



Make a Birdfeeder Webcam



Have you ever wondered what birds live in your neighborhood? With the birdfeeder webcam you'll make this weekend, you'll be able to find out! Using motion detection webcam software, you'll be able to document every bird that shows up at the feeder and get a picture of it whenever it moves.

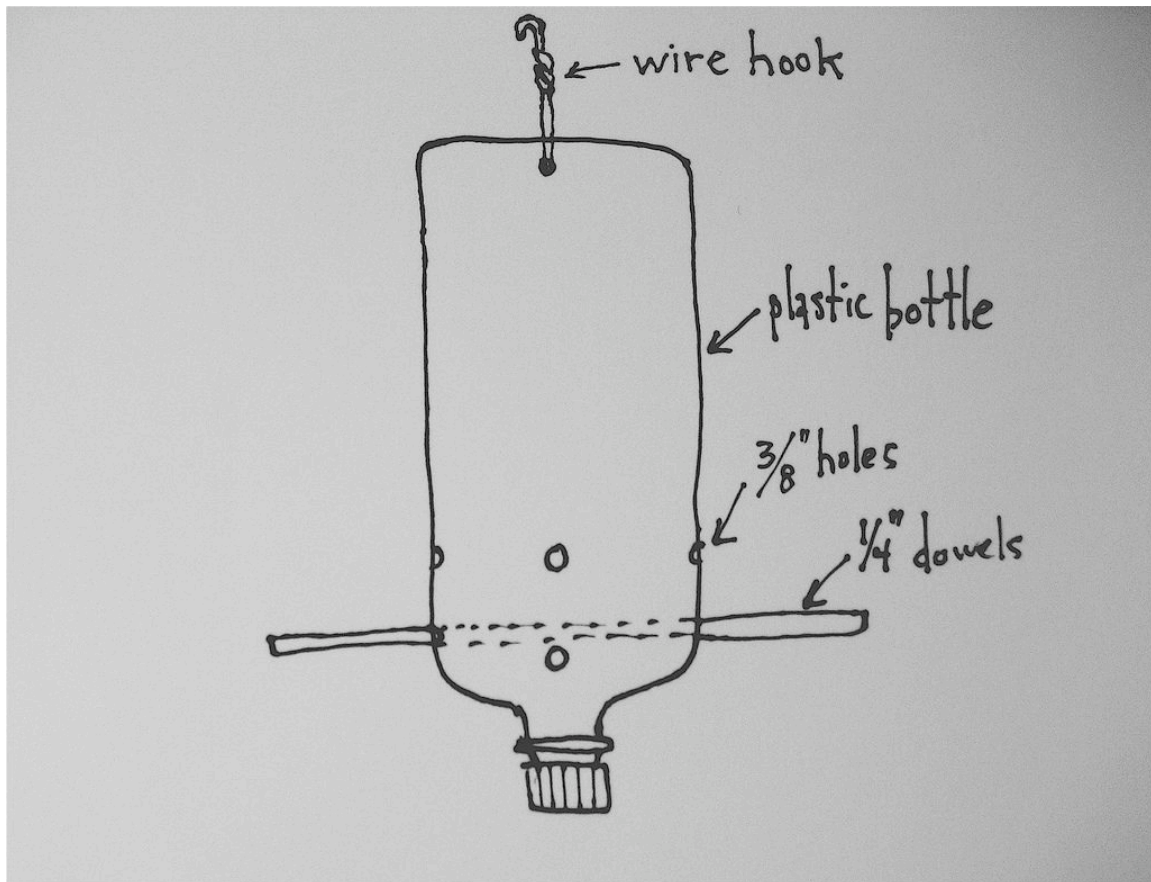
We're going to make two kinds of birdfeeders. Steve Garfield is helped me out with a simple birdfeeder that you can make from recycled materials and I'm holding one that can be made from woodscraps!

Make sure to take pictures of your birdhouse and webcam and upload it to the Make Flickr Pool at <http://flickr.com/groups/make> so we can all check it out. I'm looking forward to seeing the birds in your neighborhood!

Make a Bottle Birdfeeder

Tools: You'll need a saw and a drill/driver that you can drill holes and screw in screws with.

Materials: Grab a plastic bottle out of the recycling, a coat hanger out of the closet and some dowels (or pencils).

