

# Worm bin bag for indoor vermicomposting and easy separation of worms from compost

by [amyoungs](#) on August 7, 2008

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## Intro: Worm bin bag for indoor vermicomposting and easy separation of worms from compost

Worm composting is an easy way to turn your food waste and shredded paper into rich fertilizer for your plants. You can also feel great about keeping your food waste out of the landfill, where it turns into methane, a stinky greenhouse gas. Worm composting, on the other hand, does not stink - don't believe me? Try it yourself!

As a long-time "worm composter" or vermicomposter, I have tried many different types of worm bin systems. I've made several of those simple boxes with holes drilled in them, wood ones, rubbermaid bins, etc. and while the worms seem happy in there, I am too lazy to separate the worms from the compost that results. I've also tried those stacking type, both the homemade type and the expensive worm farm type. I like those better, but I'm still not happy with lifting out those dirty, heavy trays to get to the good stuff in the bottom tray. It always gets my clothes and basement dirty. I read about a funnel shaped, plasticized bag called the "Worm Swag", which uses a "flow-through" system of composting where your leftover food goes in at the top, the worms hang out up there, eating the food and the finished compost can be harvested from the bottom. This inspired me to make my own worm bag integrated into a table I called the *Digestive Table*, which can be seen [here](#). People emailed me, wishing this was easier for them to build themselves, so I came up with this simplified version. I call it the worm bag.

This version of the worm bag is made of wood, so you'll need some tools, a saw, a drill, a carpenter's square and a palm sander. If you don't have access to these, or you just don't feel like getting dirty, you might be interested in the laundry hamper worm bag, which only requires sewing a bag and purchasing a laundry hamper frame (around \$20). Mine is a nice sturdy chrome style from the Container Store, pictured below. The bag part of this Instructable is designed for the wood frame style, so you'll need to adjust your measurements if you go with the laundry hamper frame instead. I decided to focus this Instructable on the wood frame style, because it is a little cheaper to build and more customizable.

I spent around \$40 on materials. This is what you will need and the approximate cost:

**\$7.50 for 1.5 yards of fabric** - 100% polyester felt. Ecospun from Joanne Fabrics is what I've used here because I like that it is made of post-consumer recycled bottles. I've also used landscaping fabric.

**\$1.79 for a package of 2 cord stops** Joanne Fabrics

**\$2.59 for a spool of thread** - 100% polyester or nylon. Cotton will disintegrate, so don't use it for this project.

**\$4.24 for 1 length of pine, 8' x 2" x 1"**

**\$6.48 for 2 lengths of pine, 6' x 2" x 1"**

**\$5.00 for a Rubbermaid wash tub** - or another brand that has a 12.5" x 12.5" sized tub

**\$5.00 ? for a 1/4" thick piece of plywood that is 20" x 15"** - not really sure how much this is, since I had some around.

**\$3.00 ? for 16 wood screws 1 1/4" long** - again I'm guessing on price here

**\$3.00 for some wood glue**

**\$3.00 ? for 2.5 yards of nylon cord** - I actually just used some old hiking boot laces I had around.

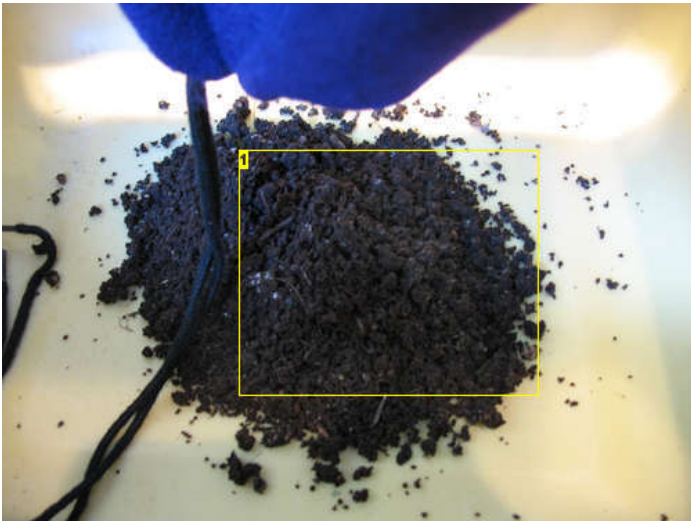
The finished project measures 24" tall x 20" wide and 15" deep. It will fit nicely in your home, pantry, basement or even at your office. Impress your work friends with your recycling gadget that eats coffee grounds, teabags, unwanted lunch scraps and shredded paper, turning it all into office plant fertilizer!



### Image Notes

1. Our homemade "Farm Fountain" grows edible plants and fish. The old plant clippings are fed to the worms and the worms are fed to the fish. To make your own Farm Fountain, visit [farmfountain.com](http://farmfountain.com)

2. Raw wood before I painted it. The lid can get warped and moldy from the moist environment in there, if you don't paint it...



**Image Notes**

1. finished worm castings! The bottom of the bag is untied and the castings, or compost comes out.



**Image Notes**

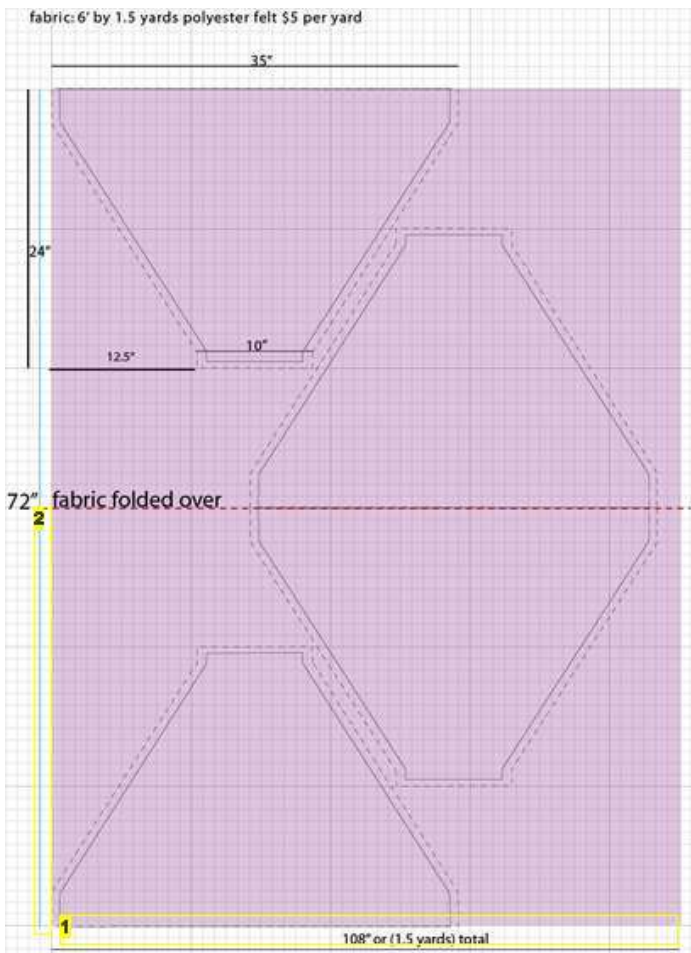
1. Even though this dish is more elegant than the washtub in the other model, I don't recommend it because it does not catch all the little leaks that can escape out of the bottom. These leaks are lovely, worm tea but you don't want that on your floor.  
2. This is an alternative version, which requires no wood construction. I bought the chrome laundry hamper frame from The Container Store for \$20. The bag is a different size than the one described in this Instructable, but it is based on the same basic concept.

**step 1: Layout your fabric**

We are starting with the fabric bag sewing part, then moving onto the wood construction.

The polyester felt fabric comes 72" wide and you'll need to get 1 1/2 half yards of it. The EcoSpun fabric I chose at Joanne Fabrics was only \$5 a yard and I saw a lot of great colors there. I picked a dark color because I did not want the coffee grounds and other foods to show stains. I'm not sure if they would though.

This fabric is not as thick as it needs to be to strong enough to hold all the worm goodness and keep it dark enough inside for them, so it is doubled up. In the pattern you'll see the basic layout and where to fold the fabric over. After folding your fabric, you will have a rectangle that is 42" x 36". Get a piece of chalk so you can map out where to cut it.

