

# SUSTAINABLE ORGANIC & WISE

Spring 2010 ♦ Volume 2 ♦ Number 1

©2010 Good Earth Worms, LLC



Colorful tulips show the exuberant benefits of having been bedded in vermicast-enriched soil.

## Vermicomposting: Simple Is Better

Vermicomposting is just a fancy word for composting with worms. With their help, much of what currently ends up in our landfills can readily be converted into nutrient-rich food for our soil. So let's use it! We'll be saving energy, reducing waste and acting locally to nourish the earth.

When we share the standard vermicomposting "recipe," friends have told us that weighing a week's worth of food scraps and dividing by 7 to get a "daily average" of what they normally toss is too complicated. So, here's a simpler way to guesstimate how many worms you'll need:

*Eisenia fetida* (redworms) are the most common worms used for composting. A pound of redworms will convert about a half-pound of organic matter each day into castings. If we're talking fresh produce, that's about 1 cup of kitchen scraps. So what does one pound of redworms look like? About 2 cups full. Yep, since worms and fresh produce are both made up primarily of water, they weigh pretty much the same – so use that as a guide. But remember, worms are like us. Sometimes they're hungry; sometimes they're not. Overfeeding will lead to problems in your worm bin.

Redworms reproduce rapidly, doubling in population every 3-4 months in the right conditions. So, even if you start out with a small number of worms, you'll soon have enough to take care of most of your household organics. We recommend and sell **The Worm Factory**.® Ask us about it!

## Worm-keeping Tips!

- A moist environment is essential. Bedding should be about as damp as a wrung-out sponge. A little too wet is better than a little too dry.
- Redworms are "litter dwellers." Indoors, 5"-10" of bedding works well. Crumbled leaves, garden litter, and shredded news or office paper makes great bedding.
- Add a handful of dirt. Worms need grit to "chew;" they don't have teeth.
- Redworms work best at the same temperatures we do, 60-75° F.
- Place only a small amount of food beneath the bedding to start and allow worms to migrate into it.
- Worms breathe through their skin. Make sure your worm bin is well ventilated and that bedding does not become compacted.
- Your worm bin should be virtually odorless. If it stinks, you've got a problem.
- Worms *need* darkness. When exposed to light, they burrow.
- If living conditions become overcrowded or unhealthy, worms may stage a "walk-out." Divide worms before this happens.
- Dispose of meat, bones, & dairy elsewhere. Limit citrus.
- For more tips, go to [www.goodearthworms.com](http://www.goodearthworms.com).



8504 Shamrock Ranch Rd.  
Fort Collins, CO 80524  
(970) 416-1424

Betsy Lynch & Matt von Riesen  
[www.goodearthworms.com](http://www.goodearthworms.com)

## Detox for landscapes: a 12-step program

### Just say “no” to chemicals (fertilizers, herbicides, pesticides)

◆ We’re bombarded by commercials that promote synthetic solutions to lawn and garden “problems.” Follow Mother Nature’s lead. She’s been growing bountiful plants forever without the help of the agri-chemical companies.

### 2. Choose high quality compost for lawns, gardens & crops

◆ High quality compost begins with high quality organic matter. Beware of “biosolids” (human waste). Who knows what toxins are left behind in sewage sludge and municipal waste? Learn whether livestock manure has undergone a “thermophilic” (hot) stage, how long it’s been aged, and the number of “turns.”

### 3. Leave grass clippings on the lawn

◆ Forget the weed and feed. Grass clippings are naturally high in nitrogen. They will feed your lawn and reduce water evaporation. Grass clippings in a compost pile really heat things up and can cause a big stink – literally!

### 4. Rotate your crops

◆ Foil pests and maximize soil productivity by alternating planting sites.

### 5. Use low till or no till techniques

◆ Forego the rototiller and let the natural soil organisms (nightcrawlers, worms, microbes, and beneficial insects) improve soil tilth. Disturb just the soil you need to seed or plant.

### 6. Mulch

◆ Suppress weeds and preserve water by using dried leaves, straw, grass clippings and/or a heavy layer of compost between rows and pathways. Use wood chips only in paths or places where you don’t intend to grow anything as they “steal” nitrogen from plants as they decompose.

### 7. Start your own “hot” compost pile

◆ Composting the traditional way requires a large enough heap of organic materials so it heats up as the greens and browns start to decay. Moisture and air are essential ingredients.

### 8. Start vermicomposting

◆ A hot compost pile is *not* hospitable to redworms. Start a separate pile, no higher than 18 inches, keep it moist, and ensure airflow by periodically “fluffing it. You can move your worms into an indoor bin this fall.

### 9. Plant heirloom and open pollinated seed varieties

◆ Preserve and promote natural diversity by avoiding genetically modified crops. Harvest, save and share seeds with friends and neighbors.

### 10. Embrace “soil conserving” techniques

◆ Leave stalks standing after harvest, plant soil-building cover crops, use a slow drip H<sub>2</sub>O system and terrace to prevent run-off and erosion.

### 11. Replace lawn with edible gardens

◆ Unless you’re pasturing livestock, consider replacing grass with fruits, vegetables and edible plants for a return on your energy investment.

### 12. Support your local organic growers

◆ Join community supported (and neighborhood) supported agricultural (CSAs and NSAs). You, the land, and the local economy will thrive!

## Why worm castings are the perfect organic option

- Vermicompost is teaming with life. Beneficial microorganisms, humus, minerals, and residual organic matter make plants healthier and more disease and pest resistant.
- Unlike peat moss, vermicast is a readily renewable resource!
- The beneficial microorganisms in vermicompost help nourish and revitalize the soil.
- Vermicompost improves soil texture, permeability, water-retention, and keeps working long past the initial application.
- Vermicompost is a “gentle” organic fertilizer.
- A little goes a long way. A common rule-of-thumb is to mix 1 part vermicast to 4 parts soil (20%).
- Vermicast can be used to “top-dress” soil around established shrubs, berries and potted plants.
- Vermicast makes an excellent compost “tea,” that can be sprayed on foliage or used as a soil drench.
- Vermicomposting is being done to detoxify soils and sewage sludge.

## Vermicompost “tea” a whole different kettle than leachate

If you keep a worm bin, you’ may need to drain excess moisture from it from time to time. Some people incorrectly refer to this liquid as “compost tea.” However, this is actually “leachate,” a waste product that is best disposed of somewhere other than by dumping it into your favorite potted plant.

Leachate is the run-off from whatever has been thrown into the bin. The liquid may have bypassed the worm’s gut altogether - and it is the worms that do the essential work of purifying decomposing organic matter. Leachate may harbor harmful pathogens and provides little in the way of nutrients for your soil and plants. To be safe, pour the leachate on the lawn, down the toilet, or into the shrubs.

Vermicompost tea, on the other hand, is terrific for plants. “Brew” it by soaking worm castings in water for 24-48 hours (using an agitator/aerator is even better.) Apply it to the soil to inoculate it with the beneficial microbes that provide countless benefits.