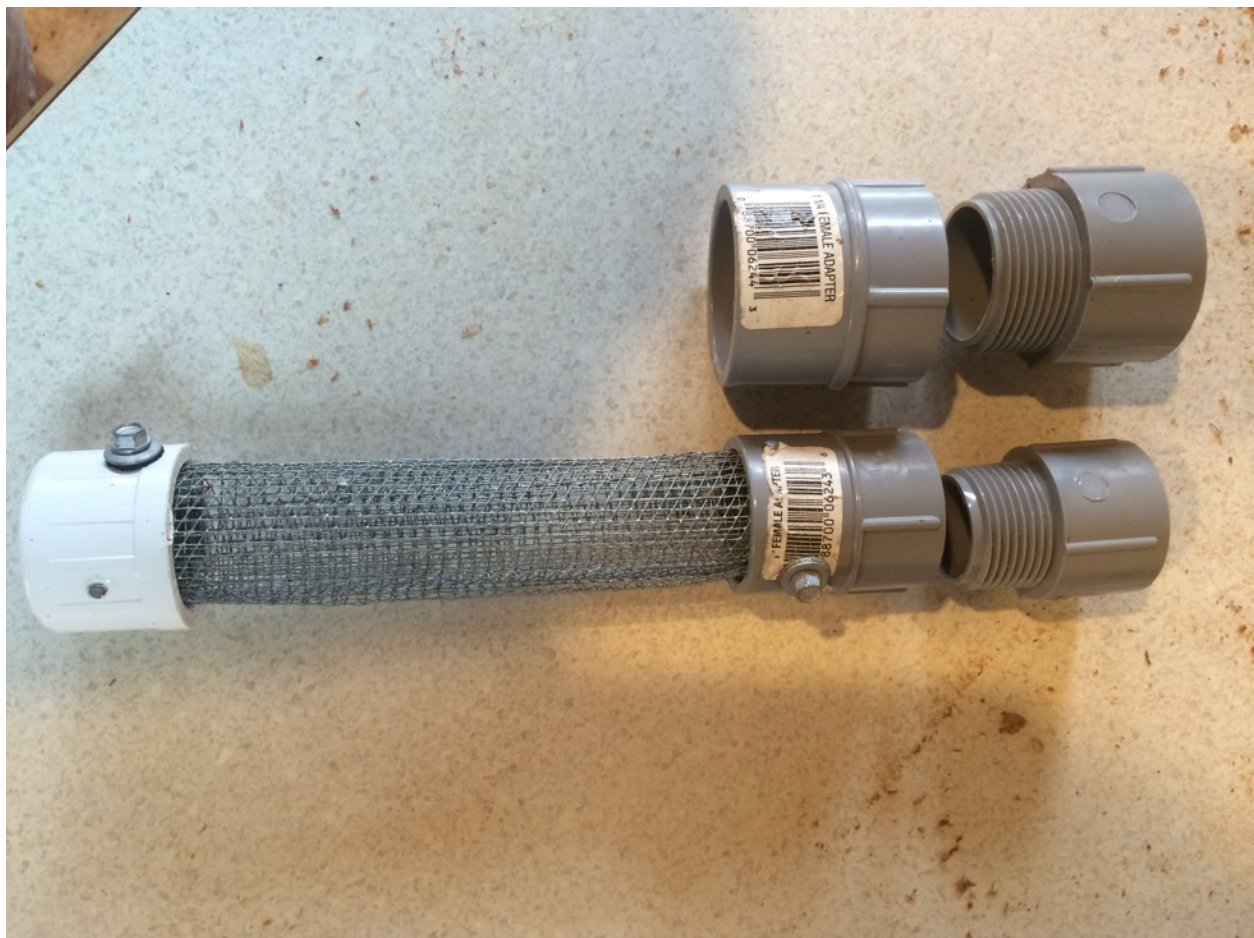


The 5 Gallon Bee Vac — Patrick Waters, watersconstr@yahoo.com

- 1) Get 1 or two 5 gallon buckets, with SNAP ON lids, not the push on ones that have a tear-off tab. SAND the inside of each bucket with 60 grit paper to give the bees a rough surface inside to climb up off the bottom and avoid overheating.
- 2) Get corresponding 1" and 1 1/4" male and female adapters in grey PVC ELECTRICAL conduit. Also a 1" end cap. Only electrical stuff will work, plumbing stuff threads will not bottom out to tighten against each other thru your lid.
- 3) Roll some 1/8" hardware cloth into a cylinder about 8" long and insert it into the 1" cap and female adapter as shown. A couple of small bolts or screws hold it in place in each end. This is the filter which will prevent bees from entering the vacuum motor.



4. We need a damper in the bucket lid to adjust the 'suckage' so it will gently pull the bees in. This is vinyl cove base. Find or make some metal rings—a wide mouth mason jar ring could work for one side—and create a sandwich with some more 1/8" screen. Drill holes and pop rivet this sandwich together with a relatively smooth side on the surface of the lid. Use a small bolt with 'nylock' or 'jam' type nut and washers to attach the flapper so it will pivot over the opening.



5) Drill holes in the lid to accept your inlet and filter. A small Vac with a 1" hose will fit the 1" female adapter, you may have to cut it up the fitting a bit to find the right diameter to 'stick.' A trip to Goodwill or St. Vincent's should yield a used hose for the inlet. Look for one that has the corrugations on the OUTSIDE and smooth on the INSIDE so bees don't get bounced and battered by them on the way in. While you're there a couple of the extra 'wands' or crevice tool fittings are great and get in tight places.

6. Make a second lid that has two large screened openings. Switch lids with the vacuum when you have too many bees and it makes a great 'cage' to hold them while you keep working with the new bucket. Set the bees in a shady spot and mist a little water thru the openings. The screen-lid bucket makes a great swarm catcher too.



This is the complete setup ready for business. The vac is a 2.5hp mini and has plenty of power.

Shopping list:

2 buckets
2 snap lids

Grey PVC electrical conduit fittings:

1 male 1" adapter
1 female 1" adapter
1 male 1 1/4" adapter
1 female 1 1/4" adapter
1 1" end cap

1/8" galvanized hardware cloth — about 2 sf.

6" of vinyl cove base
1 small bolt with two washers and nylock nut.

6 thin metal rings (I made these with two different sized hole saws) Square opening would work too.

1/8" pop rivets

Salvage vac hose from thrift store—smooth inside. Fits 1 1/4" Female adapter.