

2023 Small hive beetle survey

Collaborative survey between beekeepers, WSU, and WSDA

Two main techniques: diagnostic strips and visual inspection

This packet explains the techniques and provides an idealized survey schedule.

If you hate the schedule for the diagnostic strips, that's ok – it's just a guideline to try and make this project simpler.

If you want to provide data using other approaches (perhaps you have a beetle-blaster trap), please do!

Materials will be distributed through your society.

Please deliver collected insects to your society president and periodically retrieved by WSDA.



Diagnostic Strips

- Clear bottom board of debris (if necessary)
- Place on bottom board of colony
- Leave in colony for **2 nights during each sampling week**
- Remove quickly and shake out contents for counting or collection. (Shaking the contents into water may make it easier to collect any insects inside.)
- Record the day you remove the strip and indicate if insects were collected on the data sheet.
- Collect any insects seen and include a label (in pencil!) with your site and collection date *inside* of the collection vial.



- People with large apiaries will have more hives than strips. You can either pick a subsample of hives to monitor, change the hives you sample periodically, or sample continually throughout the season.

Visual Inspection

- At any time during colony maintenance
- Carefully examine underneath lids, between frames
- Beetles will scurry to dark areas of the hive
- Larvae will resemble small, white colored caterpillars
- Record inspection date and indicate if insects were collected on the data sheet.
- Collect any insects seen and include a label (in pencil!) with your site and collection date *inside* of the collection vial.



Visual Inspection Tips

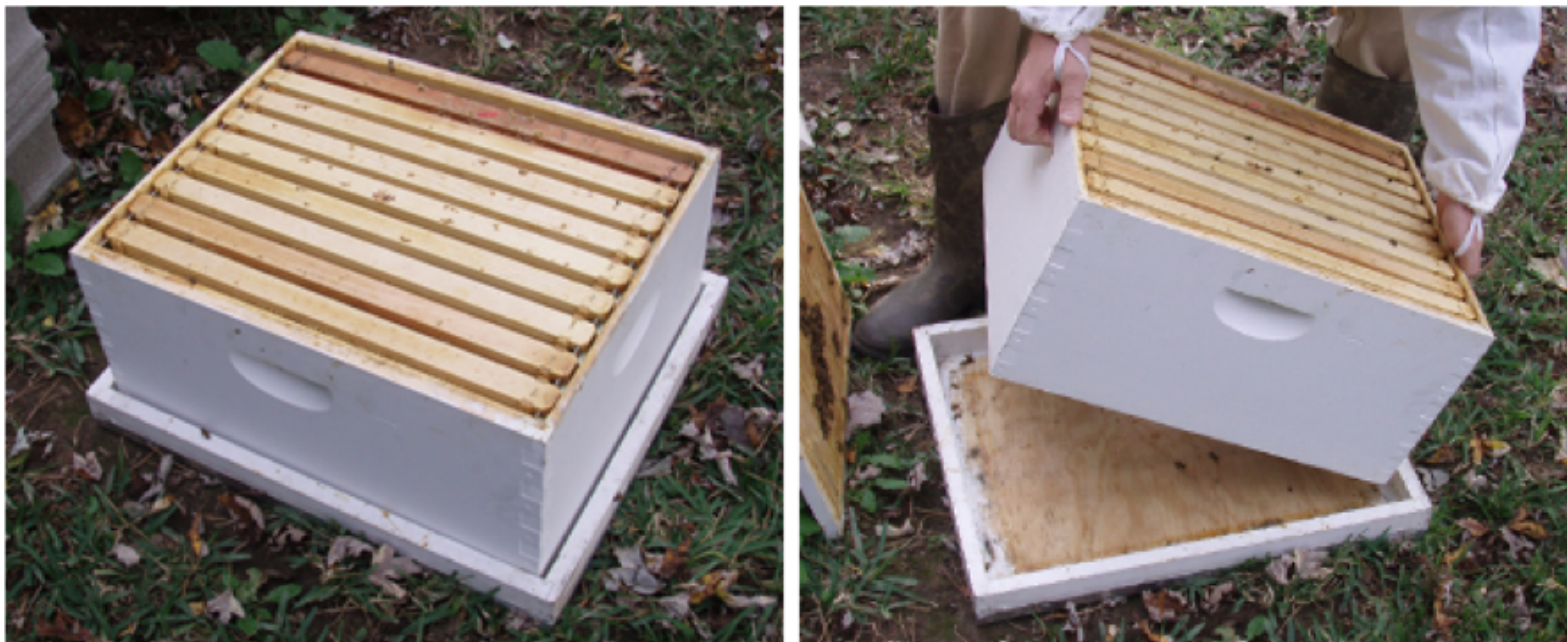


- Beetles can sometimes be found amongst workers
- Other insects may also be present – collect them too!



- Larvae may be seen crawling around on the frames and on the bottom board

Visual Inspection Tips



To detect SHB in the top super of a hive, place it on the hive lid in a sunny spot for about 10 minutes. The bright light will drive the beetles down to the bottom. If present, adult beetles should be visible on the lid when the super is lifted.

<https://bee-health.extension.org/>

Collecting the data (example)

Name: Chris Looney

(or use a fun alias!)

Address or GPS coords: 1220 Division St, 98502

(physical address or lat/long from google maps)

Colony Number: 1

(if you survey more than one hive please assign each a unique number for the year)

Collection date	Diagnostic strip used?	Visual inspection?	Insects collected?	Comments/notes
28 Mar 2023	Y	N	N	
12 April 2023	Y	N	N	
15 April 2023	N	Y	Y	
24 April 2023	N	N	N	didn't survey
4 May 2023	Y	N	N	
6 May 2023	N	Y	Y	all were on bottom board
18 May 2023	Y	N	Y	

Diagnostic Strip Sampling Schedule

Place strips in hive during the weeks of:

27 March

10 April

24 April

8 May

22 May

5 June

19 June

3 July

17 July

31 July

14 August

28 August

11 September

25 September

9 October

23 October

6 November

20 November

If you are unable to sample in a designated week, please indicate that no strip was placed.

Only use diagnostic strips if it fits your hive care regime; for example, if you are still using reducers that makes it impossible to deploy the diagnostic strip, don't start sampling until you're ready

