

## CAPA - 2023 Core Winter loss survey questions

The followings are the core questions that will be used in 2023 by each provincial apiarist for reporting the colony winter losses at the national level. As it has been since 2007, the objective is to estimate the winter kills with a simple and standardized method while taking into account the large diversity of situations around the country. This is a survey so these questions are to be answered by the beekeepers.

1. How many full sized colonies<sup>1</sup> were put into winter in fall 2022?

Outdoor wintering	Indoor wintering	Total

2. How many full sized colonies<sup>1</sup> survived the 2022/2023 winter and were considered viable<sup>2</sup> on May 1<sup>st</sup> (British Columbia), May 15<sup>th</sup> (Ontario, Quebec and Maritimes) or May 21<sup>st</sup> (Alberta, Manitoba, Newfoundland and Saskatchewan)?

Outdoor wintering	Indoor wintering	Total

3. Which method of treatment did you use for varroa control in **spring 2022**? What percent of hives were treated? (Choose all that apply)

	Treatment	Percent of hives treated (%)
<input type="checkbox"/>	Apistan (fluvalinate)	
<input type="checkbox"/>	CheckMite+ (coumaphos)	
<input type="checkbox"/>	Apivar (amitraz)	
<input type="checkbox"/>	Thymovar (thymol)	
<input type="checkbox"/>	ApiLifeVar (Thymol and essential oils)	
<input type="checkbox"/>	Bayvarol (flumethrin)	
<input type="checkbox"/>	65% formic acid – 40 ml multiple application	
<input type="checkbox"/>	65% formic acid – 250 ml single application	
<input type="checkbox"/>	Mite Away Quick Strips (formic acid)	
<input type="checkbox"/>	Formic Pro (formic acid)	
<input type="checkbox"/>	Oxalic acid	

<sup>1</sup> Does not include nucleus colonies

<sup>2</sup> Viable: A viable colony, in a standard 10-frame hive, is defined as having 4 frames or more being 75% bee-covered on both sides.

NB: You must not include in this data new colonies created by division or purchased in spring 2023. You must however include overwintered colonies that would have been sold before May 1st (British Columbia), May 15th (Ontario, Quebec and Maritimes) or May 21st (Alberta, Manitoba, Newfoundland and Saskatchewan).

<input type="checkbox"/>	Hopguard II (hop compounds)	
<input type="checkbox"/>	Other (please specify) _____	
<input type="checkbox"/>	None	

4. Which method of treatment did you use for varroa control in late **summer/fall 2022**? What percent of hives were treated? (Choose all that apply)

	Treatment	Percent of hives treated (%)
<input type="checkbox"/>	Apistan (fluvalinate)	
<input type="checkbox"/>	CheckMite+ (coumaphos)	
<input type="checkbox"/>	Apivar (amitraz)	
<input type="checkbox"/>	Bayvarol (flumethrin)	
<input type="checkbox"/>	Thymovar (thymol)	
<input type="checkbox"/>	ApiLifeVar (Thymol and essential oils)	
<input type="checkbox"/>	65% formic acid – 40 ml multiple application	
<input type="checkbox"/>	65% formic acid – 250 ml single application	
<input type="checkbox"/>	Mite Away Quick Strips (formic acid)	
<input type="checkbox"/>	Formic Pro (formic acid)	
<input type="checkbox"/>	Oxalic acid	
<input type="checkbox"/>	Hopguard II (hop compounds)	
<input type="checkbox"/>	Other (please specify) _____	
<input type="checkbox"/>	None	

5. Regarding **Varroa** monitoring:

a. Have you monitored your colonies for Varroa during the 2022 season?

- Yes – sticky board
- Yes – alcohol wash
- Yes – other (please specify) \_\_\_\_\_
- No

b. How often do you monitor your colonies with either sticky board or a washing technique (alcohol, powder sugar or gas)?

- Just in the Spring
- Just in the Fall
- Both Spring and Fall
- At least 3 times a year

6. Which method of treatment did you use for **nosema** control in **spring 2022**? What percent of hives were treated?

	Treatment	Percent of hives treated (%)
<input type="checkbox"/>	Fumagillin	
<input type="checkbox"/>	Other (please specify) _____	
<input type="checkbox"/>	None	

7. Which method of treatment did you use for **nosema** control in **fall 2022**? What percent of hives were treated?

	Treatment	Percent of hives treated (%)
<input type="checkbox"/>	Fumagillin	
<input type="checkbox"/>	Other (please specify) _____	
<input type="checkbox"/>	None	

8. Did you apply the following treatments for American or European **foulbrood** in **spring 2022**? What percent of hives were treated? (Choose all that apply)

	Treatment	Percent of hives treated (%)	
		AFB	EFB
<input type="checkbox"/>	Oxytetracycline		
<input type="checkbox"/>	Tylosin		
<input type="checkbox"/>	Lincomycin		
<input type="checkbox"/>	None		

9. Did you apply the following treatments for American or European **foulbrood** in **fall 2022**? What percent of hives were treated? (Choose all that apply)

	Treatment	Percent of hives treated (%)	
		AFB	EFB
<input type="checkbox"/>	Oxytetracycline		
<input type="checkbox"/>	Tylosin		
<input type="checkbox"/>	Lincomycin		
<input type="checkbox"/>	None		

10. To what do you attribute the main cause of death of your colonies? (Please check every suspected cause and rank the causes according to their relative importance.)

	Cause of death	Rank (1 = the most important)
<input type="checkbox"/>	Don't know	
<input type="checkbox"/>	Starvation	
<input type="checkbox"/>	Poor queens	
<input type="checkbox"/>	Ineffective Varroa control	
<input type="checkbox"/>	Nosema	
<input type="checkbox"/>	Weather	
<input type="checkbox"/>	Weak colonies in the fall	
<input type="checkbox"/>	Other ( <i>Please specify</i> ) _____	
<input type="checkbox"/>	Other ( <i>Please specify</i> ) _____	
<input type="checkbox"/>	Other ( <i>Please specify</i> ) _____	