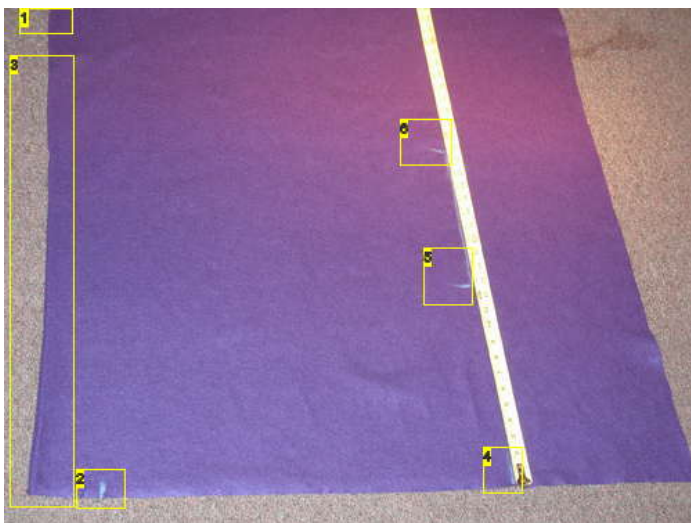


#### Image Notes

1. This edge is 1.5 yards total. Ignore the 108" number.
2. This edge is 36" once the fabric is folded over

### step 2: Chalk mark the measurements on the fabric

Now that your fabric is folded over, we will layout the pattern seen in the previous picture. Start by marking 35" over from the longest edge (the one that is 42"). Then mark 3" down, along the other edge (the one that is 36" because the fabric is folded over). Mark 24" down that same edge. Then place the ruler or tape measure as seen in this picture to mark over 12.5" and 24.5".

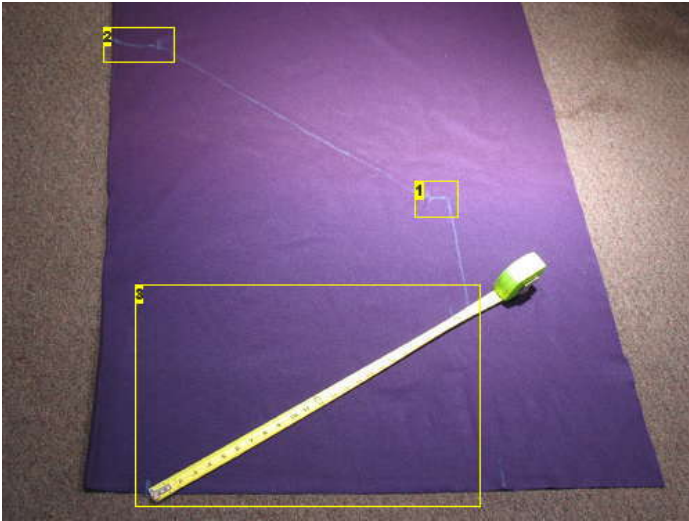


#### Image Notes

1. 35" mark not visible in this picture
2. 3" chalk mark, down from the 36" long edge
3. this is the folded over edge, mark 35" from the corner.
4. This is the tiny chalk mark made 24" down along the 36" edge
5. The 12.5" mark over from the 24" mark. If you could see the number on the tape measure, it would say 12.5" at this chalk mark.
6. 24.5 inches over. If you could see the number on the tape measure, it would say 24.5 inches at this spot.

### step 3: More chalk marking...

Those last 2 marks you made at 12.5" and 24.5" over are the bottom part of the bag. These marks should also be marked at 1.5" up, going towards the folded edge. Then make diagonal chalk mark lines to connect the top marking to the bottom marking as seen in the picture. I used the tape measure as a straight edge in the picture here.



#### Image Notes

1. This is 1.5" up towards the folded edge coming from the 24.5" mark made in the previous step. Same on the other side - mark kind of hidden under the tape measure.
2. This mark edge is 3" down from the folded edge of the fabric. Same on the other side.
3. use any straight edge to draw a chalk mark at this point. Do the same on the other side where you see the chalk mark between the yellow boxes above.

### step 4: Finally cutting that half of the bag and laying out the identical next half.

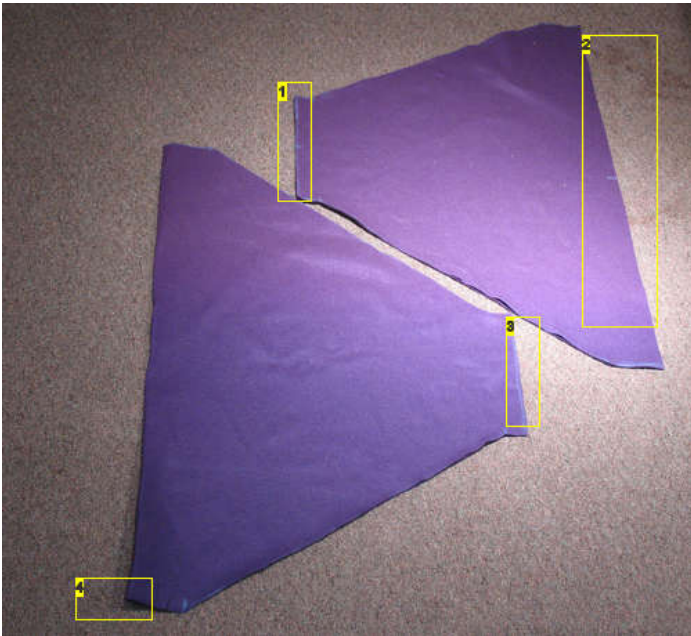
Lay out the second half of the bag along the edge opposite of the folded edge. This can be done exactly the same way as the last layout with chalk like I did here. If you are smarter, you'll instead cut out the first one so you can use it as a pattern to cut out the second half.



### step 5: pinning the top and bottom edges for sewing

Okay, so I don't have an overall picture with pins in it, but the notes show you where they should go, along the top and bottom edges, except for the folded edge, which is already connected.

The detail image shows how the pins go in along one edge.



**Image Notes**  
1. a pin

**Image Notes**

1. pins go here along the bottom edge
2. pins go here along the top edge
3. pins go here along the bottom edge
4. folded edge, no need for pins or sewing.

**step 6: sew each of the pinned edges (3)**

Sew along each of the edges you just put pins into. I made a seam around 1/2' to 3/4" from each edge. No need for perfectionism here.



**step 7: Fold each half inside out and insert nylon cord in top and bottom edges**

Each sewn half is like a tube now, that should be turned inside out so the seams are on the inside. They can be stacked on top of each other now and the nylon cords (or shoelaces) can be strung through the top and bottom of the bag. The cord needs to go through each half, right next to the sewn parts and loop through, connecting both halves. See the detail image. If you are using my old shoelace method will need to tie 2 together to span the length of the top edges.

Do the same for the bottom edge and slide the cord stops onto the ends to hold them together. Do it on the top cords too.



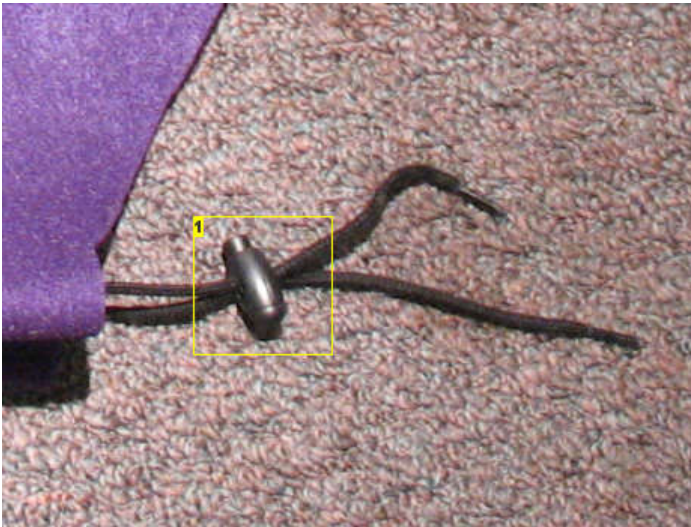
**Image Notes**

1. This is both halves stacked on top of each other. 4 total layers of fabric
2. nylon cord strung into the bottom, sewn edges



**Image Notes**

1. nylon cord or shoelace strung through top edge, traveling along the seams, which face inside.



**Image Notes**

1. handy cord stop installed. Mine were harvested from old camping equipment.

**step 8: pin the sides of bag**

Put pins in the sides to prepare for sewing. There are four layers of polyester felt here - a thick chunk that needs to be held into place for the machine to tackle.



