Wood for our Compost Bins. And to Mr. Clark for his assistance.