## Tilth Worm Composting Bin

Materials::
$1 \quad 1 / 2^{\prime \prime}$ treated sheet of plywood
$1 \quad 14^{\prime}$ utility treated $2 \times 4$
1 16' utility treated $2 \times 4$
1 lb. 4d galvanized nails
$1 / 4 \mathrm{lb} .16 \mathrm{~d}$ galvanized nails $23^{\prime \prime}$ door hinges

## Tools:

Tape measure
Skill saw or rip hand saw
Hammer
Saw horses
Long straight edge or chalk snap line Screwdriver
Chisel
Wood glue
Drill with $1 / 2^{\prime \prime}$ bit
Eye and ear protection


This system is designed for composting vegetable food wastes using red worms. Food wastes and worms are "bedded" in shredded and moistened newspaper, cardboard, peat, or brown leaves. The worms turn both food wastes and bedding into a high quality compost suitable for use on houseplants, seedlings, or for general garden use.

To maintain this system, simply rotate burial of food wastes throughout the bin. Every 3-6 months compost should be moved to one side of the bin and new bedding added to the empty half. At this time, start burying wastes in the new bedding only. Within one month, worms will populate the new bedding, finished compost can be harvested and the rest of the bin can be re-bedded. During the winter, worm bins may be kept in a cool indoor space such as a basement or warm garage to avoid freezing. Bins may be placed in a shady outdoor space the remainder of the year. A properly maintained bin is odorless.

This bin can be built for about $\$ 35$ with new wood and hardware, or less using recycled materials. Worm bins can also be made from wooden boxes or other containers. Any worm bin must have drainage in the bottom and a tight fitted lid to keep moisture in and pests out. A starter batch of worms can be purchased at a small additional cost.

## Construction Detail:



TOP LID $2 x 4$ FRAME
WITH PLYWOOD COVER

Measure and cut plywood as indicated in the drawing above. To make the base, cut the $14^{\prime} 2 \times 4$ into five pieces: two $48^{\prime \prime}$ and three $28^{\prime \prime}$ long. The remaining $12^{\prime \prime}$ piece will be used to make the sides. Nail the 2 x 4 s together on edge with two 16 d nails at each joint as illustrated in the base frame diagram. Nail the plywood base piece on to the $2 \times 4$ frame using the 4 d nails.

To build the box, cut three $12^{\prime \prime}$ pieces from the $16^{\prime} 2 \times 4$ under the end of each side panel so that the 2 x 4 is flush with the top and side edges of the plywood, and nail the boards into place. Nail the side pieces onto the base frame. To complete the box, nail the ends onto the base and side. To reinforce the box, place a nail at least every three inches wherever plywood and 2 x 4 s meet. Drill twelve $1 / 2^{\prime \prime}$ holes through the bottom of the box for drainage.

To build the lid, cut the remainder of the $16{ }^{\prime} 2 \times 4$ into two $51^{\prime \prime}$ lengths and two 27" pieces. Cut lap joints in the corners, then glue and nail the frame together. Center the plywood onto the 2 x 4 frame and nail with 4 d nails. Lay top on the ground with the plywood touching the ground. Attach hinges to the top and back using the short screws to the top and the long screws to the back. Position hinges so the screws go through plywood to the 2 x 4 s .