**Image Notes**

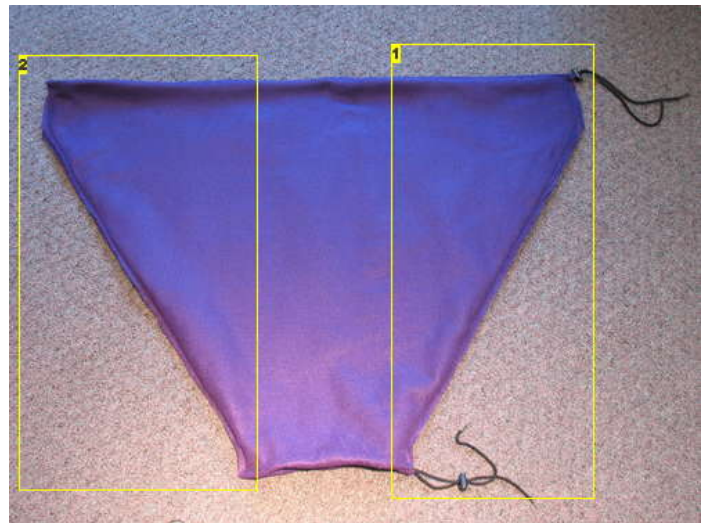
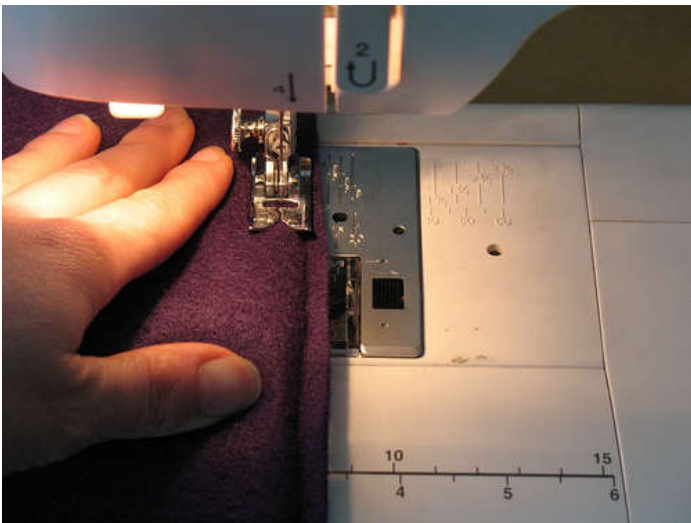
1. I won't sew over here, but I put a pin here to keep the cord out of the way of the stitches.

**step 9: Sew the sides of the bag and turn rightside out - last step for the bag!**

These need to be double stitched for strength. I first made 1/4" seams on both sides, then came back and sewed another row of stitches at 1/2". Don't sew all the way to the top and bottom edge though, you have to be careful to end each side right before hitting the nylon cord. If you stitch the cord it won't cinch the bag up properly.

Once the sides are double-stitched, turn the bag rightside out to hide those seams in the inside (the worms won't mind the seams, they can't see anything). The bag part of this project is done!

Let's prepare our wood frame now.



**Image Notes**

- 1. double stitched side
- 2. double-stitched side





**Image Notes**

1. notice that the stitching ends right before it would hit the nylon cord. Go back and forth with the sewing machine a few times to make sure it is reinforced there.

**Image Notes**

1. Stitching stops right before the edge so the nylon cord is allowed to freely move in there.  
 2. Stitching ends right before the edge.

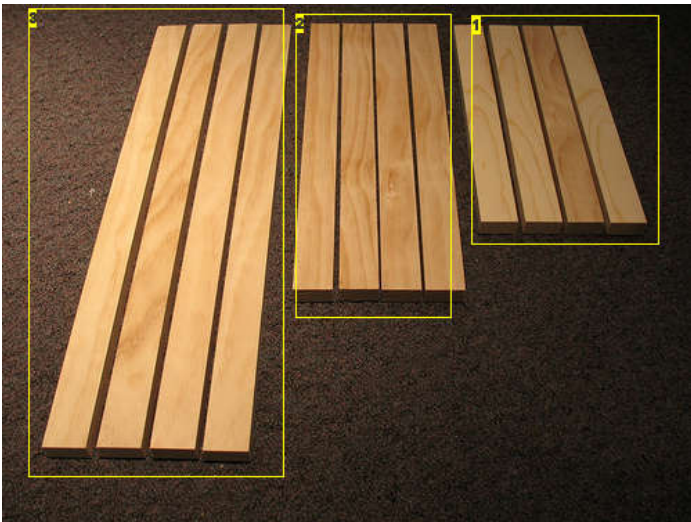
**step 10: Cut the wood for the frame**

All the wood for the frame is pine that is 2" wide by 1" thick. The lengths you'll need are:

- 4 pieces cut to 24" for the legs
- 4 pieces cut to 17.5" for the long sides
- 4 pieces cut to 14" for the short sides

At Lowes, where I purchased the wood, it came in 6 foot, 8 foot lengths (also longer, but those won't fit in my car). I bought 1 of the 8 foot lengths, which I cut into the 4 legs that are 24". I bought 2 of the 6 foot lengths which were cut into all the pieces for the sides of the frame.

I used a chop saw to make this go fast, but this could also be done with a circular saw or a even a jigsaw if you were good about clamping and keeping your cuts straight. However you choose, you must use your safety glasses and ear protection. Or, if you purchase the wood from a big box store such as Lowes or Home Depot you can have them cut the wood for you.



**Image Notes**

- 1. 4 pieces of 14 inch long wood
- 2. 4 pieces of wood at 17.5 inches long
- 3. 4 pieces of wood at 24 inches long

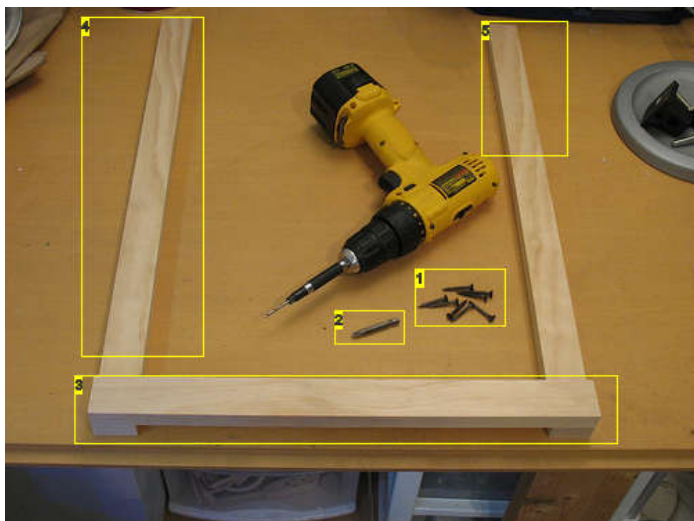
## step 11: Start assembly of wood frame

Get your drill, your drill bit, philips head driver bit, 1 1/4" screws and wood glue ready.

The drillbit is for making pilot holes before putting in the screws. Trust me, you need the pilot holes. If you are cowboy-ing it and skipping the pilot holes, don't be mad at me when your wood splits.

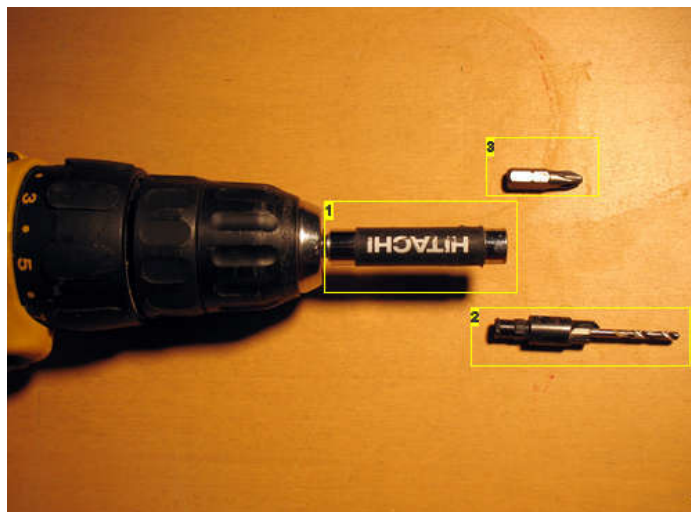
The pilot hole drillbit should be about 1/8", or slightly thinner than your wood screws. You'll also need a philips head driver bit to screw in the screws with your drill. Special bits that make this all go faster are a magnetic quickchange driver that fits into the drill chuck and a quickchange countersink drillbit, which will slip into the magnetic driver and drill a pilot hole at the same time as drilling a countersink divit into the wood that will allow the screw head to go in flush. It pops out of the driver magnetically, so you can pop in your philip's head bit to do the screwing part, all without undoing the drill chuck. Totally worth it! Check it out in the detail pics.

Lay out 2 of the legs (24" long wood) and one of the long sides (17.5" long wood) as seen in the main pic. Wood glue needs to be connecting the pieces that are touching, so flip the side piece upside down to apply wood glue on its ends and flip it back over.



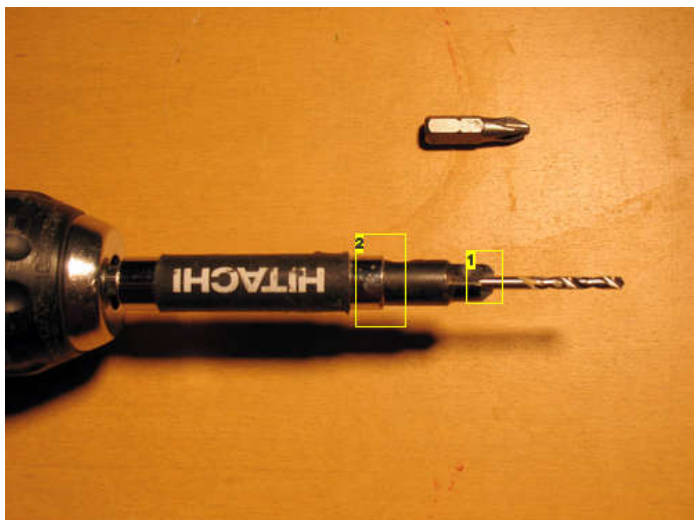
### Image Notes

1. wood screws or drywall screws that are 1 1/4" long. You'll need 16 of these to complete this project.
2. philip's head driver bit to attach to the drill and screw in the screws.
3. the 17.5 inch long piece of wood that will be one of the top sides of the frame.
4. one of the 24" long pieces of wood that will be a leg of the frame
5. the other 24" long wood that is a leg



### Image Notes

1. magnetic quickchange driver that fits into any drill chuck.
2. quickchange countersink drillbit is the amazing do-all bit! Drill your pilot hole and countersink all at the same time! The height of the drill part can be adjusted with a set screw.
3. Philip's head driver bit. It also slips into the magnetic quickchange driver.



