

WORM FARMS WORM COMPOSTING VERMICOMPOSTING



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Pets

Worms make great pets because they're easy to care for. They can be a ready supply of bait for fishing & they are also good for your garden. They help aerate the soil & they provide nutrients for your plants. They will also do some of your recycling for you.

Materials: worms, home, bedding, food, plastic bag or rubber gloves

About worms

Worms need moisture, air, food, darkness & warm temperatures.

They are most active between 55-75F but can tolerate 40-84F.

Worms are not slimy, just soft & moist. They like the dark & will try to hide when you take them into the light. These worms are not natives & should never be let loose in the Preserves or Wetlands because they might displace or breed with our native worms. This is not a good idea because we don't want to lose our native species. These exotics are invasive which means there will be too many of them & that can cause harm. They can be used in your garden as long as your home is not next to a Preserve or Wetland.

Worm Farms

The worms that are used for composting & worm farms are Red Worms or Red Wigglers. They are used because they don't mind the confinement & will quickly decompose their food. They can be purchased from bait shops, on line or from an organic gardening magazine. Do not use Night Crawlers or garden worms. They won't do well.

Food

Worms eat decaying vegetation. Their bodies break down the plant matter into byproducts plants can use. So they are providing nutrition for plants. You can feed them fruit, vegetables, coffee grinds with the filter, tea bags without the staples, crushed eggshells & garden weeds. Fibrous material like celery & banana peels should be cut up. Don't feed the worms meat, fish, oil, & dairy products because they can make your worm's home smell bad & can attract pests. Onions & broccoli will also smell bad. Avoid citrus fruit & tomatoes since they are too acidic & can attract fruit flies. Melons can also attract fruit flies. Bread & other grain products are controversial because they often contain oil or other products that might not be good for your worms. You can feed them as infrequently as once a week. Don't give them too much food at one time or the bin could begin to smell before the worms get a chance to eat all of it. Excess food can also attract flies. The food can be put under the bedding, under some damp shredded paper, or laid on top. The food should **NOT** be laid on top if you keep the bin outdoors to keep pests out. Keep excess food in a plastic bag or container in the refrigerator so you don't create a mold problem.

Compost

You can harvest the castings (worm droppings, compost) in three to five months or wait up to a year. Put the food on just one side of the bin when you want to harvest the compost. This way most of the worms will move to that side to feed. Two weeks later you can remove the composted material from the other side of the bin. You can also dump all the contents on a larger plastic tarp or bag & make piles to separate the worms, eggs & uneaten food & bedding from the compost. Add additional bedding after you've removed the compost. The worms will eat their bedding as well as the food you give them. "Compost Tea" can be made by adding 1-2 inches of the compost to your watering can & rain barrel. Let it sit for a few hours or over night. Mix & water the plants as usual. This helps make nutrients already in the soil available to the plants.

Home

A 10-gallon plastic bin works best. Put wood or Styrofoam boards under it to keep the container from sitting on the cold/hot ground. Wash the bin & put 10 – ¼ or ½ inch air holes around the upper sides. Add lots of small drain holes along the lower edge. **Do not** use a Styrofoam container. As it decomposes it lets off lethal gases.

Bedding

Use soil, humus, peat moss, hay, sand, shredded paper or newspaper (not colored paper) or a combination of these materials. Don't use potting soil since it usually has synthetic material in it like vermiculite or perlite, which the worms can't eat. Dampen the bedding so it feels like a damp sponge. When you use shredded paper or newspaper, soak it for 24 hours to remove most of the chemicals. Then drain the water or wring out the paper so it only feels damp. Pull it apart so there is lots of air in it. When you first put your worms in, make them feel comfortable by placing them half way down in the bedding.

More about worms

The worms can double their population in 90 days. They are hermaphrodites. They have both sexes but it takes two to lay eggs. The worms line up in opposite directions near their bands (clitellums). The worms are attached for about 15 minutes while they exchange sperm cells. Several days later the eggs come in contact with the sperm cells & form egg cases, which will separate from the worm & then fertilization takes place inside. The eggs normally hatch within 3 weeks & produce 2-7 worms per egg. The baby worms range from 1/8 inch to 1 inch & look like tiny white threads. Worms live about one year in the bin. When they die, you won't see it because their bodies are 90% water. They will shrivel up & become part of the compost. The new worms that are born will take their place.

Diane Goldberg

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