

# **EARTH HERDS: ALL ABOUT WORM COMPOSTING**

## **WHAT IS WORM COMPOSTING?**

Worm composting is a way to recycle food waste into a rich, dark, soil, by using the digestive capabilities of red worms. A worm compost is made in a container filled with moistened bedding (usually made of old newspaper) and red worms. You dispose of your food waste in the compost for a period of time, and before long, these wonderful wrigglers have decomposed all the waste into a rich compost of dark, fertile soil ideal for gardening.

## **WHY COMPOST?**

Around 30% or more of waste thrown into landfills is an organic food waste that could be salvaged through worm composting. The work that these worms do on our “food garbage” can easily be broken down into nutrient-rich soil that is wonderful for the environment. Though an easy and inexpensive worm composting system, you can prevent this valuable organic material from unnecessarily wasting away in a landfill, while at the same time benefiting from the fertile soil that a worm compost creates.

## **WHAT DO I NEED TO START A WORM COMPOST?**

In order to create a worm composting bin, you would need several items:

- *A container:* A worm compost bin can be easily made out of a wood or plastic container, a used washtub or shipping crate, an old fish bowl, and many other items. Commercially-bought worm composts are available as well. Normal worm composting bins are around 8 inches to 18 inches deep because of the shallow surface feeding habits of the worms. In addition, the size of the bin should also be dependent on the amount of food waste per week, one square foot of surface area per pound of food waste in a week. The container must be well ventilated, moist, and shady in order to keep the worms from overheating. Also, the bin needs to have an effective drainage system so that the worms will not drown. You would need to place the bin in a safe location, where there is no danger of the red worms inside freezing (usually below 32 degrees Fahrenheit) or dying of heat (above 86 degrees Fahrenheit). The compost bin should come with a ventilated lid that lets in oxygen at the same time it keeps out flies and other unwanted vermin. Good locations for a compost bin include: a kitchen corner, the garage, the basement, a patio, and the laundry room.

- *Bedding Materials:* Typical bedding materials used in a worm compost include strips of newspaper, shredded cardboard, shredded fall leaves, chopped up straw (and other dead plants), seaweed, sawdust, compost, and aged manure. A variety of bedding provides more nutrients and more rich compost, and a handful of soil is needed to provide necessary grit for the worms' digestion. Before filling the compost bin three-quarters full of bedding, you need to moisten the bedding so that it feels like a wrung out sponge. Worms breathe through their skin, needing moisture to help them in the exchange of air and secretion of wastes. Over time, the bedding and the food waste that you place in the compost will be eaten by the worms and turned into the dark, earthy soil that is a characteristic of a well-maintained compost.
- *Worms:* The best kind of worms for composting are “red worms” or “red wigglers”. These are a bit different from the kind of earthworms that you would find in the ground, but you should be able to acquire some at a local bait shop. Red worms are ideal for composting because of their large appetites, quick reproduction system, and ability to live in many different climates and areas of confinement. These little guys have a big bite; they can eat more than their own weight in food every day! So if you are purchasing red worms to get started on your first worm compost, two pounds of red worms for every pound-a-day of food waste is advisable. NEVER USE DEW-WORMS!! (They are very unlikely to survive).
- *Worm Food:* Worms are not very picky eaters, so a variety of food waste can be used in a worm compost. Some favorites of the creepy crawlers include: stale bread, apple cores, orange peels, lettuce trimmings, coffee grounds, tea bags, non-greasy leftovers, and vegetable scraps. It is unwise to try and compost meats, dairy products, oily foods, and grains because of problems with smells, flies, and rodents. Glass, plastic, and tin foil are definitely “no-no's” when it comes to composting. It is wise to spread out your food waste along the bin, and to cover it a little with the compost bedding. This further prevents the problems of flies and maggots that would give the compost a “stinky” smell.

## **HOW DO I MAINTAIN MY WORM COMPOST?**

Once you have obtained the correct surface area-to-worms-to-food scraps ratio, all you need to do is add the food and bedding until around two to two and a half months have passed. By then the contents of the worm compost would have changed from a large mass of bedding to a smaller portion of the rich, dark, earthy soil that so many gardeners would die for. Once this has taken place, it is very important for you to separate the worms from their compost, otherwise, the compost has a poisonous effect in them, and you would have to deal with a whole lot of dead worms. There are several different ways for you to remove the compost, and you should chose which one is most comfortable for you. The quickest way is to scoop the finished compost to one side of the bin while placing new bedding and food waste on the other. The worms will eventually shift over to the side with the new bedding, and then you will be able too extract the rich compost from the bin. Another way that is more time-consuming, but is effective for removing all of the compost is for you to dump the entire contents of the bin onto a large plastic sheet and separate the worms by hand. You might find this “messier” way a lot more pleasing, and also a fun way for children to play in the dirt while getting something productive done. When you’re separating the worms from the compost, watch out for tiny, lemon-shaped worm cocoons that can contain between two and twenty little baby worms! When you separate the worms from the compost, you save more worms for your next bin. Mix a little of the finished compost in with the bedding of the new bin and you can do whatever you want with the rest!