

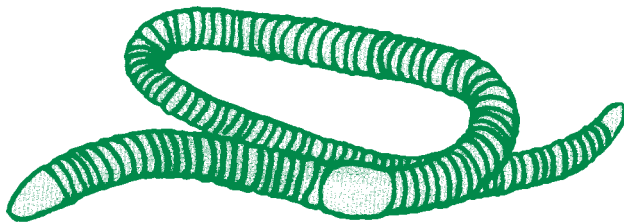
## Raising Earthworms

### INTRODUCTION

Have you ever been ready to go fishing and had trouble finding bait? You just know the fish are biting at that very minute but you're spending valuable time looking for bait! You can prevent this from happening if you raise bait at your own home. Earthworms are good bait and raising them is a good project that can be done easily.

### MATERIAL NEEDED

- 1 galvanized washtub or similar container.
- Bedding material.
- Screen wire for covering container.
- Small portion of lard, meat drippings or vegetable shortening.
- 1 piece of burlap and 1 quart watering jar.



### DIRECTIONS

Use a tub or similar container two feet in diameter and 10 inches deep. The type of bedding material you use is very important. Cured, dry cow, horse or rabbit manure makes a good bedding material. If you desire, you can mix up to 50 percent rotted sawdust, straw or leaves with the manure. Another good bedding material is a 50 percent mixture of clay loam soil and rotted sawdust, straw or leaves. Don't use pure soil or one containing sand.

Fill the container eight inches deep with bedding material. Add water until it is moist throughout. Be careful not to add more water than the bedding material can absorb. Usually one quart of water added about every two weeks is enough. If the bedding material is too dry, the worms will go to the bottom; if it is too wet, they will be on the surface. Keep the bedding material moist enough to keep the worms in the upper three to five inches.

For food, mix one pound of cornmeal and about one-half pound of lard, meat drippings or vegetable shortening with the top two or three inches of bedding material. One month later and then every two weeks, mix one pound of cornmeal and one-half pound of lard in the top few inches of bedding material. Add enough water to moisten the bedding material at this time. It usually takes about one quart.

To stock your tub, put 100 or more adult earthworms in it as soon as the bedding material, food, and water are ready. Cover the soil with damp burlap bags to prevent evaporation. You can buy worms or obtain them from a friend's worm bed. They need no other attention.

Within four to six weeks, you will find numerous small worms, and in six months the bedding material should be saturated with worms. A container two feet in diameter and 10 inches deep should produce approximately 3,500 to 5,000 fishing worms in a year.

You will have to control pests such as mites, ants, rats, and mice because they will eat the lard. Mites are a small grayish animal about the size of a pinhead. They don't prey on worms but their presence is a symptom of too much water in the bed. Rats and mice can be



controlled by placing a screen wire cover over the container. To control ants, set the container on small blocks that are set in pans of oil.

To harvest your worms, remove the bedding material containing the worms from the tub and throw it loosely in a 10-quart bucket. Let it stand about 30 minutes. Remove the top bedding material from the bucket and put it back in the tub. You will find most of the worms concentrated in the bottom few inches of the bucket.

To overwinter the beds and protect them from freezing, move them to an area not subject to freezing.

As the bed gets older, it gradually fills with decayed feed. This feed is still usable as long as it has a sticky consistency, holds water well, and is a brown color. As it ages, it turns black, crumbles readily, loses its water-holding capacity and becomes very acid. Worms will not reproduce and grow well. The bedding material should be removed and the bed restarted.

Discarded bedding material is an organic substance called castings. It is excellent for use on flower or vegetable gardens.

## THINGS TO DO

1. Raise earthworms as described in this activity. Keep a record of all costs, dates of watering and feeding, dates and kinds of pest control, and number of worms harvested.

## OTHER SOURCES OF INFORMATION

- MacPherson, T.C. 1959. *How to make earthworms pay*. Abelard-Schuman, N.Y.
- Gaddie, Ronald E. and D.E. Douglas. 1975. *Earthworms for ecology and profit*. Bookworm Publishing Co. Ontario, California.
- Gardner, D.T. 1976. *Fish bait production*. Circ. E-33. Cooperative Extension Service, Auburn University, Auburn, Ala.

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