### Image Notes

1. this is the section that does the countersinking - that little divit in the wood where your screw head sits down into to make it flush with the wood.
2. the wonders of magnetism, holding this bit into the driver



### Image Notes

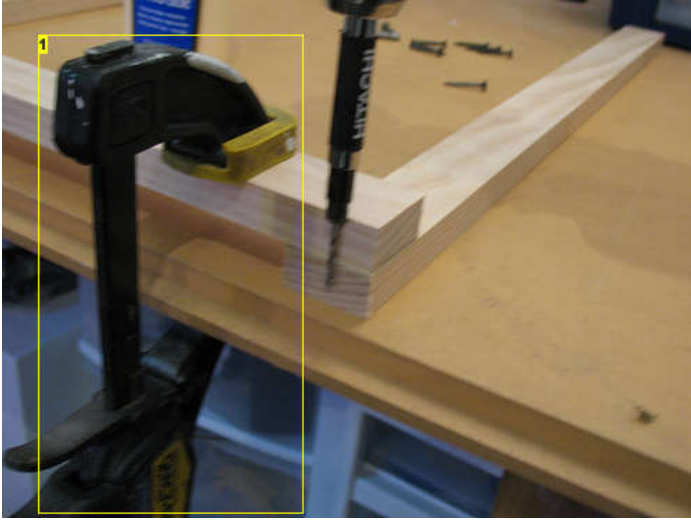
1. wood glue smeared here
2. wood glue smeared here
3. this piece is flipped upside down to apply the glue on the ends. Then you need to flip it back over.

### step 12: Drill pilot holes and put in screws

After glueing, you'll need to strengthen these connections with screws. In this main pic, I have clamped my wood together and am measuring my countersink drill bit for the pilot hole. I don't want the bit to go all the way through, just about an inch and a quarter, to match the length of my screws. After measuring, drill the pilot hole. If you don't have the countersink drillbit like me, you can use a plain countersinker bit, or even just use a large drill bit to make the divet for the screw head to be flush.

Now change to the philip's head screw driver bit and put your first screw in.

Then, repeat process - pilot hole drilling and screwing - on the other side.



#### Image Notes

1. A wood clamp makes this easy. Without a clamp, I'd need to get a friend to hold it for me while I did the drilling.



#### Image Notes

1. The little divet made by the countersink part of my bit. The screw head will sink down in there, making it flush.
2. the philip's head bit

### step 13: squaring it up

Use a carpenter's square (really and "L") and see if you have a right angle on both of the wood legs. If not, you can still move the wood before the glue dries.

Don't have a carpenter's square? Find something else around your house that has a right angle. A large book will do. Or the corner of a table.

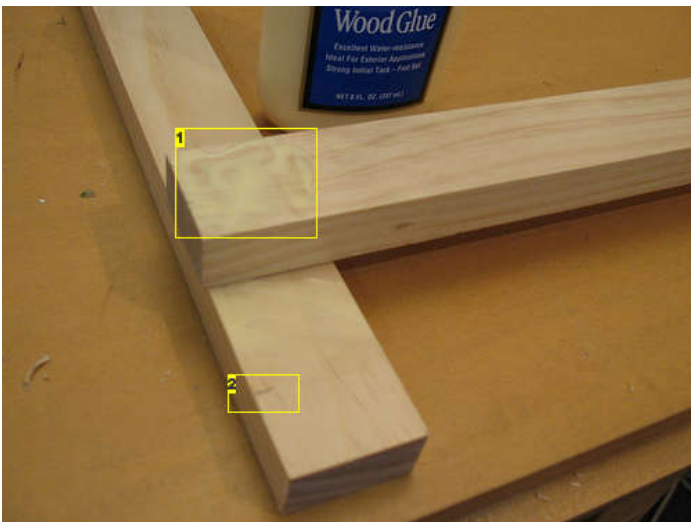


#### step 14: attaching the other side of the first frame and constructing an identical second frame

Get another piece of your 17.5" wood. This is the bottom side of your frame. Rather than put it exactly at the ends of the legs, it made more sense to me to measure up 1 inch from the bottom of the legs. It seems like it will make it stronger, plus it keeps all that extra wood surface area off of the floor. If there is a bump in the floor it would be wobbly.

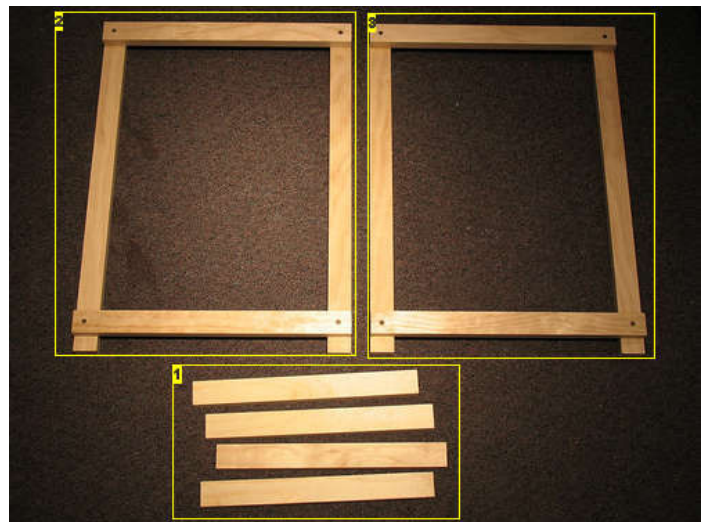
Smear glue on the end pieces, flip them over, stick them down, drill your pilot holes, screw in your screws and square it all up, just as you did for the other side.

Repeat this process to make an identical flat frame as is seen in the second pic.



#### Image Notes

1. glue smeared here
2. measured an inch up and marked here.

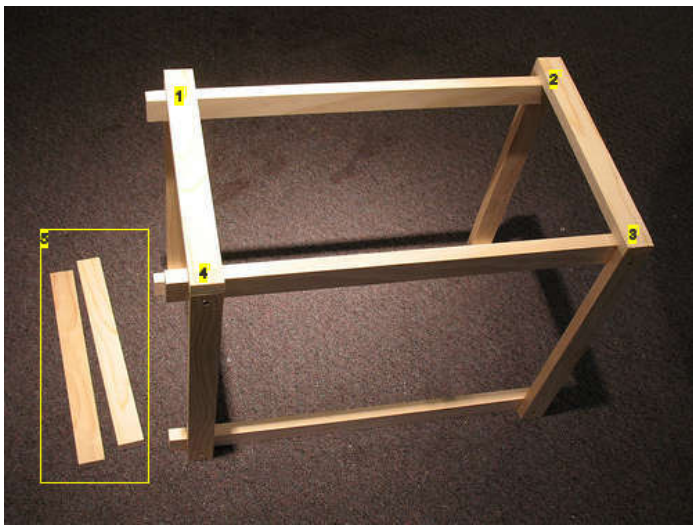


#### Image Notes

1. these four 14 inch pieces are what you should have left once you have made 2 sides of the frame.
2. first side you made
3. second side, made identically to the first.

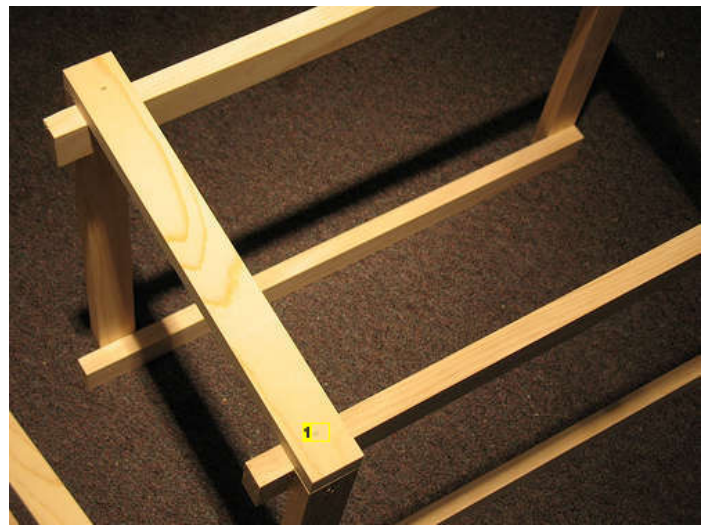
#### step 15: Attaching the final sides and entering Three-Dimensional land

Set your 2 flat frames on their edge, with the leg parts facing each other. You'll want to get them around 14" apart, so you can lay the 14" sides on top. Smear glue on the parts that touch, drill your pilot holes so they are going into the legs, not the ends of the other side part. Put your screws in at each point.



