

COLOSS: Honey Bee Colony Loss/Survival Survey

2018/2019

Dear Beekeeper,

Your contribution to this annual survey on colony losses is much appreciated. At various points in the questionnaire below, there are points of **Information** marked in **RED**. Hopefully these will explain the logic of the questions that follow. Please try to complete **all** the questions as this will allow not only the number of winter colony losses to be calculated, but will also contribute to identifying the possible causes for these losses.

Please send completed questionnaires to:

Dr Mary F Coffey, Teagasc, Oakpark Research Centre, Carlow

All completed surveys **should be returned by 1 June 2019**.

The questionnaire will also be available online from May 1st on the National Apiculture Programme website (www.nationalapicultureprogramme.info) and the webpages of FIBKA, NIHBS and IBA CLG. It is important that each beekeeper only completes the survey once.

Thank you

Mary F

Information: Completing your personal details (name, address and contact details) is optional but details of the town/county closest to apiary is essential. Please note that any personal information provided will be removed from the file used for processing the data and kept confidential.

First name _____
Last name _____
Address _____
City _____
Postal code _____
Email _____
County _____
Country **Ireland**

- ① To describe the location of your main apiary or operation, please state
a) the name of a city/town/village near to your apiary? _____
b) and the postal code of the apiary (or a postal code nearby) _____

- ② How many apiaries do you have?

- ③ If you have more than one apiary, are all your apiaries within a distance of about 15 km of each other? If you have only **one** apiary, **please answer yes.**

Yes No Don't know

Information: Numbers of colonies, losses and status of the colony post-winter.
Please consider winter as the period between the moment that you finished the pre-winter preparations for your colonies and the start of the new foraging season.
In this questionnaire we try to gather information about production colonies. A production colony is a colony which is queen right and is strong enough to produce honey.

4 How many production colonies did you have before winter 2018-2019?

Information: In the next questions you are asked for numbers of colonies lost.
Please consider a colony as lost if it:

1. died out (or reduced to a few hundred bees) during winter
2. died due to natural disaster
3. was still alive post winter, but had queen problems you couldn't solve (drone laying queens or no queen at all)

Each colony LOST should be attributed to one of these three categories.

5 How many of these (4) colonies did you lose that were alive but had unsolvable queen problems. If none, please answer 0.

6 How many of these (4) colonies did you lose, because of natural disaster (flooding, storm, fallen tree, cattle/sheep, vandalism, theft, rodents)?

7 How many of these (4) colonies did you lose, because they were dead?

- 8 How many of the dead colonies (7)
- a) ... had many dead bees in or in front of the hive?
 - b) ... had no or only a few dead bees in or in front of the empty hive?
 - c) ... had dead workers in cells and no food present in the hive (signs of starvation)?
 - d) ... had dead workers in cells while food was present in the hive?
 - e) ... had none of the above or unknown symptoms?

Note: Each individual dead colony should be categorized into only one of the Groups marked a) to e). The total number of dead colonies in Q7 should be equal to sum of colonies in Q8

9 How many of the wintered colonies (4) were weak but queenright after winter 2018-2019?

Information: We would like to calculate increases and decreases in the number of colonies, so if you had colonies in spring 2018 and remember how many you had, please answer the following two questions, considering spring as the start of the foraging season:

10 How many production colonies did you have in a) spring 2018 (last year)?
b) spring 2019?

Information: Conditions in the colonies, the environment around the apiary, and management:

11 How many of the wintered colonies had a new queen in 2018? Don't know

22 If you gave your colonies a supplemental sugar feed (sugar solution or inverted sugar) last year to prepare for winter, how many kg of sugar (dry matter) did you give on average per production colony?

23 Do you keep your bees in an area where Varroa has still not been detected?
 Yes No Don't know

24 Have you noticed bees with crippled/deformed wings in your colonies (during the summer season)? (These are signs of the presence of Deformed Wing Virus, which is spread by Varroa mites).
 Not at all to a limited extent to a large extent Don't know

25 What particular measures apply for the majority of your beekeeping:

- a) Screened (mesh) bottom board in Winter Yes No Don't know
- b) Insulated hives in Winter (incl. double walled hives) Yes No Don't know
- c) Hives made from synthetic materials Yes No Don't know
- d) Certified organic beekeeping Yes No Don't know
- e) Queens bred from Varroa tolerant/resistant stock Yes No Don't know
- f) Small brood cell size (5.1 mm or less) Yes No Don't know
- g) Natural comb (without foundation) Yes No Don't know
- h) Purchase wax from outside own operation Yes No Don't know
- i) Non-wax foundation in brood chamber Yes No Don't know

26 Did you observe *Vespa velutina* (Asian hornet) foraging for honey bees in your apiary/apiaries?
 Yes No Don't know

27 How much in Euros (€) do you estimate your costs to be per colony for Varroa treatment in the period April 2018 to April 2019.

On behalf of the National Apiculture Programme sincere thanks for completing this annual survey. We appreciate the time you have put into completing the Survey.

Mary Frances Coffey

April 2019