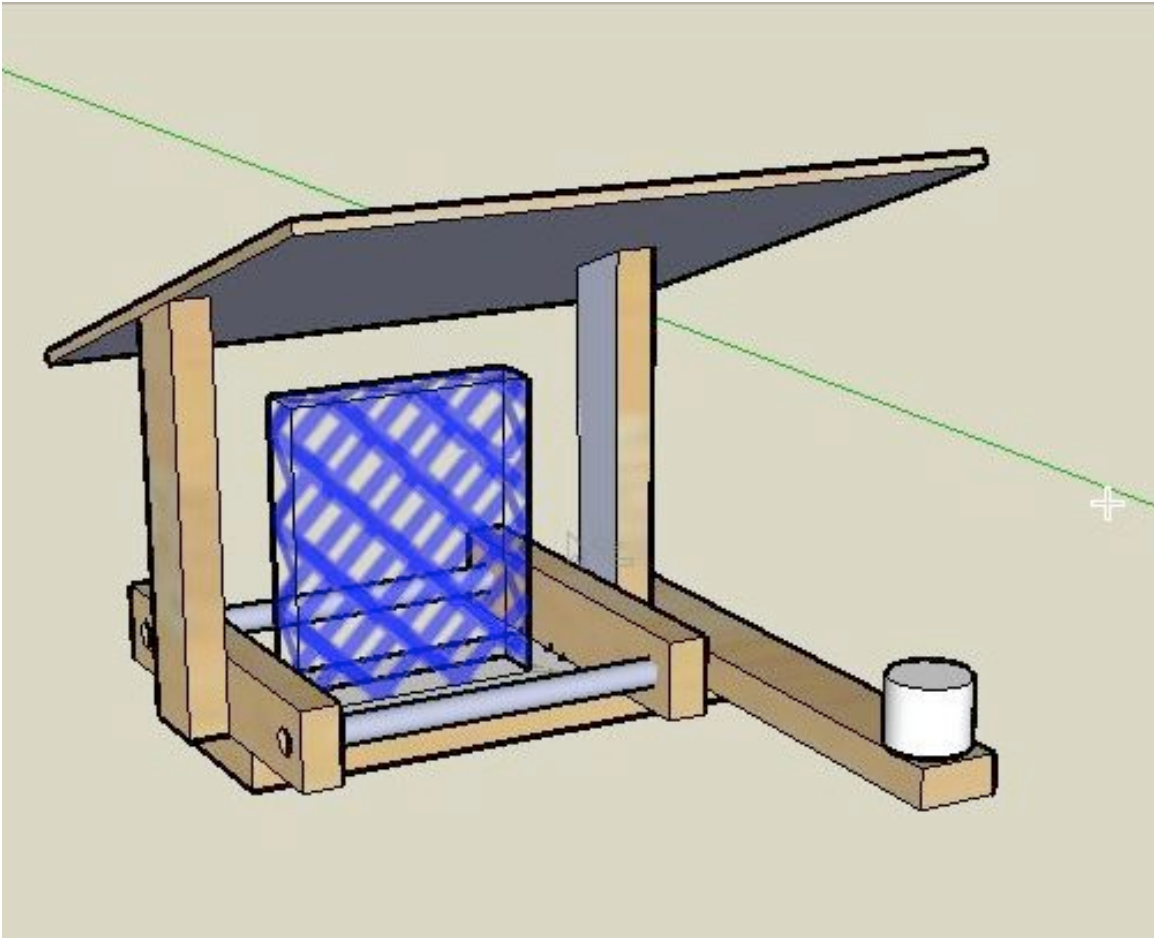


Make it!

1. Start by drawing dots on your bottle with a sharpie where you'll drill holes. Put four 1/4" holes near the cap for the dowels and for the coat hanger and then four 3/8" holes for the birds to eat out of.
2. Attach the wire hook
3. Slide the dowels in.
4. Fill with bird feed. Cut another bottle in half and use it as a funnel for easy loading, then put the cap back on.
5. Hang it someplace that the birds will find it!