#### Image Notes

1. screw goes here
2. screw goes here
3. screw goes here
4. screw goes here
5. only 2 more wood pieces left to attach!



#### Image Notes

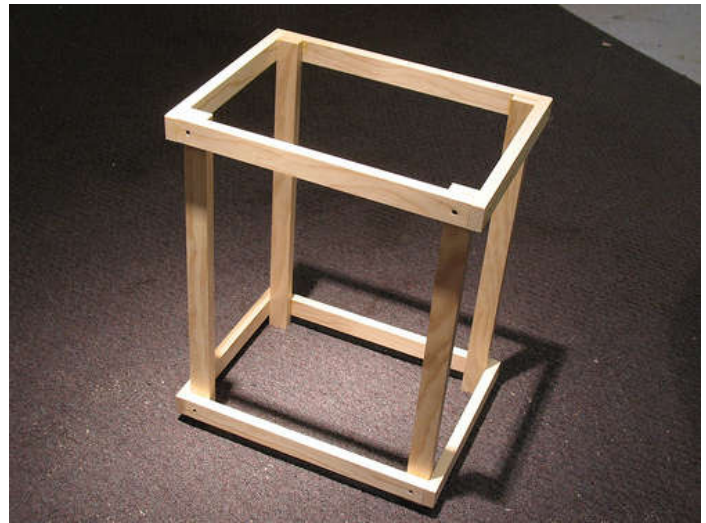
1. see how these pilot holes are positioned over the leg. This way the screws will go into the legs. Seems stronger than if they go into the ends of the other side parts...

### step 16: Attach the final side pieces to complete the frame!

Flip the frame over and attach the final 2 side pieces as shown.

Repeat the glueing, pilot-holing and screwing to put in the last 4 screws in, just as you did on the previous step.

Set it upright and you are done with constructing the frame!



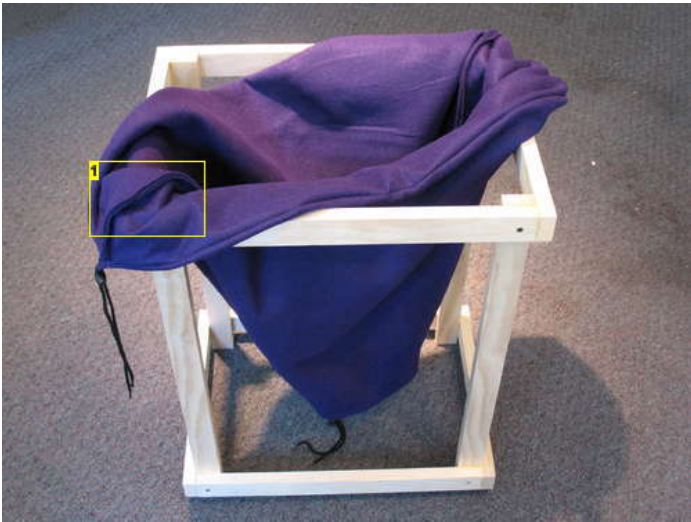
### step 17: Bag meets frame

Install your handmade worm bag onto your wood frame. I did this so the side seams of the bag are diagonal to the wood frame. They fold over the top of the wood frame and get tucked to the underside of the wood.

The nylon cord is not really sewn into place, so it can slip around in the inside layers of the bag. Make sure it is right up at the edge. Cinch up your nylon cord as tight as it will go with your cord stop, making sure all of your nylon cord is under that wood lip.

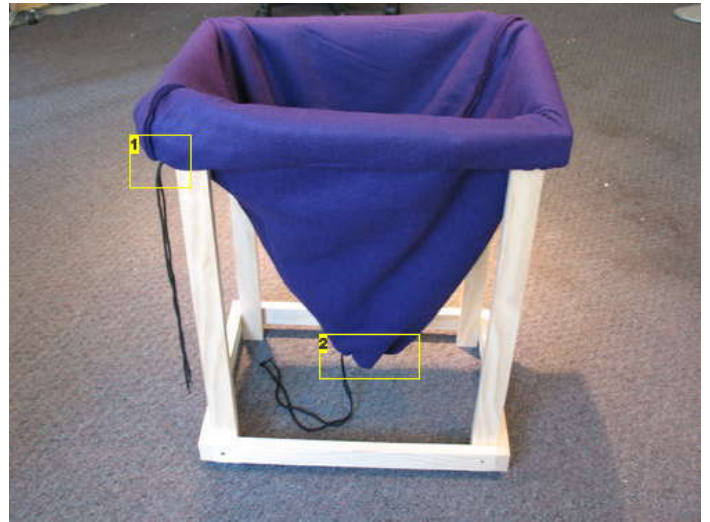
While you are at it, cinch up the cord at the bottom of the bag as tight as it will go.

[Please note that it would actually make the most sense to paint the frame before installing the bag, but that is not the way I did it... I'll paint it later on and have to separate the worm filled bag from the wood frame. It works, but maybe you'll be smarter than me and do it once your wood frame is constructed. Most important is painting the lid though, because that is the part that experiences the most moisture.]



**Image Notes**

1. you will see the seam where it folds over here. The lid will eventually cover this up - mostly.



**Image Notes**

1. cord cinched up  
2. bottom cord cinched up

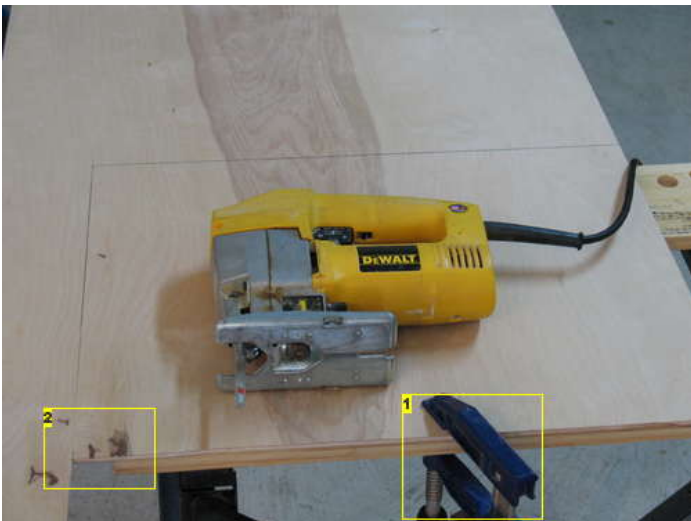
**step 18: Make (or find) the worm bag lid**

Look around for a piece of wood or plastic that is around 20" x 15". If you use plastic you won't have to paint it, but you might not find a plastic lid that fits nice and looks good, so let's build a wood one!

I found some 1/4" thick plywood around the studio. If you find some that is thicker, that will work well too and it will be less likely to warp if you want to sit on it, or put a plant on top. But the thin lid is nice because it will be lighter weight and easier to open.

Measure out a 20" x 15" rectangle and draw a line.

Get a jig saw with a wood blade installed in it, put on your safety goggles and ear protection and make the cuts. Be careful not to cut your table or saw horse. Or your fingers.



**Image Notes**

1. handy wood clamp to make this setup safe  
2. make sure you have clearance for the blade so you don't cut into your sawhorse or table.





### **step 19: Sand the edges to avoid splinters and make it pretty**

I'm using a palm sander, with 80 grit sandpaper on it and going around the get rid of splinters and round off the corners. If you don't have a palm sander you can do this by hand with a piece of sandpaper. You might get bored before your corners are rounded off, but you could certainly sand any pokey wood splinters off by hand.



### **step 20: Paint or stain the wood parts, then put it all together**

I used some leftover deck stain. It is a semi-transparent oil paint that matches my deck. I think that any paint designed to come into contact with moisture would work. Exterior paints make most sense to me. I left mine unpainted for many months and the frame did not suffer at all, only the lid, which warped from the moisture.

After the paint dries, put the bag on, the lid and the Rubbermaid dishwashing tub underneath. Now you are ready to put your worms in their styling home.



#### Image Notes

1. Rubbermaid dishwashing tub fits nicely in here and catches the any worm tea drips or sprinkles of compost that might sneak out.

