

Thank you for participating in the **2018-2019 Bee Informed Partnership National Colony Loss and Management Survey**



**DO NOT SEND US THIS PAPER SURVEY!! WE WILL NOT ENTER ANY RESPONSES PROVIDED ON THIS PREVIEW.** This preview of the survey is intended to allow you to look through the questions, or print a hard copy, as an aid before taking the survey online (at **ENTER URL** here)

*Completion of all or part of this survey is voluntary. If you are not comfortable answering a question, please leave it blank. That said, questions marked by an asterisk (\*) are very important to this survey ☺. Without them, your data will have limited value.*

1\* In what state(s)/territory did you keep your colonies between April 1, 2018 and April 1, 2019? *(Select all that apply)*

<input type="checkbox"/> Alabama	<input type="checkbox"/> Georgia	<input type="checkbox"/> Maryland	<input type="checkbox"/> New Jersey	<input type="checkbox"/> Rhode Island	<input type="checkbox"/> Vermont
<input type="checkbox"/> Alaska	<input type="checkbox"/> Hawaii	<input type="checkbox"/> Massachusetts	<input type="checkbox"/> New Mexico	<input type="checkbox"/> South Carolina	<input type="checkbox"/> Virginia
<input type="checkbox"/> Arizona	<input type="checkbox"/> Idaho	<input type="checkbox"/> Michigan	<input type="checkbox"/> New York	<input type="checkbox"/> South Dakota	<input type="checkbox"/> Washington
<input type="checkbox"/> Arkansas	<input type="checkbox"/> Illinois	<input type="checkbox"/> Minnesota	<input type="checkbox"/> North Carolina	<input type="checkbox"/> Tennessee	<input type="checkbox"/> West Virginia
<input type="checkbox"/> California	<input type="checkbox"/> Indiana	<input type="checkbox"/> Mississippi	<input type="checkbox"/> North Dakota	<input type="checkbox"/> Texas	<input type="checkbox"/> Wisconsin
<input type="checkbox"/> Colorado	<input type="checkbox"/> Iowa	<input type="checkbox"/> Missouri	<input type="checkbox"/> Ohio	<input type="checkbox"/> Utah	<input type="checkbox"/> Wyoming
<input type="checkbox"/> Connecticut	<input type="checkbox"/> Kansas	<input type="checkbox"/> Montana	<input type="checkbox"/> Oklahoma	<input type="checkbox"/> Other, please specify: <input type="text"/>	
<input type="checkbox"/> District of Columbia	<input type="checkbox"/> Kentucky	<input type="checkbox"/> Nebraska	<input type="checkbox"/> Oregon		
<input type="checkbox"/> Delaware	<input type="checkbox"/> Louisiana	<input type="checkbox"/> Nevada	<input type="checkbox"/> Pennsylvania		
<input type="checkbox"/> Florida	<input type="checkbox"/> Maine	<input type="checkbox"/> New Hampshire	<input type="checkbox"/> Puerto Rico		

*For the purpose of this survey, a "colony" is a queen right unit of bees that includes full size colonies, queen right nucs and packages once installed (do NOT include mating nucs); "Living" means alive on that date, independent of future prospects; "Increases" include successfully hived swarms and/or feral colonies.*

2*	How many <b>living</b> colonies did you have last spring on April 1, 2018?	<input type="text"/>
3	If known, how many of those specific colonies were <b>still alive</b> on October 1, 2018?	<input type="text"/>
4*	How many <b>colonies, splits and/or increases</b> did you <b>make or obtain</b> between April 1, 2018 and October 1, 2018?	<input type="text"/>
5	If known, how many of those <b>colonies, splits and/or increases</b> were <b>still alive</b> on October 1, 2018?	<input type="text"/>
6*	How many <b>colonies, splits and/or increases</b> did you <b>sell or give away</b> between April 1, 2018 and October 1, 2018?	<input type="text"/>
7*	Did you purposefully <b>combine</b> colonies between April 1, 2018 and October 1, 2018? <input type="radio"/> No <input type="radio"/> Yes    If yes:    # colonies that were combined:    # colonies that resulted from combination: <input type="text"/> <input type="text"/>	
8*	How many <b>living</b> colonies did you have last fall on October 1, 2018?	<input type="text"/>
9	If known, how many of those specific colonies were <b>still alive</b> on April 1, 2019?	<input type="text"/>
10*	How many <b>colonies, splits and/or increases</b> did you <b>make or obtain</b> between October 1, 2018 and April 1, 2019?	<input type="text"/>
11	If known, how many of those specific <b>colonies, splits and/or increases</b> were <b>still alive</b> on April 1, 2019?	<input type="text"/>
12*	How many <b>colonies, splits and/or increases</b> did you <b>sell or give away</b> between October 1, 2018 and April 1, 2019?	<input type="text"/>
13*	Did you purposefully <b>combine</b> colonies between October 1, 2018 and April 1, 2019? <input type="radio"/> No <input type="radio"/> Yes    If yes:    # colonies that were combined:    # colonies that resulted from combination: <input type="text"/> <input type="text"/>	
14*	How many <b>living</b> colonies did you have this spring on April 1, 2019?	<input type="text"/>