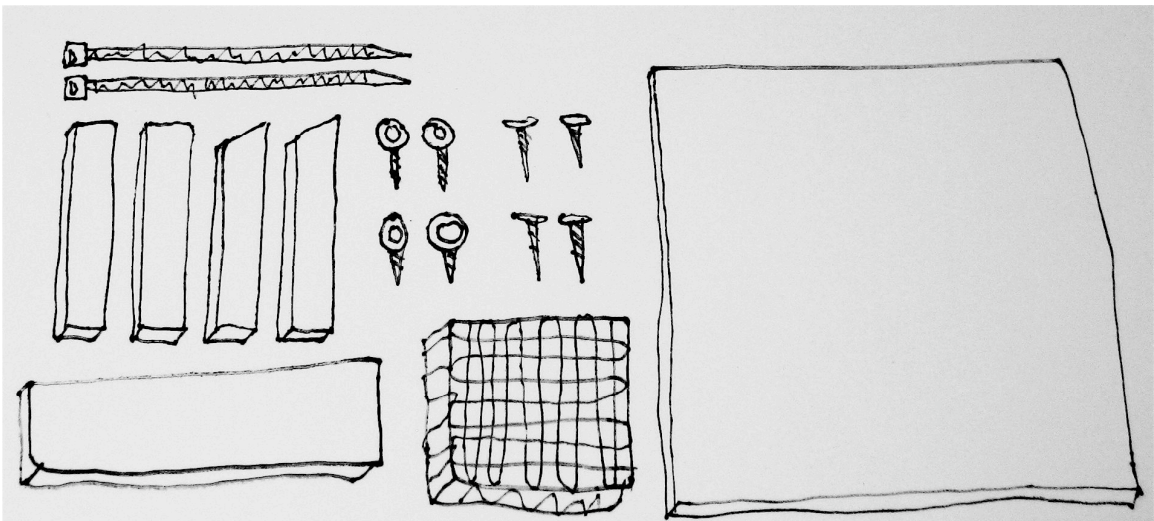
This project is perfect for bird enthusiasts of all ages, just make sure to get adult help when using a powerdrill!

Make a Bird Feeder Out of Wood



Tools: You'll need a drill, a saw, and glue.

Materials: Grab some wood out of your spare wood box or take apart a wooden box, or go to the hardware store and buy some 1x2 lumber. I also used a piece of scrap 1x4 for the base, but you could use 1x2 for that. Cut out a 1'x1' piece of $\frac{1}{4}$ " plywood for the roof. Two $\frac{3}{8}$ " dowels will work as a place for your birds to sit. You'll also need four screw-eyes, some screws, zip-ties, and unless you want to make a suet cage, get one of those.



Make it!

1. Cut your 1x2 lumber into 8" pieces and give two of them slanted ends so that the roof will have a slant to it.
2. Cut a piece of 1x4 into a 12" section.
3. Cut a 1'x1' piece of 1/4" plywood.
4. Drill 3/8" holes in the non-slanted 1x2.
5. Insert the 3/8" dowels.
6. Mount that onto the 1x4.
7. Using the screws mount the roof supports.
8. Using glue and the eyelets, attach the roof.
9. Mount the suet holder using zip ties.
10. Attach your webcam.
11. Place in a location that birds will find!



Here's a picture of the one that I made, it's a little different from my original plan. Enjoy overcoming the obstacles you face and nothing will stop your birdfeeder from completion!

If you need to find a way to hang it, check out my pal Terrie's Critter site here: <http://crittergeek.com/?p=29>

