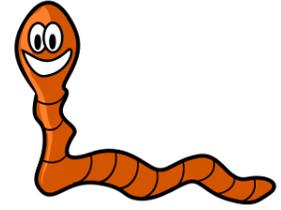




Building a Wormery

Why have a wormery? What's the big deal?

We can improve our semi-alkaline soil structure by adding compost, sulfur, and peat moss. We can improve our nutrient balance as well, but in order to accomplish this more efficiently, hiring out the work can help. Worms work for cheap, and as the worms munch their way through soil, they ingest clay, silt, sand, and bits of organic matter. This is expelled as water-stable granules called castings. These castings create soil capillaries and other spaces to improve soil structure, thus allowing water and air to flow more freely. This also facilitates deeper root growth for plants, and provides additional space for water storage. Soil that has been worked by worms can take in water 4 times faster than soil that hasn't. This also reduces runoff (wasted water), and prevents water loss through evaporation from puddles when soil cannot absorb rain or irrigation quickly enough.



Worm Count

If you dig in your soil and see a lot of worms, this is usually a good sign that you have fairly healthy soil, and this is usually due to the presence of organic material and a friendly environment.

If you dig an area of 12"x12"x7" and see fewer than 10 worms in your soil sample, this is a bad sign. The fewer worms, the worse the situation. The more the merrier; you can never have too many.

This is a sign that your soil is well-stocked with organic material and trace minerals will also be more available to your plants. Your soil is structurally full and fertile.

When and How to Transport Worms into Your Life and Garden:

It's definitely not advised to transport worms into your soil if the conditions aren't just right. Without providing the ideal soil moisture, food, and temperatures, the worms will leave and move into areas with more favorable environments.

Then what?

First, build a wormery and add "vermicompost" to the less favorable areas of your garden, and before you know, worms will be moving in of their own accord. Also, the vermicompost will enhance your garden, lawn, and landscape.

Another great benefit to having a wormery is that it reduces your family's impact on the local landfill.

You may be surprised to learn that there is no odor or noise with wormeries. The wormery will take up less space than a composter. The amount of care involved with your wormery should be minimal.

How to Build a Wormery

You can buy a worm composting bin or make one out of a plastic garbage can or Rubbermaid style bin. You will need to drill holes at the bottom for drainage. Worms feed on scraps, and a lot of



moisture is produced. I put the lid of my bin under the container and collect the excess fluids. This worm tea makes a great liquid fertilizer for houseplants or transplants.

Cover the drainage holes with 1 inch of gravel. Cover this with a fine mesh screen or weed barrier cloth. This way, when trying to collect worm castings, you won't mix the gravel with the rest of the bin.

Next, add the bedding material:

- Shredded leaves, grass clippings
- Wet strips of newspaper, not including any glossy paper
- Wet strips of cardboard
- Kitchen scraps: vegetable and fruit scraps, bread, pasta, tea bags, coffee grounds and filtered, and crushed egg shells. Try to help speed up the process by cutting up large melon rinds
- A little peat moss, but not a lot, to avoid excess acidity
- Do not add:
Meat or dairy products; no animal manure; fatty foods, like peanut butter or mayonnaise take longer to break down; they may also develop odors or attract insects; fill your bin within a couple inches of the top, but do not pack down, as this may limit the mobility of the worms

Add worms:

Do not use earthworms, they do not adapt well to bins. Use red worms. You can usually find them at garden centers, bait shops, or online. I have had great success with vermico.com. Worms are usually bought in 1 pound increments. One pound generally equals about 1,000 worms. This is usually enough to start out with. They should start reproducing in 4 to 6 weeks of age. They are hermaphroditic (both male and female). Their numbers will not exceed the space and sustenance available.

To feed worms, use a trowel or small shovel to divide your bin into sections. Make a small trench and add kitchen scraps. Cover with the sides of the trench to avoid inviting fruit flies or gnats. It is a good idea to have about an inch of bedding on top of scraps. This also helps you to avoid creating odors. You should bear in mind that worms will die in absence of food source. You should try to add scraps to your bin every day or every other day. When the bedding is gone, you should remove the castings. Too many castings can be toxic, and can kill your worms. The easiest way to accomplish this is to push the bedding to one side of the bin and add fresh bedding to the side you have just emptied. In about two weeks, the worms will move over into the fresh bedding. After time has passed, scoop out old material. Add more bedding to the bin and continue feeding. Use the portions worked over by worms in your garden. Do this about every three months.



You should make sure the temperature remains between 55 and 77 degrees Fahrenheit. Due to this, it's not advisable to leave the bin outside throughout the winter. I have found that they do okay in a basement or insulated garage. Worms need moisture, but you should never allow the bin to become swampy or soupy. The worms may drown or leave. Worms are also sensitive to vibrations. Put a good amount of thought and planning into the area in which you will be putting the bin, to ensure as little vibration as possible. A few examples of areas that would have a lot of vibration are: around furnaces, refrigerators, or any speakers. The worms may try to leave in search of a better location.

You will find that building a keeping a wormery is a fun and worthwhile project. Worms do most of the work themselves, and we and our gardens reap the benefits! Happy gardening!