What Not to Compost

⇒ Black walnut tree leaves or twigs Releases substances that might be harmful

to plants

⇒ Coal or charcoal ash Might contain substances harmful to plants

\Rightarrow Dairy products (e.g., butter, egg yolks, milk, sour cream, yogurt)

Create odor problems and attract pests such as rodents and flies

\Rightarrow Diseased or insect-ridden plants

Diseases or insects might survive and be transferred back to other plants

\Rightarrow Fats, grease, lard, or oils

Create odor problems and attract pests such as rodents and flies

\Rightarrow Meat or fish bones and scraps

Create odor problems and attract pests such as rodents and flies

\Rightarrow Pet wastes (e.g., dog or cat feces, soiled cat litter)

Might contain parasites, bacteria, germs, pathogens, and viruses harmful to humans

\Rightarrow Yard trimmings treated with chemical pesticides

Might kill beneficial composting organisms

"<u>No-turn" composting</u>

The biggest chore with composting is turning the pile from time to time. However, with 'no-turn composting', your compost can be aerated without turning. The secret is to thoroughly mix in enough coarse material, like straw, when building the pile. The compost will develop as fast as if it were turned regularly, and studies show that the nitrogen level may be even higher than turned compost. With 'no-turn' composting, add new materials to the top of the pile, and harvest fresh compost from

Compost Troubleshooting

Compost pile won't heat up-

The materials may be too dry. This can happen quickly during the summer months. Try to keep your compost materials moist to the touch. Cover the pile. Another possibility is that the pile may be low in nitrogen. Fast-working microorganisms can quickly consume all the nitrogen and leave undecomposed carbon materials behind. Replenish the nitrogen content of your pile with fresh green grass clippings, garden weeds, kitchen scraps, manure, or an activator. Another possible cause: Your pile is too small. Collect more materials and mix everything into a pile that measures 3 feet on each side, and is at least 3-feet high.

Smelly compost-

If your pile smells like ammonia, it may contain too much nitrogen. Add carbon materials such as straw, leaves, or hay to correct the balance.

Soggy compost-

Dense or water-logged compost piles don't contain enough oxygen for the microorganisms to survive. Often these piles give off an unpleasant odor. The solution is to aerate the pile and add more dry materials.

Finished product is too rough-

Some materials like eggshells and corncobs take a very long time to break down. If you want a more finely textured compost, shred or chop up the materials before putting them into the bin. You can also sift out these crumbs and throw them back into the next pile.

The pile is attracting flies, rodents, or other pests- This could mean that protein-rich, fatty, or sugary foods are present in the pile or food is exposed. Be sure to leave meat, bones, oily foods, and dairy products out of the compost pile and bury the fruit and vegetable trimmings at least 6-12 inches deep.

NOTE:

Finished compost can be applied to lawns and gardens to help condition the soil and replenish nutrients. Compost, however, should not be used as potting soil for houseplants because of the presence of weed and grass seeds.

Carbon/Nitrogen Ratio the secret to successful composting

- ⇒ All compostable materials are either carbon or nitrogenbased. The secret to a healthy compost pile is simple: maintain a working balance between these two elements.
- ⇒ Carbon carbon-rich matter (like branches, stems, dried leaves, peels, bits of wood, bark dust or sawdust, shredded brown paper bags, coffee filters, conifer needles, egg shells, hay, peat moss, wood ash) gives compost its light, fluffy body.
- ⇒ Nitrogen nitrogen or protein-rich matter (manures, food scraps, leafy materials like lawn clippings and green leaves) provides raw materials for making enzymes.
- ⇒ A healthy compost pile should have much more carbon than nitrogen. A simple rule of thumb is to use one-third green and two-thirds brown materials. This allows oxygen to penetrate and nourish the organisms that reside there. Too much nitrogen makes for a heavy, smelly, slowly decomposing mass. Good composting hygiene means covering fresh nitrogen-rich material, which can release odors if exposed to open air, with carbon-rich material, which often exudes a fresh, wonderful smell. If in doubt, add more carbon.

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Compliments of The Rensselaer County Environmental

Management Council

Composting

According to the E.P.A., yard trimmings and food residuals together constitute 24 percent of the U.S. municipal solid waste stream. Composting creates a useful product from organic waste that would otherwise have been land filled. In addition, composting is a practical and convenient way to handle your yard waste. It is easier and cheaper than bagging yard waste and it improves your soil and plants. If you have a garden, lawn, trees, shrubs or planter boxes, you have use for compost.