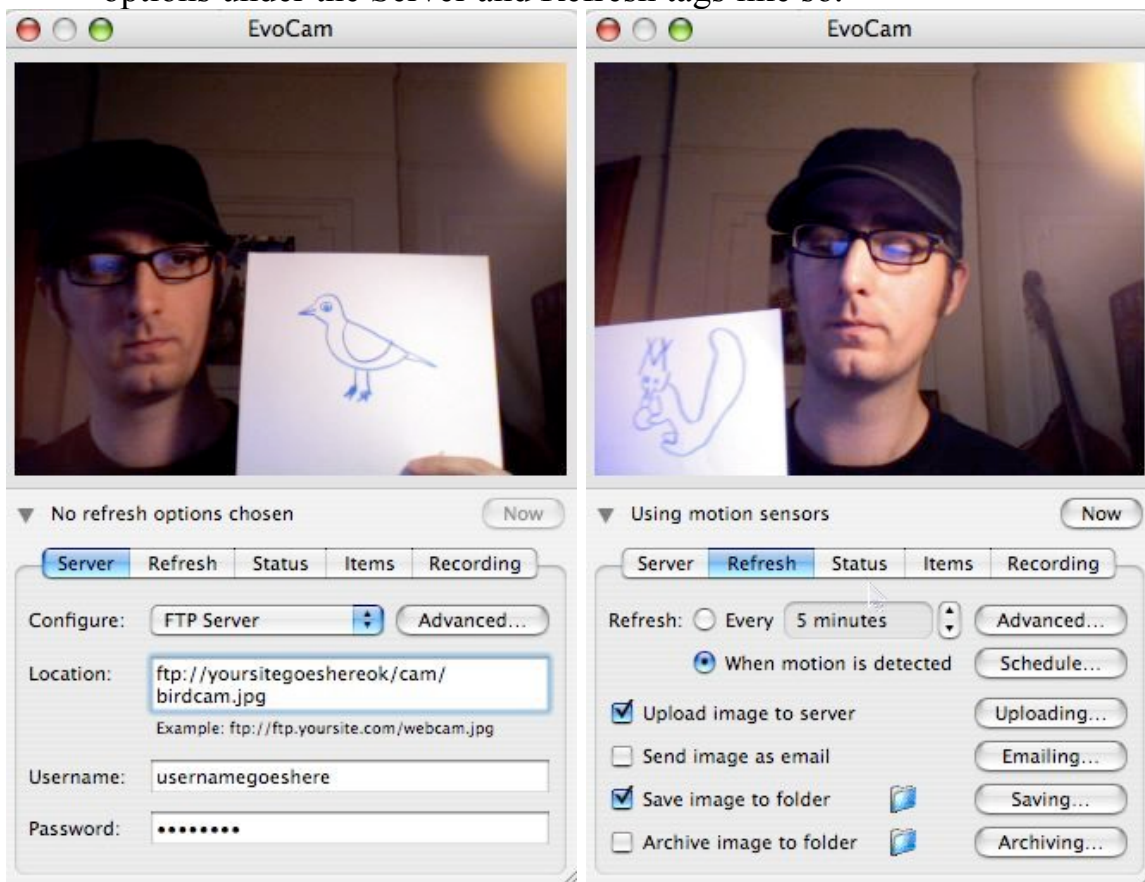
Configure Your Webcam

Tools: Computer and Webcam

Materials: Waterproofing supplies, webcam software, usb cable extension. You'll also need hosting. Look around for the best deal. I like [dreamhost](#).

Make it!

1. Download some webcam software. Your webcam may have come with some! I chose the \$25 evocam software <http://www.evological.com/evocam.html> since it comes with lots of configurable options and motion sensing and it works for the mac! There are lots of other options out there. Here's one that's opensource for the pc that looks really cool. <http://dorgem.sourceforge.net/>
2. In order to use my pc-based usb webcam, I had to download macam, which is an open source mac driver for pc webcams. <http://webcam-osx.sourceforge.net/>
3. Once you open up evocam you have some options. First configure the options under the Server and Refresh tags like so.



The server tab lets you put your server information in the Location spot. This took some fussing to get the right url in there for me.

Under the refresh tag, when you check the boxes you'll have to figure out the image name and which folder you want to save your archives in.



Under the Status tab you can check to see the status of the last picture. It says “Server not Found” because I didn’t have it set up to go to my site yet. In theory you can get this thing to send an email with each pic and that’s how I’m hoping to get it to upload to a special flickr account so that I’ll have a public archive of all the bird feeder shots.

Under the items tab, you have a lot of options. You can do a lot of cool effects and add a badge and text, but the coolest thing is a motion detector. When you click on this you can define an area that the software will monitor for movement, when it sees it, it tells you by showing yellow and uploading that pic. I have mine set to check every 10 seconds so that it’s not uploading 5 pics a second.

Once you have it all set, your computer will take a picture and upload it to your hosting whenever there is movement. The Boston Birdcam is at <http://imakethings.com/cam/birdcam.jpg> and I made a little simple webpage for it at <http://imakethings.com/cam/birdcam.html>. Feel free to copy the html and customize it! If you are a webcam geek and know of some other ways of presenting webcam images on the net, I’d like to hear about it! And that’s pretty much it. There are more features here including video capture, but I haven’t had a chance to play with those, so if you figure something cool out, make sure to post a comment to the blogpost or shoot me an email at bre@makezine.com.



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Fill out, cut out, fold, and glue!