### step 21: Ready for your worms (and friends of worms).

Put your red wiggler worms into the bag. I took part of one overfilling worm bag to put into this one - with worms, partially composted materials and all. I've always had pillbugs in my worm bins and bags, so you'll see a few of those hanging out. I asked a worm professional about them once and he told me that they are "helpers of the worms". They process some of the food and getting the microbial action going that is the actual food for the worms. So I'm happy to have them around, even if they gross some people out. When the worm bag is disturbed, they do tend to crawl all over looking a bit menacing to some folks, but they settle down and find hiding places in the compost, so you eventually don't even see them. They become the hidden helpers of the worms, so don't worry about it. Even if a few escape the bag once in awhile, they just die off. They can't live in our dry world.

Why don't you see worms at the top in the first pic? Because they hate the light (ultraviolet light kills them) so they quickly burrowed down into the food stuff to hide. I turned over the material and quickly took the second detail picture so you could see them. I have red wiggler worms or *Eisenia Foetida*, which are great for composting situations. Don't try digging up some common Nightcrawlers out of your yard for this type of composting, they will be unhappy because they like to burrow way down into the ground and are not happy feeding at the surface of the soil like red wigglers are.

Food for worms should be about 1 inch thick at the top of their bag. All types of vegetarian leftovers make great food - wilted lettuce, stale bread, dead houseplants, coffee grounds, tea bags, fruit and veggie peelings, apple cores, melon rinds, corn husks and cobs, rabbit and chicken poop and more. Don't feed them any poop from animals that eat meat, oily things, meaty things, citrus or super rotten stuff unless you want to endure the stink that will result.

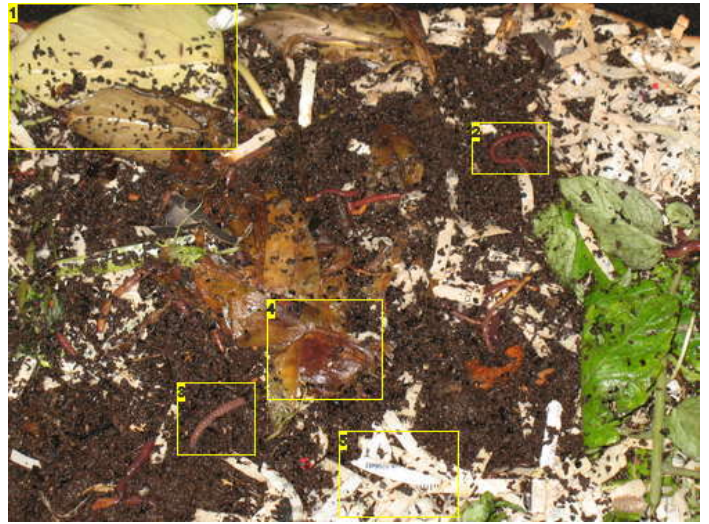
To learn more about keeping worms, and to connect with like-minded worm people, I recommend visiting or joining up with the free and friendly community at [vermicomposters.com](http://vermicomposters.com)





**Image Notes**

- 1. small pillbug congregation in the corner
- 2. wayward pillbug



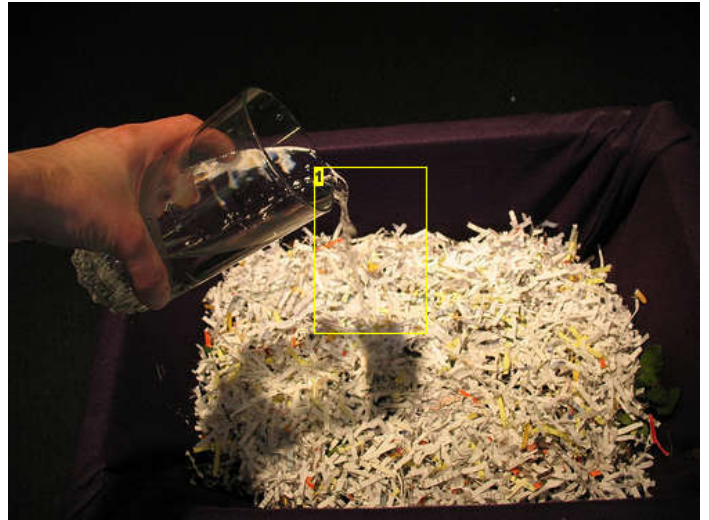
**Image Notes**

- 1. plant clippings as worm food
- 2. red wiggler worm
- 3. red wiggler worm
- 4. old veggies, maybe onion skins as worm food.
- 5. shredded paper as worm food.

**step 22: Layer of shredded paper is important**

After feeding the worms, I always sprinkle a layer of shredded paper on top. The worms also eat this stuff and turn it into compost, but more importantly, it keeps a balance in the system. I'm convinced that my diligent paper layer is why my worm bins and bags do not become anaerobic and stinky. I'm not sure if I really know what I'm talking about with that "anaerobic" talk, but I can tell you that this shredded paper layer method works great.

I also sprinkle water on top of the shredded paper periodically to keep things moist. Worms like water and air so I follow the practice that says you should keep the worm bedding as moist as a sponge that is wet, but not dripping. Another material I've used as worm bedding is coco coir, which holds the moisture just right. I'm told this material comes from the hull of a coconut. This is useful if you buy some worms by the pound and they don't come with their own bedding and compost. You can give them a bed of coir and then put food on top, then newspaper and they have a nice, moist world to squirm around in - one that does not compact down like newspaper does when it is put in too thick. Compacted newspaper does not let the air come in.



**Image Notes**

- 1. I know it looks like I'm pouring, but I'm really just sprinkling water on top of the shredded paper

**step 23: Put the lid on top, sit on it and wait for compost to happen**

This kind of works as a chair, at least for this picture. More often, I use it like a small table and set things on top of it, like plants, fish food and tools.

I feed this worm bag lots of plant clippings from the Farm Fountain pictured behind me. I also feed it rabbit poop, coffee grounds and lots of shredded paper.



**step 24: Find a nice place to put it**

Here is a lime green colored worm bag, living in the office of Catherine Girves, who was very instrumental in the development of this project. She is the director of the University Area Enrichment Association in Columbus, Ohio and she organized a crew of volunteers to construct many of these worm bags to "seed" our local community with the wonders of worm composting. Thanks Catherine!



## step 25: Harvest some compost

Hooray! Here is where your worm will really pay off (and the unseen work of your worms). After a few weeks, open up the bottom by sliding the cord stop out and loosening the cord. Lovely, rich compost will come out. If you want more, squeeze on the bottom part or pat/hit it lightly and more will come out. If you start seeing some uncomposted parts or more than a couple of worms coming out, you should cinch it back up and wait some more weeks. Just throw the uncomposted bits and worms back up in the top of the bin.

Use this finished vermicompost to sprinkle on your houseplants and around your garden. You'll never need to buy that stinky steer manure or chemically fertilizers again!



### Image Notes

1. Lovely, finished vermicompost. This is not your average dirt, it contains tons of fertilizing nutrients that make plants happy. Solid vermicompost is too rich to be used alone, so cut it with potting soil or garden soil if you want your plants to live directly in it. I usually just sprinkle it on the top of the soil as fertilizer.

## Related Instructables



**Caring for Your Worm Bin** by discontinuity



**Mini Wooden Portable Compost Bin** by Brennn10



**Understanding Hydroponics** by dutchypoodle



**Make a Compost Bin From a Wheelie Bin** by yetihair



**Fast Composting!** by GEEK1



**Making a compost box** by tomsaccount



**Grow organic food without spending \$** by gowithflo



**Home Composting** by Boring\_Jester

## Comments

50 comments

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**Pizzapie500** says:

I read on this website that they become larve then beetles then back to worms? Just to breed? Is this true? Here is the website.  
[http://www.wormman.com/breeding\\_superworms.cfm](http://www.wormman.com/breeding_superworms.cfm)

Nov 8, 2009. 2:56 PM [REPLY](#)



**smarcellini** says:

I like this concept and design very much. What keeps the other uncomposted materials, food and worms from falling out of the bottom if you open the drawstring to much. Is that a problem? Is a wire mesh needed at the bottom to only allow the castings to fall through or no? Also worms need to lay eggs which hatch to multiple, do these not fall out at the bottom as well?

Oct 29, 2009. 7:59 PM [REPLY](#)



**amyongs** says:

Oct 31, 2009. 4:48 PM [REPLY](#)

The red wiggler worms don't burrow very deep and they spend their time feeding and reproducing within the top 10 inches of the at the surface. Only a few worms will be found at the bottom. The compost gets churned around and continually moves downward with gravity. It does not tend to fall out or need any extra mesh because it kind of sticks together. When I'm harvesting it, I break it up to get it to come out and when I start seeing some worms I know it I've harvested enough. Do try it!



**nachobobs** says:

Oct 14, 2009. 4:20 AM [REPLY](#)

If you were to make the bag out of a porous material such as cotton, could you then in fact catch all the liquid fertilizer as it is formed or use a litre of water over the worms once a week to create nutrient rich liquid on demand?