Composting involves mixing yard and household organic waste in a pile or bin and providing conditions that encourage decomposition. The decomposition process is fueled by millions of microscopic organisms (bacteria, fungi) that take up residence inside your compost pile, continuously devouring and recycling it to produce a rich organic fertilizer and valuable soil amendment.

What is Compost?

Compost is a dark, crumbly and earthy smelling form of decomposing organic matter that can be used to enhance everything you grow.



Benefits of Using Compost

- \Rightarrow Improves the soil structure, porosity, and density, thus creating a better plant root environment.
- \Rightarrow Increases moisture infiltration and permeability of heavy soils, thus reducing erosion and runoff.
- \Rightarrow Improves water-holding capacity, thus reducing water loss and leaching in sandy soils.
- \Rightarrow Supplies a variety of macro and micronutrients.
- \Rightarrow May control or suppress certain soil-borne plant pathogens.
- \Rightarrow Supplies significant quantities of organic matter.
- ⇒ Improves cation exchange capacity (CEC) of soils and growing media, thus improving their ability to hold nutrients for plant use.
- ⇒ Supplies beneficial micro-organisms to soils and growing media.
- \Rightarrow Improves and stabilizes soil P.H.
- \Rightarrow Can bind and degrade specific pollutants.

<u>Tips</u>

- 1. Fruit flies can become a nuisance. Cover the top of your compost with a small scrap of carpet or some plastic with a small rock on top.
- 2. Help start a new compost pile with aged manure, cottonseed meal, alfalfa meal, blood meal, or compost starter. They are rich in nitrogen and help jump-start the microbes responsible for breaking down organic matter into compost.
- 3. Select a well drained area to establish your pile; preferably over soil so that worms can access it. The compost pile should be in a sunny position in colder climates or a shady area in warm climates.
- 4. To speed up composting, break down materials into smaller pieces or shred; and turn the pile regularly.
- 5. Compost piles that are smaller than 3 feet by 3 feet will have trouble heating up especially in cool climates. Piles larger than 5 feet by 5 feet may not allow enough air to reach the center.
- 6. Worms are a big help. When you happen to dig up a worm in your garden, place it in your compost pile; it will help turn and aerate your compost.



- ⇒ While you can compost successfully in a pile on the ground, a bin will keep the process neater and help to discourage animals if you are composting food scraps.
- ⇒ To build a simple compost bin, you'll need small mesh wire fencing and seven or more boards or stakes. Wire mesh is essential because the organic material needs air to "operate". However, unless the wire is quite heavy, it may not be strong enough to hold in the mass of damp leaves, grass, twigs, etc. inside the container. The bin can be square, rectangular or circular. The bin should be able to contain a pile that is three feet tall by three feet square.
- \Rightarrow For pre-manufactured compost bins, check out your nearest hardware or garden center.
- \Rightarrow -Your compost pile should be started on bare earth. This allows worms and other beneficial organisms to aerate the compost and be transported to your garden beds.
- \Rightarrow Start with a layer of chopped leaves, grass clippings and kitchen waste like banana peels, eggshells, old lettuce leaves, apple cores, coffee grounds, etc. Keep adding materials until you have a six-inch layer, then cover it with three to six inches of soil, manure, or finished compost.
- \Rightarrow Alternate layers of organic matter and layers of soil or manure until the pile is about three feet tall. A pile that is three feet tall by three feet square will generate enough heat during decomposition to sterilize the compost. This makes it useful as a potting soil, topdressing for lawns, or soil-improving additive.
- ⇒ Keep compost moist, but not soaked and sodden. Water occasionally, or let rain do the job. -Cover with anything you have - wood, plastic sheeting, carpet scraps. Covering helps retain moisture and heat, two essentials for compost. Covering also prevents the compost from being over-watered during rainfall.
- ⇒ Turn (unless you utilize no-turn composting) Every few weeks give the pile a quick turn with a pitchfork or shovel. This aerates the pile. Oxygen is required



- Animal manure
- Cardboard rolls
- Clean paper
- Coffee grounds and filters
 - ♦ Cotton rags
- Dryer and vacuum cleaner lint
 - ♦ Eggshells
 - Fireplace ashes
 - Fruits and vegetables
 - Grass clippings
 - Hair and fur
 - Hay and straw
 - ♦ Houseplants
 - ♦ Leaves
 - Nut shells
 - ♦ Sawdust
 - Shredded newspaper
 - Tea bags
 - Wood chips
 - ♦ Wool rags
 - Yard trimmings



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