15 What percentage of your colonies established or made the previous spring and summer (between April 1, 2018 and October 1, 2018) were still alive on April 1, 2019?  Between 0-100%  
(In other words, what % of your colonies **successfully overwintered for the first time.**)

16\* What **percentage** of loss, over the last winter, would you consider acceptable?  Between 0-100%

17 Of your colonies that died between October 1, 2018 and April 1, 2019, what **percentage** experienced the following symptoms:  Between 0-100%  
*Lack of dead workers around hives AND rapid loss of adult worker force, but presence of brood and laying queen AND delayed invasion of hive pests/robbing*

18 In your opinion, what factors were the most prominent **cause(s) of colony death** in your operation in **Summer** (between April 1, 2018 and October 1, 2018)? *(select all that apply)*

I did not experience summer loss     Natural disaster (e.g. hurricane, flood)     Pesticides and Apicultural treatments  
 Adverse weather (e.g. drought)     Nutritional stress (pollen deprivation)     Predators (e.g. bears)  
 Brood diseases (e.g. EFB, AFB)     Starvation (honey/nectar/sugar water)     Scavenger Pests (e.g. Small Hive Beetle, Wax moth)  
 Queen issues     Equipment failure (e.g. moisture, ventilation)     Varroa mites and associated viruses  
 I don't know     Other, please specify:

19 In your opinion, what factors were the most prominent **cause(s) of colony death** in your operation in **Winter** (between October 1, 2018 and April 1, 2019)? *(select all that apply)*

I did not experience winter loss     Natural disaster (e.g. hurricane, flood)     Pesticides and Apicultural treatments  
 Adverse weather (e.g. cold snap)     Nutritional stress (pollen deprivation)     Predators (e.g. bears)  
 Brood diseases (e.g. EFB, AFB)     Starvation (honey/nectar/sugar water)     Scavenger Pests (e.g. Small Hive Beetle, Wax moth)  
 Queen issues     Equipment failure (e.g. moisture, ventilation)     Varroa mites and associated viruses  
 I don't know     Other, please specify:

**Between April 1, 2018 and April 1, 2019...**

20 Please provide the zip code of your **primary apiary.**

21\* Did you move any of your colonies **across state lines**?     Yes *(skip Q 25 -27)*     No *(skip Q 22-23)*

22 Approximately what **percentage** of your operation moved **across state lines** at least once between April 1, 2018 and April 1, 2019?  Between 0-100%

23 What **percentage** of your hives did you send to or move into California almond orchards for pollination in 2019?   None  
Between 0-100%

24 For each month last year, please provide the number of colonies you maintained in each states/territory.

State	1 Apr '18	1 May '18	1 Jun '18	1 July '18	1 Aug '18	1 Sept '18	1 Oct '18	1 Nov '18	1 Dec '18	1 Jan '19	1 Feb '19	1 Mar '19
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25 What is the average size of your apiary or apiaries? *(On average how many colonies share the same location)*

26 In how many different apiaries did you keep your bees?

27 If you maintained stationary apiaries, please consider to include their GPS coordinates.  
*(Disclaimer: This information is confidential and will not be published. GPS data is valuable to estimate apiary densities in different regions.)*

N	<input type="text"/>	W	<input type="text"/>
N	<input type="text"/>	W	<input type="text"/>
N	<input type="text"/>	W	<input type="text"/>
N	<input type="text"/>	W	<input type="text"/>

**Congratulations and thank you!** You have just completed **Part 1** of the survey. Your information will be used to generate colony loss information that is critical to establishing baseline knowledge about the health of your honey bee colonies. **Part 2** focuses on how you managed your colonies last year. This information allows us to understand how your management practices are connected to the health of your colonies. Let's goooooo!!!!!!!

