

DC Parks and Rec (DPR) Vermicompost BMPs

By Josh Singer



Why Vermicompost

Vermiculture is creating compost by feeding organic matter to worms.

- Advantages
 - Can be done inside
 - No heat
 - Worms reproduce on their own
 - *Highest quality compost*
- Disadvantages
 - Worms take more care
 - Limited to the number of worms in the bin
 - Sensitive to certain foods
 - Onions, citrus
 - Can take longer



Components of a Worm Bin

- 1 or 2 bin(s) with several 1/8 inch holes, and a lid
- 6-8 inches of **Moist** bedding
 - Ripped up newspaper
 - Pet moss/coconut coir
 - Straw
- Cup of starting soil
- Worms
 - Red Wigglers, *Eisenia foetida*
 - Need at least a 1000 worms
 - Uncle Jim's Worm Farm, Veterans Compost



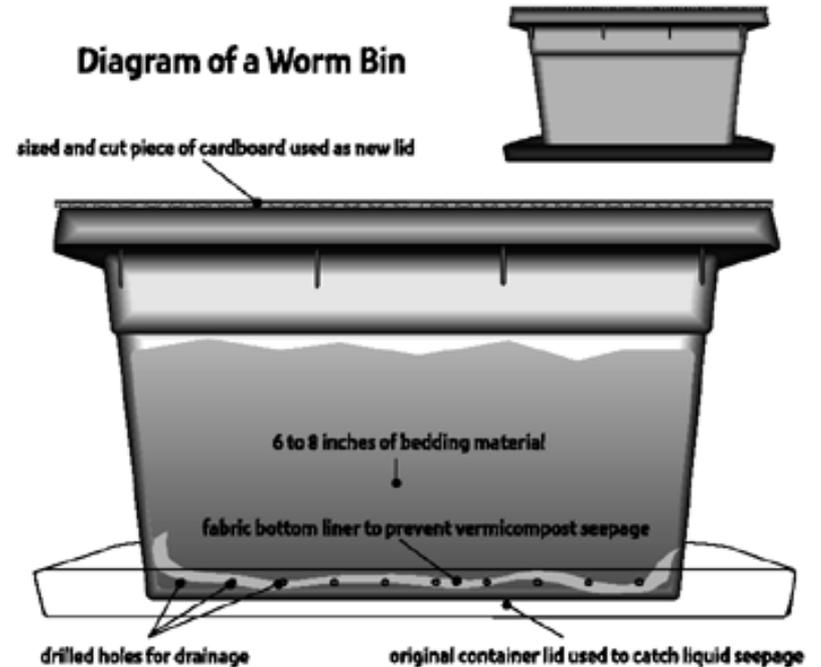
Construction Instructions

1. Drill 1/8 inch holes every couple of inches starting 6 inches off the ground.

- Drill several holes on bottom for drainage
- Do not drill holes on lid.



Diagram of a Worm Bin



Construction Instructions

1. Create the bedding by ripping newspaper into long thin strips on the bottom of the bin.
 - Fill the bin up 6-8 inches.
 - Can use peat moss, coconut coir, etc
2. Add a cup of starter soil
3. Wet the bedding with a spray bottle.



Alternative Worm Bins

- Worm Hotel
 - Great for indoors
 - Worms work their way up
- In ground worm bin
 - Hardware cloth bottom
 - Cinderblock walls
 - Wood top cover
 - *Keeps temp regulated*



Harvesting a Worm Bin

Method #1

- Push the finished compost all to one side.
- Add fresh bedding and food scraps to the other side.
- In 2 weeks all worms should be in the new bedding area.

Method #2

- Create a new bin with bedding and food scraps.
- Place on top of the old bin
 - Holes in bottom of new bin should be touching the compost in the old bin
- Wait 2 weeks



Feeding Your Worms

- Worms can eat most raw fruits and vegetables
 - Avoid lots of citrus and onions
- Always add food to top
 - If possible bury food in fresh and moist bedding
- Don't feed more food scraps than the worms can eat in a week.
- Only add more food after the worms have eaten 2/3 of previous food scraps



Vermicompost Bin Storage

- Worms can survive in temp 50-85 degrees.
- They are most active in temp 60-75
- Store in a dry shaded area
- Bring inside during winter or bury in ground and cover with lots of mulch.



Vermicompost Trouble Shooting

- Flies
 - Cover food in bedding
 - Have extra newspaper next to bin
 - Use a large loose newspaper covering
 - Chop food scraps small
 - Avoid rotting food
 - Don't over feed
 - Staple fly paper strips on inside lid
- Odor
 - Too wet
 - Add more bedding and mix
 - Check drainage and air holes
- Dying worms, escaping
 - Too wet, too dry
 - Not enough air
 - Not enough food
 - Extreme temperatures



Further Questions

- Contact Josh Singer
–Joshua.singer@dc.gov

