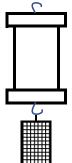
## Squirrel proof bird feeder (for hanging from trees):



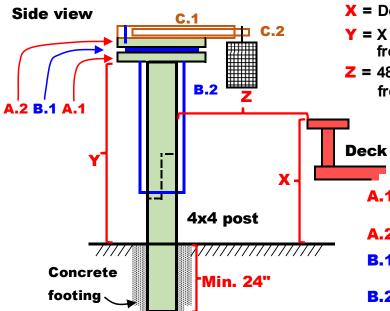
4" hard duct, 12-16" long, with a cap on either end (either solder, or use self-tapping screws to assemble).

Attach a hook through both caps prior to assembly, and hang from a branch, which *must be 3-4' away from other branches (to prevent squirrels from jumping across).* 

If the squirrels try to reach this bird feeder, they will slide off.

They might jump from the ground, so the feeder should be at least 4' off the ground!

## Free standing squirrel & raccoon proof bird feeder:



**X** = Deck railing height above the surface.

Y = X + 30-36" to make feeders visible from the deck and the house.

**Z** = 48" to prevent squirrels from jumping from the deck to the feeders.

I use a 3' 'grabber' to reach out to the Swivel Board, so I can turn it towards the deck for refilling the bird feeders, and away from the deck otherwise.

A.1 = Piece of 2x8, trimmed to fit the swivel size (±7" square). Screwed to the post.

A.2 = Swivel Board, 2x8, 30-36" long.

**B.1 = 'Lazy-Susan'** swivel assy (about 6" diam.)

Use longer screws than those supplied with the swivel.

B.2 = 6" hard duct, 5-6' long, covering the 4x4 post to prevent squirrels & raccoons from climbing up from the ground.

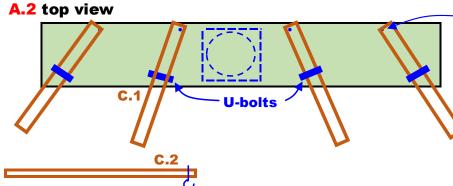
C.1 = 1.1/4" PVC pipe (30" long).

C.2 = 1" PVC pipe (30" long), with hook.

1" PVC fits snuggly inside 11/4" PVC pipe,
so you can pull the extension out to refill
the bird feeders.

4x4's come in 8', 12' or 16' lengths, but working with 12' & 16' lengths is difficult after you have installed the top assembly.

If you need 8'+ total length, I suggest using two 8' pcs, notching the ends and joining them as the final step (I needed 13' total length, and made two 18" notches to assemble).



Drill a hole, and insert a hook in the end of C.2

Use lock washers to prevent nuts from unwinding.

-Drill a hole in the end of C.1, and fasten to swivel board with a screw. Secure the position of the other end with a U-bolt.

## 4 feeding stations:

- Mixed seed
- Thistle seed
- Sunflower seed
- Suet cake.



garden 'grabber' to reach and turn the swivel top.

Please feel free to contact me, if you need assistance with your bird feeder project.