**Between April 1, 2018 and April 1, 2019...**

<p>28* ... how often did you visit/inspect your colonies per month? (e.g. May 3x)</p> <p><input type="radio"/> Never</p> <table style="width:100%; border: none;"> <tr> <td>Apr '18</td><td><input type="checkbox"/></td> <td>Aug '18</td><td><input type="checkbox"/></td> <td>Dec '18</td><td><input type="checkbox"/></td> </tr> <tr> <td>May '18</td><td><input type="checkbox"/></td> <td>Sep '18</td><td><input type="checkbox"/></td> <td>Jan '19</td><td><input type="checkbox"/></td> </tr> <tr> <td>Jun '18</td><td><input type="checkbox"/></td> <td>Oct '18</td><td><input type="checkbox"/></td> <td>Feb '19</td><td><input type="checkbox"/></td> </tr> <tr> <td>Jul '18</td><td><input type="checkbox"/></td> <td>Nov '18</td><td><input type="checkbox"/></td> <td>Mar '19</td><td><input type="checkbox"/></td> </tr> </table>	Apr '18	<input type="checkbox"/>	Aug '18	<input type="checkbox"/>	Dec '18	<input type="checkbox"/>	May '18	<input type="checkbox"/>	Sep '18	<input type="checkbox"/>	Jan '19	<input type="checkbox"/>	Jun '18	<input type="checkbox"/>	Oct '18	<input type="checkbox"/>	Feb '19	<input type="checkbox"/>	Jul '18	<input type="checkbox"/>	Nov '18	<input type="checkbox"/>	Mar '19	<input type="checkbox"/>	<p>29* ... how often did you monitor VARROA mites in your colonies per month? (e.g. May 3x)</p> <p><input type="radio"/> Never (skip Q31)</p> <table style="width:100%; border: none;"> <tr> <td>Apr '18</td><td><input type="checkbox"/></td> <td>Aug '18</td><td><input type="checkbox"/></td> <td>Dec '18</td><td><input type="checkbox"/></td> </tr> <tr> <td>May '18</td><td><input type="checkbox"/></td> <td>Sep '18</td><td><input type="checkbox"/></td> <td>Jan '19</td><td><input type="checkbox"/></td> </tr> <tr> <td>Jun '18</td><td><input type="checkbox"/></td> <td>Oct '18</td><td><input type="checkbox"/></td> <td>Feb '19</td><td><input type="checkbox"/></td> </tr> <tr> <td>Jul '18</td><td><input type="checkbox"/></td> <td>Nov '18</td><td><input type="checkbox"/></td> <td>Mar '19</td><td><input type="checkbox"/></td> </tr> </table>	Apr '18	<input type="checkbox"/>	Aug '18	<input type="checkbox"/>	Dec '18	<input type="checkbox"/>	May '18	<input type="checkbox"/>	Sep '18	<input type="checkbox"/>	Jan '19	<input type="checkbox"/>	Jun '18	<input type="checkbox"/>	Oct '18	<input type="checkbox"/>	Feb '19	<input type="checkbox"/>	Jul '18	<input type="checkbox"/>	Nov '18	<input type="checkbox"/>	Mar '19	<input type="checkbox"/>	<p>30* ...how often did you monitor NOSEMA levels in your colonies per month? (e.g. May 3x)</p> <p><input type="radio"/> Never (skip Q32)</p> <table style="width:100%; border: none;"> <tr> <td>Apr '18</td><td><input type="checkbox"/></td> <td>Aug '18</td><td><input type="checkbox"/></td> <td>Dec '18</td><td><input type="checkbox"/></td> </tr> <tr> <td>May '18</td><td><input type="checkbox"/></td> <td>Sep '18</td><td><input type="checkbox"/></td> <td>Jan '19</td><td><input type="checkbox"/></td> </tr> <tr> <td>Jun '18</td><td><input type="checkbox"/></td> <td>Oct '18</td><td><input type="checkbox"/></td> <td>Feb '19</td><td><input type="checkbox"/></td> </tr> <tr> <td>Jul '18</td><td><input type="checkbox"/></td> <td>Nov '18</td><td><input type="checkbox"/></td> <td>Mar '19</td><td><input type="checkbox"/></td> </tr> </table>	Apr '18	<input type="checkbox"/>	Aug '18	<input type="checkbox"/>	Dec '18	<input type="checkbox"/>	May '18	<input type="checkbox"/>	Sep '18	<input type="checkbox"/>	Jan '19	<input type="checkbox"/>	Jun '18	<input type="checkbox"/>	Oct '18	<input type="checkbox"/>	Feb '19	<input type="checkbox"/>	Jul '18	<input type="checkbox"/>	Nov '18	<input type="checkbox"/>	Mar '19	<input type="checkbox"/>
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<p>31 Which of the following <b>techniques</b> did you use to monitor VARROA mites? (select all that apply)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Visual inspection of adult bees</li> <li><input type="checkbox"/> Visual inspection of drone brood</li> <li><input type="checkbox"/> Mite drop (sticky boards or other collection tray below the hive)</li> <li><input type="checkbox"/> Powdered sugar roll</li> <li><input type="checkbox"/> Ether roll</li> <li><input type="checkbox"/> Alcohol wash</li> <li><input type="checkbox"/> Samples collected by a BIP Tech Transfer Team (Lab Testing)</li> <li><input type="checkbox"/> Samples collected for another monitoring effort (eg: APHIS NHBS, Sentinel Apiary) (Lab Testing)</li> <li><input type="checkbox"/> I sent samples to another project (Lab Testing)</li> <li><input type="checkbox"/> Other, please specify:</li> </ul> <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>	<p>32 Which of the following <b>techniques</b> did you use to monitor NOSEMA levels? (select all that apply)</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Looked for Nosema symptoms in and around the hive</li> <li><input type="checkbox"/> Took samples and examined spores loads using a scope on my own</li> <li><input type="checkbox"/> Samples collected by a BIP Tech Transfer Team (Lab testing)</li> <li><input type="checkbox"/> Samples collected for another BIP monitoring effort (e.g.: APHIS NHBS, Sentinel Apiary) (Lab testing)</li> <li><input type="checkbox"/> I sent samples to another project (lab testing)</li> <li><input type="checkbox"/> Other, please specify:</li> </ul> <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>																																																																									

