



Everything you wanted to know about worms

What are Vermiculture and Vermicomposting?

Simply put, vermiculture is the raising or "farming" of worms. Vermicomposting is the ecologically friendly system or technique of using worms to recycle waste into beneficial products for plants and gardening.

What are the benefits of using worms?

The benefits are many. *It's simple, safe and fun. *It's perpetual once established. *It's organic. *It makes the "best fertilizer known to man."

Is it expensive?

No! After your initial investment, it's free. Initial start-up costs are less than \$70.00

What kind of worms do I need and how many?

Red wigglers (*Eisenia Foetida*) are the best – they are hardy, have enormous appetites and breed prolifically! One pound of worms (about 800 – 1200) is a great start, but your results will improve when you start with greater quantities.

Where can I raise them?

Worms can be successfully raised both indoors and outdoors. Indoor set-ups, either in the kitchen or garage, offer a convenient way to feed and water your worms without having to go outdoors. Outdoor set-ups – compost piles, flower beds, and potted plants – keep the worms outside with convenient access to organic matter in the form of lawn clippings, leaves, etc.

Will my worms reproduce?

Absolutely! Under ideal conditions the growth and reproduction rate is as follows..

Growth Rate

30-75 days to hatch from cocoon
50-80 days to sexual maturity
80-150 days from hatch to mature

Reproduction Rate

3.8 cocoons per adult, per week
83.2% hatch success
3.3 worms per hatch

Net production of 10.4 hatchlings per adult, per week

What are worm castings? Are they really black gold?

Worm castings are the "waste" produced by the digestive process of worms. It's their poop, and it's like *black gold* for your garden and plants. Castings are full of minerals, vitamins and nutrients that have been broken down for easy uptake by plants. Side dress your plants and broadcast castings on gardens and lawns for best results. Or mix up to 50/50 with potting soil for healthy indoor plants.

Quick Glance Guide to the Proper Care and Feeding of Worms

Container and Bedding (if not using a compost pile):

A plastic opaque bin or tote with a lid is an easy way to start. Using an 1/8" drill bit, drill holes 1" from the bottom all the way around the sides, spaced 2" apart. Drill about 12 in the lid. One pound of worms require 1 square foot of surface area and about 4-8" of bedding depth. Coir, an inexpensive and renewable resource, makes an excellent bedding to start worms in. Add shredded paper and cardboard (NO shiny or glossy paper.) The coir and paper should be as wet as a wrung out sponge. Fluff the materials together. Add the worms and place under a light for 24 hours. This encourages worms to stay down until they are used to their new home. After 24 hours, add small amounts of food just below the surface of their bedding.

Watering and Fluffing:

Keep the bedding moist at all times, but NOT wet. Rain water is best. If you have to use city water, fill a bucket and place it in the sun for 24 hours. This will reduce the amount of chlorine and chloramines in the water. If using a tote or bin, you should fluff it every week. This allows gases to escape and adds oxygen to the colony. If using an outdoor compost pile, water it as needed.

Temperature and Light:

The best temperature range is between 40-85 degrees. In an outdoor pile, follow the rule of 24. If you were a worm, you would want 24" of material between you and daylight. This allows the worms to self regulate temps by moving in and out of the core of the pile. If using a bin, keep it covered to keep humidity high and light out.

Feeding:

When starting a new bin, wait 24 hours to feed. After that, start slowly, feeding only what they will eat in a day. Lightly cover their food with damp paper or bedding. This will help avoid fruit flies, gnats and any foul odors.

Feed your worms:

Grass clippings (sparingly in bins)
Non-glossy paper
Compost
Egg shells
Coffee grounds, filters and tea bags
Fruits and Veggies
Bread and Noodles
Livestock manure

Do not feed:

Meat products
Dairy products
Vinegar (rinse your salads before feeding)
Free salt (nuts, chips, popcorn)
Citrus (O.K. in a pile not bin)
Grass clippings (small amounts in bins)
Pet Feces
Onions and Peppers (small amounts in bins)
***Pineapple (It *may* be harmful to worms)