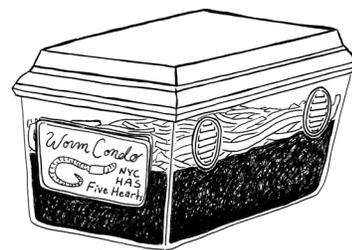


WORM BIN TROUBLESHOOTING GUIDE

Taking steps to avoid problems with your worm bin is often easier than getting rid of problems once they've started, so it's important to monitor your bin regularly for the symptoms below. If a problem develops that cannot be controlled, the best solution may be to harvest the worms and start a new bin from scratch, using what you have learned from your past experience to create a better bin.



SYMPTOM	PROBLEM	SOLUTION
Odor	exposed food	Cover food scraps with bedding.
	too much moisture	Add dry bedding so that it can soak up pooling water, particularly in wet areas. Reduce the amount of food placed in the bin.
	not enough oxygen	Add dry bedding; fluff up the bedding if it appears matted down.
	too much food; food not decomposing	Break food into smaller pieces, especially hard, woody items like stems. Freeze and thaw to break down cell walls. Feed worms less so that they have time to go through the food in the bin.
	food in bin is naturally odorous	Some foods are naturally odorous when decomposing (such as onions, broccoli, or cabbage, plants in the allium or brassica family). Therefore, remove foods that produce unpleasant odors if it bothers you. Don't add meat, bones, dairy, or oil products, as these turn rancid.
	dead worms	See worm death section below.
Fruit Flies <i>Try using flypaper traps or make your own fruit fly trap; house flies should not be attracted to your worm bin if you cover the food scraps with bedding material</i>	exposed food	Bury food under bedding material; cover the contents with a section of dry newspaper.
	too much moisture	Avoid overfeeding; add dry bedding.
	fruit fly eggs in food scraps	Cut fruit into small pieces; wash all fruits and peels, particularly bananas and citrus. Freeze fruit before feeding to worms or microwave fruit for 60 seconds. These actions help to kill fruit fly eggs. You can also simply avoid adding fruit.
Worm Death <i>Dead worms decompose rather quickly; you can have a bin with no worms before you realize it.</i>	bin is too wet; worms are drowning	Add dry bedding; leave lid off for an hour or two to allow water to evaporate. Make sure bin is well ventilated.
	bin is too dry; worms are drying out	Lightly moisten and turn bedding; add moist foods. Make sure it's not too hot for the worms.
	not enough air; bedding and food are matted together; worms are suffocating	Fluff bin contents to aerate. Be sure bin is adequately ventilated with holes; add paper tubes or other bulky paper products such as torn up paper egg cartons to increase air flow.
	not enough food	Increase food, or reduce number of worms.
	worms not eating	Avoid adding too much food at one time. Avoid very spicy foods, salty foods, large amounts of citrus, or toxic ingredients like alcohol.
	bin is too hot or too cold	Worms prefer the same temperatures that people do, so it's best to keep the bin in a location where the surrounding temperature is between 55°F and 80°F (13°C and 27°C). Smaller bins are more impacted by surrounding temperatures so keep these in a location with temperature controls.
	overabundance of mites (A small mite population is natural, but if you notice large collections of mites, you should try to remove them.)	Remove any food that has a congregation of mites. To reduce mites, bring bin outside and leave it open in the sun for 1–2 hours to dry it out a little. Repeat as necessary until mite population is reduced. To trap mites, place a slice of fresh bread in the bin, wait until mites congregate on it, and then remove the bread.

The NYC Compost Project, created by the NYC Department of Sanitation in 1993, works to rebuild NYC's soils by providing New Yorkers with the knowledge, skills, and opportunities they need to produce and use compost locally. **Learn more at nyc.gov/compostproject.**

nyc.gov/compostproject
Follow us @NYCzerowaste

WORM BIN CHECKLIST

Use these checklists to make sure your worm bin is functioning properly!



SIGNS OF A HEALTHY WORM BIN

- Bin smells earthy like the soil.
- Bedding and food scraps are disappearing over time.
- Worm castings are accumulating.
- Worms have glistening skin.
- Sufficient air space between the bedding.
- Bin has small quantities of other critters, such as mites or little white worms.
- Fuzzy mold on some foods.
- Bin contents are damp but not soggy.
- Food scraps are placed underneath the bedding so that they are not visible.

SIGNS OF AN UNBALANCED WORM BIN

- Water is accumulating inside the bin.
- Bedding and castings are dry.
- Castings and bedding are sticking to the worms.
- Bin has a foul odor.
- Food and bedding are matted in large clumps.
- Fruit flies present.
- Mites present in large quantities.
- Maggots present.



If the problem with your worm bin can't be controlled, the best solution may be to harvest the worms and start a new bin from scratch, using what you've learned from your experience to create a better bin. Contact the NYC Compost Project in your borough with any worm bin questions or problems.

WORM BIN PLACEMENT

Make sure your worm bin is placed in a good location for both you and the worms. Aside from your own aesthetic preferences, red wigglers are most active when the temperature inside the bin is anywhere between 55°F and 80°F (13°C and 27°C). Common indoor placements that often meet those temperature needs include the kitchen, laundry room, or basement.

If you want to keep your worm bin outdoors, you'll need to make sure it has enough shade in the summer and plenty of insulation in the winter to maintain the desired temperature range. Water can have a negative impact on your worm bin as well, so make sure your worm bin is protected from heavy rains as the worms can drown.

TRAPPING FRUIT FLIES

Here are some fruit fly traps you can make yourself:

- 1. Bottle fly trap.** Cut a small plastic water or soda bottle in half. Fill the bottom half with some apple cider vinegar or beer and a drop of detergent. Turn the top half upside down and place it into the bottom half so that the neck forms a funnel. Secure the two halves with tape.
- 2. Fruit fly bait.** In a small glass, vase, or similar vessel place one drop liquid dish soap, 2 t. concord grape or other juice, and 1 t. vinegar (any kind). Swirl together and coat the sides of the glass. Place on a dish (in case of spillage) near flies or on top of refrigerator. Dump out dead flies along with bait as needed (may be as often as twice a day initially). Replace bait and repeat until flies are gone.
- 3. Vacuum.** Don't let flies linger to lay new eggs. Use a hand-held vacuum to remove flying insects.



Bottle fly trap



Fruit fly bait