# Bee Informed Partnership
## Bag of Bottles (BOB)

**Overview:**

The kits provides beekeepers the ability to collect and received diagnostics on up to a total of 20 honey bee samples based on their needs. By monitoring disease levels, you will be able to make informed decisions about the health of your colonies, such as when to treat colonies and if treatments are effective. For each bottle, open and remove 1 frame from a colony that contains young, developing brood (if available) and shake the adult bees into a box or scoop bees from the frame, being careful to avoid the queen. You should aim to collect two, ¼ cup scoops of bees from each sampled colony and using the funnel, put them into the saltwater bottle. You will want to provide each colony with an identification code for referencing the sample bottle.

Send the samples to the University of Maryland Diagnostic lab for analysis and you will received a report in 2-3 weeks.

**YOU WILL NEED TO PROVIDE:**

- Box to ship saltwater bottles
- Postage for above
- Shipping tape
- Writing pen
- Marker or sharpie

**PROVIDED ITEMS (See Figure 1):**

- 20 small (125 ml) concentrated salt water solution samples
- 1 data sheet
- (optional) 1 funnel
- (optional) ¼ cup measuring cup

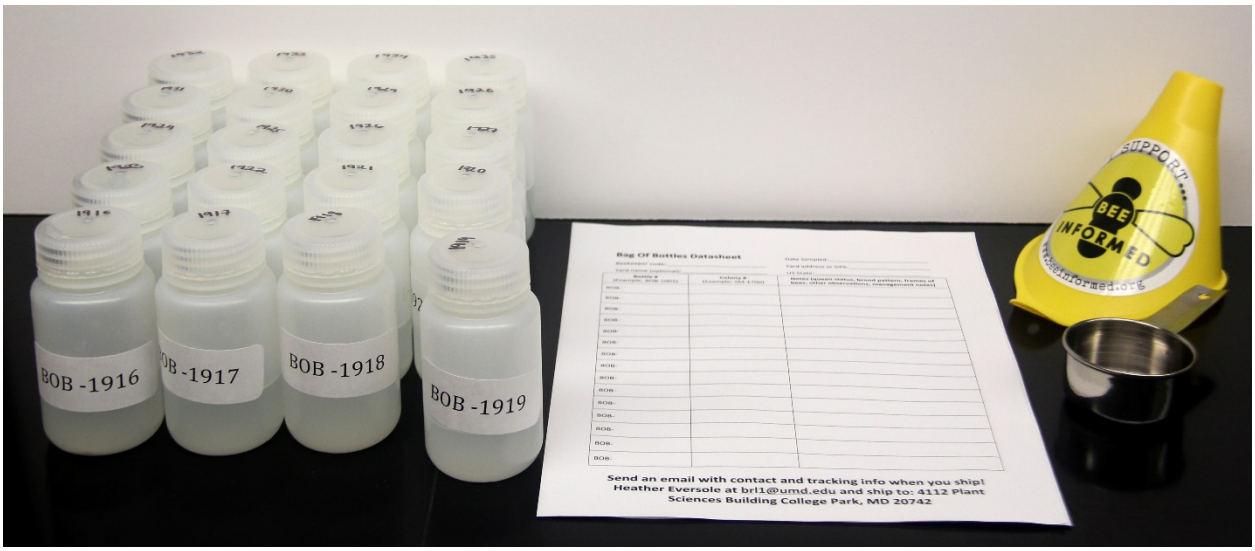

Figure 1: Bag of Bottles kits with optional funnel and scoop

**Steps:**

1. Open the colony to the brood nest and examine as desired, for disease, queen status/condition, # of frame of bees and brood pattern using provided info sheets as reference. Record the examination or unusual conditions present on the data information sheet.

2. Uncap one of the sampling bottles and insert the funnel into the top of the bottle (Figure 2).

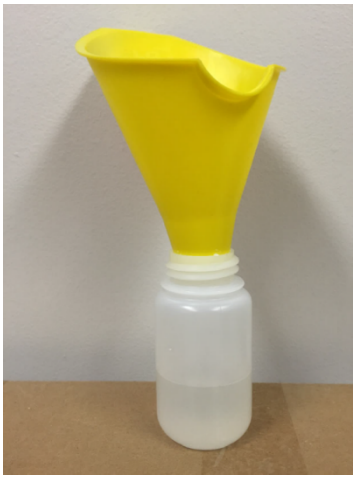
Figure 2: Sample bottle with funnel

3. Find a frame containing some uncapped brood. Carefully examine the frame to ensure the queen is not on this frame. You don't want to collect her!

4. Firmly shake the frame over a washtub or box to dislodge the bees. Gently knock the corner of tub on the ground so the bees collect in the corner. Gently scoop two, ¼ cup scoops of adult bees (1/2 cup total = about 300 bees) from the tub and place them into the funnel (Figure 3). Gently knock the bottle and funnel to get the bees to fall through the funnel and into the solution. 300 bees should fill about 2/3 of the bottle. If you do not have a washtub, you can

gently scoop bees directly from the frame by lightly dragging an open bottle upwards across the frame so the bees fall in. Be careful not to harm wax cappings or sample the queen and again, make sure the bottle is 2/3rd full.

5. Label each sample bottle to match your colony and note this on the data sheet.

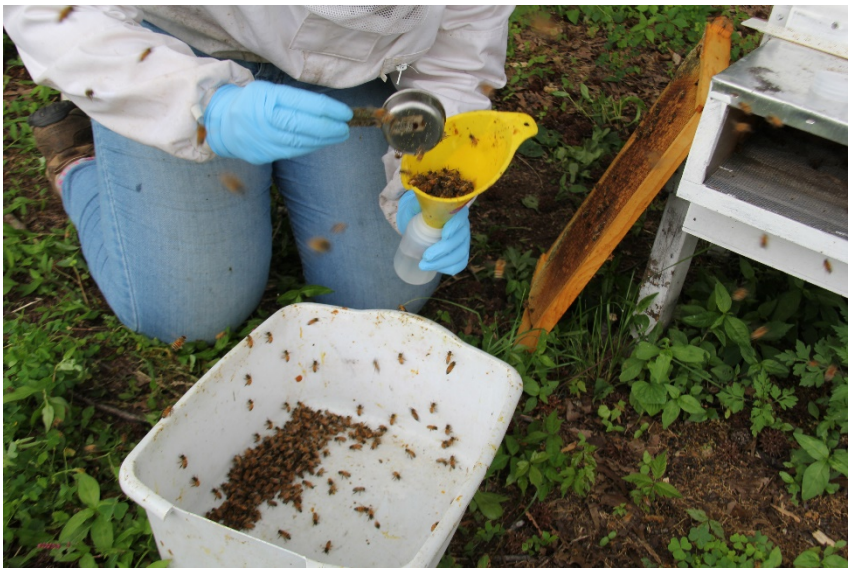

Figure 3: Scooping bees from tub into funnel

6. Close the labeled bottle tightly; shaking it to make sure the bees are fully dampened with solution.

7. Repeat steps one through six until up to 20 colonies have been sampled (if desired).

8. Ensure the data collection sheet is completely filled out and legible and place in a shipping box.

9. Ship the samples to Attn: The vanEngelsdorp Lab, 4112 Plant Science Bldg., College Park, MD 20742. Write your return address on the upper left corner of the box. Write the date on the front of the box.

10. Email: Research Specialist Heather Eversole (heversol@umd.edu) within 24 hours of shipment or call 301-405-3799 to notify personnel that a live bee shipment is expected. Please also email Heather within 24 hours after shipping the samples to notify the Bee Research Lab that a shipment is to be expected.