

Massachusetts Master Gardener Association

FACT SHEET

Have gardening questions? Contact the **Master Gardener Help Line.**

Two locations / two ways to contact us:

At *Mass Hort, Wellesley*: mg helpline@masshort.org, 617-933-4929

At *Tower Hill Botanic Garden, Boylston*: hortline@towerhillbg.org, 608-869-6111 x104

Please visit our web site for Help Line open hours <http://massmastergardeners.org/what-i-do/>



Vermicomposting

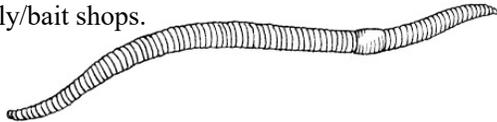
Vermicomposting is simply composting with earthworms using a bin. Worms live/multiply, aerate the organic material in the bin, and enhance the finished compost with nutrients and enzymes from their digestive tracts.

Vermicompost systems easily turn food scraps into a valuable resource rather than sending them to a landfill. Adding vermicompost (worm castings) to garden soil provides nutrients and helps it retain moisture.

THE WORMS

Red worms – also known as “red wigglers” – are the best earthworms to use; they thrive in decomposing organic matter. Once the worm bin is fully established, red worms will eat and expel up to their own weight in compost every day. A small bin will yield pounds of vermicompost.

Worms are available from various local sources or fishing supply/bait shops.



THE BIN & BEDDING

Worm bins can be purchased from a supplier or you can make your own inexpensively using a plastic storage container. (See “How to” information at right.)

Red worms can thrive in many kinds of bedding material. Bedding should be high in carbon: fall leaves (small or shredded), shredded paper (e.g., newspaper, paper towels, paper bags), ground cardboard (worms especially like cardboard!) or peat moss. If using peat moss, mix it with other bedding material, as it is too acidic to use alone. Also mix in a few handfuls of soil.

In addition to food waste that you add to the bin, worms also eat their bedding. Dampen bedding material until the moisture content is 50% (as damp as a wrung-out sponge). To avoid odors and prevent worms from dying, it is important to keep the bedding this damp but not soggy.

Worms prefer temperatures 40°- 80° F. Good bin locations include basements or garages that don't freeze.

HOW TO MAKE YOUR OWN BIN

You will need the following materials:

- Opaque-colored rectangular plastic storage bin with a lid (A 10-gallon bin is a good starter size.)
- Sufficient bedding material to fill the bin about three-quarters full (See “Bedding” at left.)
- Food scraps (3 lbs. per week)
- 2 cups ordinary soil, any type
- Red wiggler worms (1 lb. to start)

Starting just below the lid overlap, use a drill to create two rows of ventilation holes in the sides of the bin. Holes should be at least 1/8” diameter, 3-4” apart. To avoid leakage, don't put holes near or in the bottom of the bin.

FOOD

Worms will eat just about any type of kitchen waste including vegetables, fruit, coffee grinds, tea bags and crushed egg shells. Do not use meat or meat byproducts.

Worms can't eat food until it starts to decompose. To speed up decomposition, chop food finely. To prevent odors and fruit flies, bury food scraps completely in the bedding. Be careful not to provide more food than worms can eat in several days.

HARVESTING COMPOST

A new bin will take a while to get established. After about 2-3 months you will notice that the volume of materials has dropped substantially, and the original bedding is no longer recognizable. Move the finished compost and worms to one side of the bin, and add new bedding and new food wastes to the vacant side: worms will move from the finished compost in search of new food. Wait 2 more weeks and remove the lid under a bright light source. (Worms are very sensitive to light and will burrow away from it.) Scoop out the finished compost a few layers at a time and place in a plastic bag or container. Now add fresh bedding, and the process starts all over again.

Use vermicompost sparingly in your garden: nutrients are very concentrated, and a little goes a long way.

The Massachusetts Master Gardener Association is a non-profit organization whose mission is to share knowledge and experience with the public through outreach programs in education, horticulture and gardening; to provide the Master Gardener Training Program to interested members of the public; and to provide graduates of the Master Gardener Training Program with educational and practical opportunities to extend their knowledge and interests in gardening and related topics.

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