**amyongs** says:

Oct 22, 2009. 5:16 PM [REPLY](#)

Hi Nacobobs,

Even though the material is made of polyester felt, it is still very porous and indeed water can flow through it. I have poured water into the top and retrieved the resulting compost tea from the tub below. I have not done it very often, but it would be interesting if someone on this comment list knows if it can be done every week and continue to provide nutrient-rich fertilizer. Maybe you will try it and let us know? BTW, I would not try making this out of cotton, since worms will eat it!

-amy



**NorthernSuze** says:

Sep 24, 2009. 10:04 AM [REPLY](#)

Thank you so much for your instructable! Of all the worm bins I've tried over the years - this one is perfect for me. I can't believe how much the worms eat. I added weeds from the garden this summer and never did get the best of them! My husband added castors and an oak cutting board to make it a perfect kitchen island. (but we were too excited to try it out...we didn't get the wood finished before attaching the bag,



**amyongs** says:

Oct 13, 2009. 8:03 AM [REPLY](#)

What a great idea to have the top be a cutting board that slides open! That way you can just slide the veggie peels and heels you don't want into the bin. This looks like it would be very practical. I want one.

-amy



**NorthernSuze** says:

Oct 13, 2009. 8:35 AM [REPLY](#)

I dreamt for years of a hole in my kitchen counter or a drawer that slides out to take the valuable trimmings, but your idea is perfection! As the air freeze dries this winter, I will have to keep a close eye on the moisture levels. But oh, the bliss, having my worms right in my kitchen, sez the lady who misses them on holidays! lol

cheers!  
Suze



**kadewei** says:

Apr 18, 2009. 2:58 AM [REPLY](#)

Thanks so much for this Instructable! I made one using a very sturdy IKEA Antonius stand for laundry bag (7\$ or 5.5 Euro without the bag) and an IKEA Trygg serving bowl (4\$ or 2 Euro) at the bottom. The outside bag is made of a heavy duty disposal bag made of white woven Polypropylene. I find white nicer looking than black, and I guess that in summer it will keep the worms cool. But white lets through too much light for the worms, so I lined it with an identical bag made of landscaping fabric, which is black woven polypropylene. The top corners of the black lining are closed with duct tape so light is completely blocked out. Polypropylene is a food safe non toxic plastic, and the woven form can be sewn like very fraying fabric on a normal sewing machine. The worms are still alive, so I guess it lets through enough air. (Top inside view on the right. On top of the worm bag is a tray with seeds that have not yet sprouted)



**rkimedes** says:

I did the same thing with the Antonius, but I didn't want to have to take stuff off of the lid to use it, laced it to the inside of one of the antonius' drawers.

Jun 27, 2009. 10:40 PM [REPLY](#)



**amyongs** says:

This sounds very interesting. What are the drawers like? I'd love to see what yours looks like. Might you post a picture for us? -amy

Jun 28, 2009. 6:28 AM [REPLY](#)



**rkimedes** says:

I tried, but it didn't work :-)) I documented my deviations, though...  
<http://rkimedes.livejournal.com/370812.html>

Jun 28, 2009. 8:49 AM [REPLY](#)



**amyongs** says:

Fantastic worm composting drawer design! I love your hacking of the IKEA drawers combined with the worm bag. The recycled Huggies box is also a great idea - thanks for sharing your pictures of it on your blog. -amy

Jun 29, 2009. 7:31 AM [REPLY](#)



**WhatknotAnna** says:

This is a great idea. I've looked at all the designs and thought this to be the most useful and practical. After a couple of harvests, I can really appreciate 'compost at the ready'. Thanks for the 'Instructable!' Anna

Jun 28, 2009. 11:06 AM [REPLY](#)



**amyongs** says:

I'm glad it is working out for you. And thanks for the posting the picture I love the inset lid with the fancy handle. Looks like it will fit right in with the kitchen cabinetry and/or the appliances. -amy

Jun 29, 2009. 6:55 AM [REPLY](#)



**Arlie** says:

Thank you. 2 questions: Do you keep the composter in your living area? & Other worm bed builders spoke of what sounded like a large amount of liquid by-product that was released and if not drained would turn the compost into smelly mud....is this an issue with this bag composter??? thank you again for the info.

Jun 23, 2009. 7:28 PM [REPLY](#)



**amyongs** says:

If the worm bin/bag is aerated, the a liquid that can develop does not smell. It is a nice "worm tea" which is a great plant fertilizer. If you have a plastic worm bin that does not allow for enough aeration or drainage, smells can develop. With this worm bag, there is plenty of aeration due to the bag being made of fabric rather than plastic. If the worm bag does get very damp, the extra liquid just dribbles out of the bottom into the rubbermaid tub. This rarely happens for me, unless I put a lot of water into the top of the bag or feed them a bunch of wet foods at once. I keep a worm bag in my art studio and another 2 in my basement. I used to keep a worm bin under my kitchen sink, which was super convenient for feeding, but my current kitchen does not have the space. Good luck with your vermicomposting adventure!

Jun 24, 2009. 6:55 AM [REPLY](#)



**pcastagner** says:

May 20, 2009. 2:31 PM [REPLY](#)

108 inches is 9 feet... I couldn't find 9 feet anywhere on my 1.5. Yards. I did get it done with my mom though. Thank you for the instructable.



**amyongs** says:

May 20, 2009. 4:54 PM [REPLY](#)

Thanks for pointing that out - I fixed it so it says 42" now!



**iovsjupiter** says:

May 19, 2009. 9:29 AM [REPLY](#)

Great Instruction! I'm vermicomposting since 2 weeks in the balcony, next to the kitchen. I have no problems with leaking, only some drops when added too much water, no odours, very few fruit flies, one or two every now and then. Thanks Amy! Do you have an vermicomposters.com account?



**amyongs** says:

May 20, 2009. 7:51 AM [REPLY](#)

Thanks! I am on vermicomposters.com, my page is: <http://vermicomposters.ning.com/profile/AmyYoungs>

That worm you are handling in the picture is huge! Looks like a healthy one.



**pcastagner** says:

May 14, 2009. 1:36 PM [REPLY](#)

I am not sure where you got the 108" measurement... very confusing



**amyongs** says:

May 20, 2009. 7:46 AM [REPLY](#)

I just mean to refer to the long side of the fabric rectangle here. The short side of the rectangle is 72" and the long side is 108", which is the side where the 35" mark is made. Hope this helps! amy



**Yirdaki player** says:

May 7, 2009. 7:43 AM [REPLY](#)

Tried a "commercial" worm compost bin but stopped because of the big invasion with the so called "Sciaridae" A small kind of black fly that often resides in the soil of indoor plants. Thousands of it in the bin. Started to get them indoors too. Anyone a solution for this? The semi-professional compost-masters that were consulted didn't have a solution for me. Want to start again.... Regards, Mike



**avie93309** says:

Jan 5, 2009. 9:00 PM [REPLY](#)

Love this instructable! Great instructions. If only I had printed out the full direction for the frame, my hubby and I would not have ended up arguing at OSH. I copied down 8" & 6" instead of feet. After the argument, I decided to just go with the laundry hamper idea. The fabric was on sale at Joanne's for \$2.99/yd so I bought enough to make 2 chutes. I cut out a square at the bottom with a vertical saw to access the chute when harvesting the future compost. I replaced the laundry hamper cover and Voila! Thank you for this great idea!



**CarolynW** says:

Feb 28, 2009, 6:36 PM [REPLY](#)

Hi I didn't fully understand the laundry bag one, do you make a hole underneath the laundry bin? does this laundry bin come with a cover? Does the material have to be thick?



**avie93309** says:

Apr 11, 2009, 1:40 PM [REPLY](#)

Sorry for late response. I didn't cut a hole on the bottom - only on the back side of the bin for easy access when harvesting, also for aesthetics. The cut out area holds my gloves for harvesting & checking the wormies. This bin came w/ a cover as do most of them. I made 2 of these - I use the other to place the harvest - let it sit there for another week and wait for the baby worms. I place the baby worms back to the main one so they can make me more worms. I make compost tea with the manure using DIY Deuley's Texas Tea Brewer - happy composting



**amyoungs** says:

Jan 8, 2009, 9:46 PM [REPLY](#)

I like your plastic hamper innovation. Much easier than having to do all the wood construction. Plus, a decision that reduces fights with spouses is always a good one, well done! -amy



**elissa** says:

Jan 28, 2009, 6:05 PM [REPLY](#)

pvc piping frame



**elissa** says:

Jan 29, 2009, 3:55 PM [REPLY](#)

I don't think it would hold the weight of a human, but my cat seems to feel comfortable sitting and jumping onto it. I'll be sure to watch carefully over time to make sure the PVC doesn't yield. The PVC was thicker than I thought it would be and was quite difficult to saw through. Advise to those who want to do it this way: --90 degree three-prong PVC corners were not available at local hardware stores so I had to special order those (just googled a company) --make the bag bigger or the PVC frame smaller --the felt wants to slip off of the frame, so ended up using large quilting safety pins. \*\*I've had the wormies in for two weeks now and it is completely smell-free, with only the slightest aroma of dried coffee grounds



**amyoungs** says:

Jan 29, 2009, 6:52 AM [REPLY](#)

Thanks for the pics of your PVC frame innovation. It looks very modern and it seems like it will be sturdy.. Is it strong enough to sit on? Do let us know how it holds up when the worms and compost get heavy. thanks! amy



**wushuair** says:

Jan 27, 2009, 7:24 PM [REPLY](#)


Is there a difference between ecospun felt and regular felt? Does ecospun felt provide more aeration than the regular felt? Thanks.





