Tips for Using Composting Tumbler Bins in the Desert

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A composting tumbler bin is simply a holding unit for organic material. It confers no special magic to the composting process. How it is used will determine composting success. Here are some recommendations:

1. **Where to place the bin:**
   1. Place the bin in the shade in the summer months because high temperatures and intense sun on the bin will encourage evaporation of moisture. If you have no shady spot, drape two layers of shade fabric over the bin.
   2. If you have roller wheels as part of your tumbler bin, keep them clean so that they turn easily.

2. **Air and drainage holes:**
   1. There are holes for aeration and holes for water drainage in most tumbler bins. In the desert, we reduce the porosity of a bin by overtaping half of the air holes with good quality duct tape. This will reduce evaporation from the bin.
   2. The water drain holes must remain open.

3. **Processing choices:**
   1. **Cold:** This involves occasional additions. *Dump and Tumble*. Add whatever organics you have at any time. Mixing greens and browns is helpful to the decomposition process. Bulk as you build (see #4). Maintain 50% moisture at all times (see #5). With this process you may tumble (see #6) or let the bin remain static. It is your choice. For more details see our Cold Composting in the Desert Guide.
   2. **Hot:** You'll build a 1 cubic yard batch (about 170 gallons), mixing 50% greens with 50% browns plus bulking material (see #4) plus moisture, all at once. When content reaches temperature (about 150 F) in about 72 hours then tumble/turn. Do not overfill the bin; 3/4 full is enough. The hot process method should be tumbled/turned every seven days until decomposition is complete. Then, harvest finished compost. For more details see our Hot Composting in the Desert Guide.

The choice of a process, actively tumbled or static, hot or cold is up to the homeowner. The cold process is easy and it works well if you employ these recommendations.

4. **Adding composting material to the bin:**
   1. See Composting in the Desert for a list of organic materials (greens and browns) that may be composted.
   2. Gather ten gallons of coarse bulking material and store it near the bin. For example, sticks, twigs, pine cones, pine needles, corn cobs. These bulking materials decrease compaction thus improving air flow in the mix of organics and decreases the formation of clumps (balls).
   3. Except for coarse bulking material, chop, shred, cut, rip or grind all organics before adding to the bin. Smaller organics decompose faster.
   4. Avoid the formation of balls and clumps in the bin by sprinkling in coarse bulking material as you add other organics. Bulking material helps decrease compaction of other added wet organics. Each time you make an addition of greens and browns, sprinkle an inch of bulking material on top, then tumble as in the Dump and Tumble process (#3a).
   5. Do not compact or compress additions. Just add them to the top.
5. Moisture:
   1. Maintain 50% moisture at all times. Sprinkle with water as necessary. Content of the bin should have a moisture level similar to the residual moisture in freshly brewed coffee grounds or a wrung out sponge. Moist but not dripping.
   2. Moisturize (soak) dry materials (browns) before adding to the bin.
   3. Avoid standing liquid in the bin. This would encourage anaerobic decomposition which will cause unpleasant odors. Be sure that your drain holes are patent.

6. Tumbling the bin: There are no hard and fast rules. Some guidelines:
   1. Follow manufacturer's suggestions. Use common sense.
   2. Make an addition, then add coarse bulking, then tumble to blend.
   3. If contents dry, then tumble and moisturize by sprinkling with water.
   4. If content is too wet, then add dry material and tumble to mix.
   5. Over-exuberant tumbling may actually disturb the microbial process. Once per week is probably good enough.
   6. Contents will not tumble (mix) well if the bin is overstuffed. 3/4 full is enough. Leave space in the bin for movement of the contents. Avoid an overstuffed bin.
   7. Tumbler bins may be used statically (not turned) as long as you continue to add coarse bulking material and maintain moisture at 50%. See #3a.

7. Harvesting finished compost:
   1. In a tumbler, if you are doing the Dump and Tumble method (#3a) you are frequently adding undecomposed organics to that which is already decomposed. Harvest that which is decomposed after 6 to 12 months from the first addition.
   2. Separate and screen out the bulking material, then slowly re-add the undecomposed material to the bin.
   3. Finished, screened compost looks like coffee grounds, dark brown, with a pleasant earthy scent. Harvest it from the bin every 6 to 12 months. Then you will know that you have finished product: compost. Undecomposed bulking material may then be re-used.

8. My bin is full (3/4). What do I do now?
   1. Harvest finished compost from the bin to decrease the load and make more space.
   2. Purchase an additional bin.
   3. Employ another composting process for the extra organics.
   4. Browns may be stored for future use and added later.

9. My bin is too heavy. I can't turn it. What shall I do? Harvest finished compost from the bin to decrease the load. (See #7.) And/or you may carry on the process statically (no tumbling) following the above recommendations for moisture and bulking.

10. Nothing is happening in the bin. What should I do? If you are using the Dump and Tumble method (#3a) you are usually mixing undecomposed materials with that which is already decomposed. Because of this blending, the finished compost is not always evident. Harvest from the bin regularly to get the finished product. Then you will know that decomposition is happening. See #7.

11. Where to learn more and get help:
   1. Attend a Composting in Tumbling Bins class. Visit Bernalillo County Master Composters: Classes/Activities for the Public to see when one is offered.
   2. Email us your composting questions: compost-questions@nmcomposters.org. Please include your residential zip code in your email.

Tumbler bin composting is experiential. Consider the above recommendations. Do it, you learn it.

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