





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 <u>all</u> 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 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 <u>optional</u> 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	
	ocation of your main apiary or operation, please state of a city/town/village near to your apiary?	
•	ostal code of the apiary (or a postal code nearby)	
•		

O Yes O No O 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 col is a colony which is queen right and is strong enough to produce honey.	ony
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 que or no queen at all) Each colony LOST should be recorded to ONLY one of these three categories.	ens
5 How many of these (4) colonies did you lose that were alive but had	7
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 <u>dead</u> 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 <u>dead workers in cells</u> and <u>no food present</u> in the hive	
(signs of starvation)?	
d) had <u>dead workers in cells</u> while <u>food was present</u> in the hive?	
e) had none of the above or unknown symptoms?	٦
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 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	t:
11 How many of the wintered colonies had a new queen in 2019? Don't know	
To what extent did you observe queen problems in your colonies during the foraging season	of
2019 compared to what you usually have? O More O Normal O Less O Don't know	

(3) Compared with your colonies with old queens, have your colonies with young queens survived winter?									
O Better O No differently		У	O Wor	O Don't know / not applicable					
14 How many of y faeces inside the h	es had a	ı large aı	mount c	of	Don't kn	ow			
15 Did you migrate any of your colonies at least once for honey production or pollination in 2019? O Yes O No O Don't know									
6 Approximately colony in 2019?	ombs di 0 1-30	-	place w 0 31-5			lation per re than 50%			
Did the majority of your bee colonies have a significant flow on one or more of the following plants in 2019?									
a)	Orchards		O Yes	O No	O Don'	t know			
b)	Oil seed rape		O Yes	O No	O Don'	t know			
c)	Maize		O Yes	O No	O Don'	t know			
d)	Sunflower		O Yes	O No	O Don'	t know			
e)	Heather		O Yes	O No	O Don'	t know			
f)	Autumn forage pla	nt	O Yes	O No	O Don'	t know			
(Autumn fo	rage plants = nectar p	lants gro	owing in	land lyin	g fallow:	eg must	ard)		
18 Have you monitored your colonies for Varroa during the period April 2019 - March 2020?									
Trave you mom	tored your colonies	O Yes			t know ,			2020.	
19 Have you treated your colonies against Varroa during the period April 2019 – March 2020?									
		O Yes	O No	O Don	t know ,	/ not ap	plicable		
20 Could you plea	se indicate the month	S		Month	in which	each mea	sure start	ed:	
when you monitore	onies			2019			2020		
	o indicate when you								
	treatment or manager	l II				_			
plan during the per	iod : Apr 2019 – Mar 2	2020?			<u>.</u>	nber er	lber lber	y ary	

20 Could you please indicate the months	Month in which each measure started:											
when you monitored your production colonies		2019							2020			
for Varroa AND also indicate when you STARTED a Varroa treatment or management												
plan during the period : Apr 2019 – Mar 2020?						þer		er	er	_	>	
Method / Product:	April	Мау	June	July	August	Septem	October	Novemk	Decemb	January	February	March
Monitoring of Varroa infestation level (e.g. counting mite fall)												
Drone brood removal												
Hyperthermia (heat treatment of brood/bees)												
Other biotechnical method (as e.g. trapping comb, complete brood removal, queen confinement)												
Formic acid - short term												
Formic acid - long term (e.g. MAQS)												
Lactic acid												
Oxalic acid (ApiBioxal) - trickling												
Oxalic acid (ApiBioxal)- sublimation (evaporation)												
Hiveclean/Bienenwohl/Beevital												
Thymol (e.g. Apiguard, ApilifeVar)												
Tau-fluvalinate (e.g. Apistan)												
Flumethrin (e.g. Bayvarol)												
Amitraz (in strips, e.g. Apivar, Apitraz)												
Amitraz (fumigation/aerosol)												
Coumaphos (e.g. Perizin)												
Coumaphos (in strips, e.g. Checkmite+)												
Another chemical product												<u> </u>
Another method												

22 If you gave your colonies a supplemental sugar feed sugar) last year to prepare for winter, how many kg of				
on average per production colony?				
23 Do you keep your bees in an area where Varroa has	still not O Yes	been de	etected? O Don't know	
24 Have you noticed bees with crippled/deformed wing season)? (These are signs of the presence of Deformed O Not at all O to a limited extent O to a limit		irus, wh		
What particular measures apply for the majority of a) Screened (mesh) bottom board in Winter b) Insulated hives—in Winter (incl. double walled hives) c) Hives made from synthetic materials d) Certified organic beekeeping e) Queens bred from Varroa tolerant/resistant stoof) Small brood cell size (5.1 mm or less) g) Natural comb (without foundation) h) Purchase wax from outside own operation i) Non-wax foundation in brood chamber	O Yes O Yes O Yes O Yes	NoNoNoNoNoNoNoNoNoNoNoNoNo	O Don't know	
26 Did you observe <i>Vespa velutina</i> (Asian hornet) foragapiary/apiaries?	ging for I	noney bo	ees in your O Don't know	
27 How much in Euros (€) do you estimate your costs t treatment in the period April 2019 to March 2020.	o be pe	r colony	for Varroa	

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