

## COLOSS: Honey Bee Colony Loss Survey 2019/2020

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:

*Mary F Coffey, Oldtown, Templemore, Co Tipperary  
(Please note all data will be stored in an encrypted UL database)*

All completed surveys **should be returned by 1 June 2020.**

The questionnaire will also be available online from May 1<sup>st</sup> on the National Apiculture Programme website ([www.nationalapicultureprogramme.info](http://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 \_\_\_\_\_  
Eircode \_\_\_\_\_  
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 2019-2020?

**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 recorded to ONLY 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 died out during the winter period?

- 8 How many of the dead colonies (died out group) (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 Q8

9 How many of the wintered colonies (4) were weak but queenright after winter 2019-2020?

**Information:** We would like to calculate increases and decreases in the number of colonies, so if you had colonies in spring 2019 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 2019 (last year)?   
b) spring 2020?

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

11 How many of the wintered colonies had a new queen in 2019?

12 To what extent did you observe queen problems in your colonies during the foraging season of 2019 compared to what you usually have?  
 More  Normal  Less  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 2019 to March 2020.

**On behalf of the John Breen and Mary Coffey, our sincere thanks for completing this annual survey and we appreciate the time you have taken to complete it.**

*John Breen/Mary Frances Coffey*

*April 2020*