**amyoungs** says:


Jan 28, 2009, 6:19 PM [REPLY](#)


You can use any type of polyester felt, which is basically fake felt. It does not have to be the ecospun type. I would stay away from real felt though, since it is made of actual sheep wool, which is organic and therefore edible by worms...


 **elissa** says: Jan 28, 2009. 6:02 PM [REPLY](#)  
Using pvc piping I created a bin with the measurements of 11" and 14" instead of 17.5" and 14". If I were to do it again I would keep the larger frame measurements and sew a larger felt bag.


 **The Berwick Worm Farm and Waste Systems** says: Jan 21, 2009. 6:56 AM [REPLY](#)  
I think this was a very good article. Im going try it with my worms. Thanks for sharing Howard FEED YOUR WORMS AND STARVE THE LANDFILL


 **deirdre625** says: Jan 8, 2009. 7:15 AM [REPLY](#)  
OK, so I built my bag over a metal ikea hamper frame and all was looking great.. until my worms arrived. I dropped them into my bag that contained plenty of lightly dampened paper and cardboard, one pot's worth of coffee grounds, a few bits of fruit (strawberry tops, apple and pear peels) and a few slightly dried out potato skins. My new roommates' immediate reaction was to attempt to jump ship. Upon dumping out my fresh shipment of worms, they immediately started climbing the walls of the bag, I shook/tossed the bag around a bit in an attempt to mix them up and aerate things, but despite my best effort, I had a few 'jumpers' on the floor this morning who had managed to squeeze between a crease in the bag and the lid and meet their fate on my tile floor. I opened up the top this morning and there seems to be quite a few less of them climbing the sides of the bag and not as high up the sides. I just wonder if this is a normal reaction after having been shipped and cramped up for a few days (were they just stretching their legs/exploring their new surroundings?) or should I be worried that they don't like their new conditions? I really want them to be happy. (And not have a bag of dead worms and rotting food in my kitchen - gross). Help!


 **amyongs** says: Jan 8, 2009. 9:41 PM [REPLY](#)  
This does not sound like fun... I have not had this problem, but I just consulted "The Worm Book" by Loren Nancarrow and Janet Hogan Taylor and sure enough, what you describe does happen sometimes when worms are added to a new bin. Apparently, they get "stressed out" from their travels and take some time to get used to their new home. The authors of this book suggest putting a light on your bin, so the worms will be forced to stay inside where it is dark (they hate light) and they will eventually get used to their new home. Also, some types of worms are more difficult to keep in bins than others. You might check to see which type you ordered. I have the super easy-going type (Eisenia Fetida). Hope your worms settle down! amy


 **deirdre625** says: Jan 12, 2009. 7:19 AM [REPLY](#)  
The suicide missions seem to have stopped, thankfully. I think they were just getting situated. I took a peek yesterday and they seem to be doing ok. munching on pureed apples and some leafy stuff... Thanks for your help!


 **Chapu** says: Jan 5, 2009. 12:13 AM [REPLY](#)  
I second that, great great tutorial! Just about to make an indoor vermicompost solution, and this one is by far the most attractive I've seen so far, very clever the textile-bin. It gets a lot of air, so no chance it gets to wet. Almost the opposite I suppose. I just saved a laundry frame from a dumpster, great! As for the fabric, I'm gonna try out a dark thin nylon , must try to get everything as light as possible as the laundry frame isn't to sturdy. Thankyou..

 **holly faye** says: Jan 2, 2009. 2:08 PM [REPLY](#)  
well this sure seems cuter than those barrel designs i've always seen. I do love sewing and would certainly try this with nylon for my fabric of choice. Indoor is the way to go since it's always winter where I live and frozen food doesn't compost very quickly. The compacting of newspaper is good to know, I was just shredding coarsely by hand when adding it to compost because I didn't know what else to do with it. But your shredded office paper looks so...perfect. I'll put my recieved bill stubs and their envelopes through a shredder in future to lighten up the mixture (maybe newspaper isn't so bad when machine shredded?)

 **amyongs** says: Jan 3, 2009. 1:39 PM [REPLY](#)  
Do post pictures if you make one with nylon fabric - I'd love to see how that looks and works. As for the newspaper, it does work great when put through the shredder. It keeps it airy. Be careful with envelopes though, if there are plastic envelopes or tape on them, those evil plastic bits end up in your finished compost. If you are only using the finished compost on potted plants, it won't pollute them or anything, but it looks shiny and bad. I had to pick it out, piece by piece...

 **holly faye** says: Jan 3, 2009. 4:49 PM [REPLY](#)  
yeah I'm familiar with ripping the windows out, i used to remove them before bringing them into the recycling depot (by their request) in the past. It doesn't take long once you get at it though. So newspaper once properly shredded is okay? lovely. I recycle so much because there's no room in the garbage can or house for that matter to be throwing away useful stuff. So I might seem like a recycle freak but I'm really just a waste reducer and tools like rapid composters are a boon in the long run. I figure why not use these junk/food scraps for something constructive like my inner compulsive horticulturist...Totally checked out your aqua-farm: very cool way to make seemingly useless ornamental fish earn their keep around the house!

 **engrained** says: Dec 18, 2008. 6:59 PM [REPLY](#)  
A couple questions for you. I've notice mold growth around the outside bottom of the bag. How much water should I be giving and how often? Also I've notice several worms getting stuck in the fibers of the bag, ending up dehydrated and strangled. How can I help prevent this?

 **amyongs** says: Dec 19, 2008. 9:05 AM [REPLY](#)  
It sounds like your bag is too wet. It is hard to pin down exactly how much water to put in the bag, since the types of food you put in also add moisture. Maybe your food and your local environment is wet enough that you don't need to add water at all. I look for a moist, "wrung-out sponge" interior, but my bag is pretty dry feeling on the outside. Probably this is why my worms don't get into the fabric of the bag like yours are. Since it is kind of dry on the outside, they don't try to squirm into the dry bag fabric. Hope this helps!





**redsonya25** says:

Dec 14, 2008. 6:51 PM [REPLY](#)

Hi Worm Composters! I am new to the worm composting world and just have a question. I don't have a super fancy contraption like the one shown here but just a simple plastic bin. My question is.... Is it ok for a small amount of worms to hang out around the top/lid groove of the bin? I get worried that they are unhappy but it's a very small amount - maybe 20-30 worms out of the 1-2 lbs of worms that are in the bin. Am I being a crazy and paranoid worm mom?

---



**amyounigs** says:

Dec 15, 2008. 10:15 AM [REPLY](#)

That is normal for the plastic bin types. The plastic surface is wet and slick enough for them to explore around, looking for new horizons. They will go right out of any tiny hole they can find - unless it is inhospitable for them out there. If they poke their head out and find it bright and/or dry, they will go right back into their comfortable bin home. If their bin home is not comfy, they might adventure outside looking for a better home. This happened to me once when it got really hot in my worm bin.

---



**redsonya25** says:

Dec 15, 2008. 12:37 PM [REPLY](#)

Thanks for the info. They must be decently happy because only 1 guy has ventured outside the bin and he didn't survive. They're definitely eating because there's worm poop everywhere!

---



**cpeds** says:

Dec 15, 2008. 9:17 AM [REPLY](#)

What type of worms are they? I've heard that European Nightcrawlers tend to wonder quite a bit. Do you have enough food, water, air? Do you have too much food, water, air? I'm still new at this myself, so take what I say with a grain of salt.

Good places for info are [Vermicomposters.com](http://Vermicomposters.com) and [Red Worm Composting and The Garden Forums](http://Red Worm Composting and The Garden Forums)

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**amyounigs** says:

Dec 15, 2008. 10:21 AM [REPLY](#)

True, Nightcrawlers will not stay in the worm bin. They are not good for this type of vermicomposting because they need to burrow deep into the ground to be happy. These red wigger type do not burrow deep down and enjoy hanging just below the surface of their food source. There is an incredible variety of worms. I highly recommend the book, "The Earth Moved", by Amy Stewart to learn more about these fascinating creatures.

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**engrained** says:

Dec 4, 2008. 11:29 AM [REPLY](#)

We put up pictures of our composter on our blog post at [www.wayfaringwanderer.com](http://www.wayfaringwanderer.com). I love this thing. I like to gently flip up the corners and find the bunches of them. It's really exciting. I know y'all know what I mean. Pet worms. Thanks for showing us how to do this! I'm having a lot of fun with it.

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[view all 129 comments](#)