



MONITORING FORM FOR FREE-LIVING HONEY BEE COLONY NESTS

Before completing this questionnaire, it is important that you **first carefully read the accompanying Guidelines**. Sections and questions below with **red asterisks* are mandatory**, as they are necessary for collecting and organizing fundamental data on nest occupation and colony survival. For this reason, if any are left blank, the quality of your data may be compromised and your questionnaire(s) unusable for the study. The remaining questions (10–19) are optional, although we strongly encourage that you fill them out, too, to the best of your ability for more comprehensive and scientific reporting.

In order to improve the validity of the data collected through this form, we request that you **take digital photos and/or videos per the Guidelines**. When sending those to Honey Bee Watch, our research partners, or any other initiative using this form, please make sure to include the same contact information, Nest ID#, and Observation date and time as reported herein (up until Question 2 below).

***Contact information for the person monitoring the nest(s):**

First name _____
Last name _____
Email _____
Phone _____

1. *** Nest ID#:** _____
2. *** Observation date** ___ / month ___ / year _____ **and time** ____ : ____ **AM or PM**
(circe one)
3. *** Period of observation, relative to seasonal colony activity (see “Timing of Observations” section in the Guidelines):**
 - End of winter
 - Between end of winter and before swarming
 - During swarming
 - Between end of swarming and beginning of autumn
 - Between end of autumn and beginning of winter
 - I'm not sure
4. *** Weather conditions:**
 - A. **Temperature at time of observation:**
 - <0°C // <32°F



- 0–10°C // 32–50°F
- 11–15°C // 51–59°F
- 16–20°C // 60–68°F
- 21–25°C // 69–77°F
- 26–30°C // 78–86°F
- >30°C // >86°F

B. Wind at time of observation:

- 0 - No wind
- 1 - Barely noticeable wind
- 2 - Leaves moving, wind felt on face
- 3 - Stronger wind, moving branches
- 4 - Very strong wind

C. Cloudiness at time of observation:

- 0 - Completely clear
- 1 - Low cloudiness (1–34% coverage)
- 2 - Moderate cloudiness (35–75% coverage)
- 3 - High cloud cover (76–100% coverage)

D. Rain at time of observation:

- 0 - No rain
- 1 - Drizzle
- 2 - Moderate rain
- 3 - Heavy rain

5. *In observing the entrance, quantify the bees' level of activity (i.e., the number of bees seen during timed intervals):

- 0 - Not active: For two minutes, no bees were seen at the entrance
- 1 - Passive: Bees present at entrance but not flying (e.g., guard bees, fanning, etc.)
- 2 - Barely active: Per minute, between 1–10 bees were seen flying at the entrance
- 3 - Active: Per minute, 1–20 bees were seen **constantly** flying at the entrance
- 4 - Very active: Per minute, 20+ bees were seen **constantly** flying at the entrance
- I'm not sure or I can't see (e.g., the entrance is blocked from view)

6. *Do you see bees carrying pollen into the nest?

- Yes
- For two minutes, no pollen was seen entering the nest
- I'm not sure or I can't see (e.g., the entrance is blocked from view)

7. *If no flying bees are visible and you can SAFELY reach the entrance (do not climb or take any risks!), do you see other signs of nest occupancy?

- Yes, I can hear bees inside the nest
- Yes, I can see bees inside the nest



- I looked and listened closely at the entrance but no bees could be heard or seen
- I was unable to reach the entrance

8. *Was a swarming event observed?

- Yes, I saw a swarm leave the nest
- Yes, I saw a swarm fly into the nest
- No
- I'm not sure or I can't see

9. *Have there been any changes to the nest, such as damage or degradation caused by natural events (e.g., fallen tree) or human activities (e.g., construction, vandalism)?

- Yes, damage or degradation caused by natural events (please describe):

- Yes, damage or degradation caused by human activities (please describe):

- No changes
- I'm not sure or I can't see

OPTIONAL QUESTIONS

10. Was the nest site in full shade at the time of observation?

- Yes
- No

11. Describe the flight pattern of the bees at the entrance:

- Directional: Bees flying in and out in straight lines
- Erratic/undirected: e.g., Individual bees flying in nervous zigzags around entrance
- Some flights are directional, some erratic/undirected
- Other (please describe): _____

12. If the cavity is no longer occupied by honey bees, do any other species occupy it?

- Yes
 - Mammals: _____
 - Birds: _____
 - Insects: _____
 - Other: _____
- No
- I'm not sure or I can't see



13. Do you see wasps or hornets flying around the entrance of the nest?

- Yes
- No
- I'm not sure or I can't see

14. Do you see honey bee drones at the nest entrance or flying in/out of the nest?

- Yes
- No
- I'm not sure or I can't see

15. Defensiveness of the bees:

- 0 - Not defensive
- 1 - Mildly defensive: Bees flew around without stinging me
- 2 - Defensive: I was stung by one or more bees

16. Are other honey bee colonies nearby (e.g., within a radius of a few 100 meters)?

- Yes, I know of one or more other **free-living colonies** nearby
 - Number of free-living colonies: _____
 - What is the distance from this nest to the others? _____
- Yes, I know of one or more **managed colonies** nearby
 - Number of managed colonies: _____
 - What is the distance from this nest to them? _____
- No
- I'm not sure

17. Since the previous visit, have you observed any changes to the nest entrance, including new entrances or modifications to existing ones (e.g., an entrance in a tree cavity that is gradually closing)?

- Yes
 - Please specify the number of new entrances: _____
 - Entrance has become narrower or is gradually closing
 - Propolis or wax construction added to reduce entrance(s)
 - Other: _____
- No
- I'm not sure or I can't see

18. During this visit, did any problems occur that affected your observations (e.g., a large animal passed by, a sudden storm erupted, you left midway through, etc.)?



19. Please use this space to describe any other observations or details that you encountered that may be interesting and that have not already been addressed in this questionnaire:

Submitting This Form

When you have completed one form for each observed nest site, please submit it either directly to Honey Bee Watch (honeybeewatch.info@gmail.com) or to your local research group.