

Composting Human Waste Suggestions from Anne Schatz

The System

1. Construct a bin (at least one cubic yard) over bare ground using wood, pallets, cinderblocks, or other found materials. It should be covered to shed excess water and exclude animals and be close to the home (there will be no odor).
2. Fill the bottom of the bin with 18-24 inches coarse carbon material and forest duff to act as a sponge.
3. Put several inches of fine carbon material in the bottom of the bucket. Use the bucket as a toilet indoors. After each deposit, cover with fine carbon material.
4. When full (about 1 week), or at the maximum comfortable carrying weight, take bucket to bin. Empty bucket and cover with coarse carbon material. Clean bucket and dump water into compost bin.
5. For subsequent deposits into the bin, open a hole in the covering material and dump the bucket into the center. Add more cover material (coarse carbon material). You are striving to layer coarse carbon material between bucket contents. Add kitchen scraps and food waste, too, to limit refuse buildup.
6. Before the bin fills, construct a second bin.
7. When the first bin is full, add a thicker layer of cover material and allow to sit (ideally for a year). Repeat previous steps for the second bin.
8. When second bin fills, empty first bin into a pile and cover with a tarp (for additional curing) or spread contents outdoors.

Minimum Supplies Necessary

- Bin to optimize heat, contain organic matter and cover materials, and preclude animals.
- Fine carbon material (sawdust, peat moss, shredded paper, needles, crushed leaves)
- Course carbon material (straw, weeds, intact leaves)
- Bucket

Optional Supplies

- Extra buckets
- Lids for buckets

- Toilet seat (can modify home seat, make a makeshift seat or buy a bucket seat)
- Shovel or pitchfork
- Long handled cleaning brush
- Soap (preferably biodegradable)
- Compost thermometer
- Tarps (to cover curing piles)
- Extra covered bins to collect carbon material

Examples of Coarse Carbon-rich materials

Straw, weeds, intact leaves

Examples of Fine Carbon-rich materials

Sawdust, peat moss, shredded paper, needles, crushed leaves

Examples of Nitrogen-rich materials

Green grass clippings, manure, carcasses, entrails, legumes

Suggestions:

- Optimizing carbon/ nitrogen ratio (20-35/1) in the presence of adequate moisture and oxygen will result in thermophilic (hot) compost.
- Composted organic material will be roughly one third of the original mass.
- Adding soil to compost will slow down microbial action and lower temperatures.
- The system, as described, produces no odors (if it does, add more carbon material), and has no flies.
- Adding human manure will ensure a concentrated nitrogen source for thermophilic composting. It really *will* get hot!
- With this system, it is not necessary (or desired) to turn the pile.
- Add buckets with lids (with optional items, if desired) and The Humanure Handbook to your emergency supplies.
- Read The Humanure Handbook. It's available online free as PDF's by chapter, or as an e-book for \$10 (both at humanurehandbook.com) or as a paperback for \$18.52 on Amazon.
- Watch "Humanure Compost Training in Haiti - Part 1 of 3" under videos at humanurehandbook.com to see how this system can be applied in a disaster scenario.