Bee Sampling Vacuum Attachment
Drawing by Gary Reuter adapted from design by Kirk Visscher

**Parts needed**
1. ¾” barb x FIP PVC fitting
2. ¾” MIP x 1¼” spigot PVC fitting
3. 1¼” coupling PVC fitting
4a. 1¼” x 6” PVC pipe **OR**
4b. 1½” x 6” shipping tube
5. 1¼” slip x 2” spigot PVC fitting screen

**Definitions**
- FIP = female pipe thread
- MIP = male pipe thread
- Spigot = fits into PVC slip fitting
- Shipping tube Uline #U12642 or similar
- Slip = slips on PVC pipe
- Screen = 8x8 hardware cloth

Purchase parts shown and assemble. As noted the center section needs to be removable so do not glue. Parts 1, 2, & 3 become the removable nozzle. Purchase small rechargeable vacuum. Remove the front housing from the vacuum and glue 2” adapter to the front. If the vacuum has very smooth plastic make it rough with coarse sandpaper before gluing with hot glue, epoxy or silicone adhesive.

You can use either the PVC pipe (4a) or the shipping tube (4b) for the center collection tube. The pipe is more durable but the shipping tube is nice to see what is going on inside. Screen is epoxy glued into the shipping tube. Screen on the PVC can be melted in or glued with hot glue, epoxy or silicone adhesive. **DO NOT** breath fumes from heated PVC.

This unit can be used for vacuuming bees from the entrance for nosema sampling or from the comb or frames for other sampling.

**Operation:** Purchase zip lock bags. Vacuum up the desired number of bees. Remove the tube from the vacuum (that is why you did not glue it). Rap tube on screen end to get all the bees to the screen end. Remove nozzle from tube and put end of tube into bag. Hold bag tight around tube and shake the bees into the bag. Quickly remove tube and seal bag.