Wooden Worm Bin – 1.0

This worm bin can be built in an afternoon with simple tools and a minimum of materials. It is well sized for a typical kitchen with two people. Use the plastic bin size to properly size your wooden trays: I found a bin measuring 16” × 16” so the interior length and width were built to fit that bin inside. You may have to change the size depending on the plastic bin you find and amount of compost to be added (ca. 1”² per person). You may likely need to drill ¼” holes in the bottom bin for ventilation if moisture becomes an issue, but wooden bins are generally drier than plastic.

Materials
24 ft. – 6”-wide, tongue-and-groove or shiplap* cedar boards
2–3² – window screen
4–6² – ¼” hardware cloth
½ lb – 2 ½” screws
1 – low plastic bin, 16” × 16”, 12” × 24”, or similar

Optional: utility stapler, wood glue, paint

Tools
Saw Measuring Tape Drill Screwdriver Utility Stapler

*If you use shiplap, make sure the top of the bins has the outside lap and the bottom of the bins has the lap that goes inside.

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If you use this plan, we’d love to see a picture.
Cut List

6” Boards
6 – 18” long (sides)
6 – 18” minus twice board width (sides) (e.g., if board is ¾” wide, cut 16 ½” long)
3 – 18” (if lid to be set on top) or length between bin-top tongues, usually about 17”
(if lid to sit down between tongues).

Window Screen
1 – 18” × 18” (on top of bottom tray)

1/4” Hardware Cloth
2 – 20” × 20” (on bottom of top trays)

Instructions
Predrill all screws. Refer to schematic for measurements. Insure junctions are square.

1) Cut all pieces on cut list. Cut precisely or else the bins won’t stack properly.
2) Glue and screw the long sides to the short sides to create the bin segments using clamps or straps to help glue set up; repeat three times – fig. 1.
3) Center the window screen over the top edges what will be the bottom bin, then use another bin to push down on the screen, forcing the screen into its place; this bends the screen around the grooves – fig. 2.
4) Staple the screen from the top down along the inside shoulder of the tongue; staple every 2” – fig. 3.
5) Fold the excess screen towards the center of the bin and staple again – fig. 3.
6) Fold the edges of the ¼” hardware cloth to fit just inside the second bin segment (fold up ca. 1” on each side); put bin on the ground, right-side up and set screen inside on the bottom; staple the screen into the bin sides, double staples at least every 2”; repeat for third segment – fig. 4.
7) Put glue on all but one of the tongues of the lid boards and slot them together, leaving the tongue without glue exposed; strap or clamp together and/or staple from the surface through the tongue and groove to hold it until the glue has set; after it has set, rip the bottom board to create a square lid, cut exposed tongue if desired – fig. 5.
8) Assemble: place bottom (with window screen) over bin, another tray on top of the bottom (reserve the second tray until the first is full of worm casings), and the lid on top.