

Compost Education Education Center 615 Willow Avenue Ithaca, NY 14850-3555 Rotline 607.272.2292 for compost help acm1@cornell.edu www.ccetompkins.org/compost

## **Troubleshooting Compost Piles**

SYMPTOM	POSSIBLE CAUSE	POSSIBLE SOLUTION/ALTERNATIVE
Compost pile is damp and warm in the middle, but nowhere else.	The pile may be too small.	Gather enough material to form a pile 3' by 3' by 3' and/or insulate the sides and cover the top.
Compost pile isn't heating up.	If it seems damp and sweet smelling, it may be a lack of nitrogen.	Mix in fresh grass clippings, manure, blood meal or other material high in nitrogen. If it is difficult to turn the pile, create holes in the pile and add the nitrogen-rich material.
	Not enough oxygen.	Turn or fluff the pile.
	Cool weather	Increase pile size and/or insulate with straw or a plastic cover.
	The pile may be too small.	Gather enough material to form a pile 3' by 3' by 3' and/or insulate the sides and cover the top.
	Pile was built over several months.	Don't worry about it. Let pile compost "cold." Check for finished compost.
Compost pile isn't heating up.	Compost may be finished.	If it looks dark and crumbly and smells earthy (not moldy or rotten), it may be done. Use it! (If unsure, call for more info.)
The pile is dry throughout.	Lack of water.	Turn the compost and add water. Moisten new materials before adding to the pile. If the pile is out in the open, consider covering with a straw or plastic cover. The pile should be as damp as a wrung-out sponge throughout.
Matted, undecomposed layers of leaves or grass clippings.	Compaction, poor aeration.	Break up layers with garden fork or shred them, then re-layer pile. Avoid adding heavy layers of leaves, grass clippings, hay or paper unless first shredded.
Large, undecomposed items.	Size and composition of materials.	Screen out undecomposed items, reduce size if necessary and use in a new pile.
Compost pile has a bad odor like a mixture of rancid butter, vinegar and rotten eggs.	Not enough oxygen, too wet.	Turn the pile and add course dry materials such as leaves, straw, or corn stalks to soak up excess moisture. Protect the pile from rain using a plastic film or other cover.
	Not enough oxygen, compacted.	Turn the pile and shake materials apart to aerate.
Compost pile has a bad odor like ammonia.	Pile may have too much nitrogen.	Add materials high in carbon such as shredded leaves, non-treated wood chips, sawdust or shredded newsprint and aerate.
Compost pile is attracting rats, raccoons, dogs, flies or other pests.	Possibly inappropriate food scraps: meat, fat, bones, or byproducts	Avoid adding such material; use a rodent-resistant bin with a top, bottom and sides. Bury non-fatty kitchen by-products 8"-12" deep in the pile.
Compost pile contains earwigs, slugs and/or other insects.	Pile is composting correctly	Insects are a good sign of a productive compost pile. Note: slugs live happily in compost piles. If the pile is next to a garden, barriers can be placed between the pile and nearby garden with traps, metal flashing, etc.

## STOPPING TROUBLE BEFORE IT STARTS

<u>Material</u>	<u>OK?</u>	Comments
Barbecue ashes/coal	No	Contains sulfur oxides; bad for garden
Cardboard (CC)	Yes	Glue probably organic
Coffee grounds (N, P)	Yes, but	Acidic
Cooked food scraps	Yes, but	Low in nutrients and may attract animals if it contains oils or meat/dairy
Cornstalks, cobs (C, K)	Yes, but	Must be mixed with nitrogen-rich material
Dishwater	No	Most dishwashing soaps contain perfumes, greases, sodium
Dryer lint	Yes	This is a good one!
Eggshells	Yes	Crush; source of calcium
Fish scraps	No	Can attract animals; bury scraps in a trench
Grass clippings (N, P, K)	Yes, but	Not from lawns treated with pesticides; good nitrogen source when fresh, carbon source when dried
Grease	No	Does not break down well in backyard system; attracts animals & slows composting process
Kitty litter	No	Likely to contain disease organisms
Manures - horse, cow, sheep, goat, chicken, pig	Yes, but	Horse manure more likely than others to contain weed seeds; compost thoroughly
Dog, cat & bird manure	No	May contain disease organisms
Mushroom compost	Yes, but	May contain fungicides; low in nutrients, but good soil builder
Newspaper (CC)	Yes	Shred for compost, use shredded or flat for mulch; colored sheets now considered OK
Oak leaves (C)	Yes, but	Acidic
Pine cones (C)	Yes, but	Decompose slowly; acidic
Sawdust, wood shavings (CC)	Yes, but	High in carbon and must be mixed with nitrogen-rich material
Weeds	Yes, but	Only if weeds are green and seeds have not matured
Wood ashes (P,K)	Yes, but	Use small amounts; highly alkaline

N - Nitrogen, P - Phosphorus, K - Potassium, C - Carbon (All plant and animal materials contain carbon. A single C needs to be accompanied by nitrogen or it will rob nitrogen from the soil.) CC - Extra large amounts of carbon, so needs additional nitrogen.

Compost Chart adapted from National Gardening Magazine, June 1986