**Between April 1, 2018 and April 1, 2019...**

<p>33* ...did you use a <b>treatment</b> to try to control VARROA mites? (choose one)</p> <p><input type="radio"/> Yes <input type="radio"/> No</p>	<p>34* ...did you use a <b>treatment</b> to try to control NOSEMA? (choose one)</p> <p><input type="radio"/> Yes <input type="radio"/> No</p>
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Note: a "treatment" is the application of a biological, organic or synthetic chemical to control the pest.  
 For the purpose of this survey, "pest" includes any pest/pathogen/parasite/general enemy of the honey bee.

35\* ... which, if any, of the following did you apply to any of your colonies? (select all that apply)

<input type="checkbox"/> None of the following	<input type="checkbox"/> Thymol-based product (e.g. ApiLife VAR, ApiGuard)	<input type="checkbox"/> Fumagillin (e.g. Fumidil B)
<input type="checkbox"/> Amitraz-based product (e.g. Apivar)	<input type="checkbox"/> Coumaphos-based product (e.g. CheckMite+ )	<input type="checkbox"/> Terramycin
<input type="checkbox"/> Formic Acid (e.g. MiteAway QuickStrips)	<input type="checkbox"/> Fluvalinate-based product (e.g. Apistan)	<input type="checkbox"/> Tylan-based product (e.g. Tylosin)
<input type="checkbox"/> Oxalic Acid	<input type="checkbox"/> Hop oil based product (e.g. HopGuard)	<input type="checkbox"/> Mineral oils
	<input type="checkbox"/> Menthol-based product (e.g. Mite-A-Thol)	<input type="checkbox"/> Essential oils

Other, please specify: (NO FEED SUPPLEMENTS)

36 Please specify how and when you used the products selected in Q35 during the last year (April 1, 2018 to April 1, 2019):

Product used <i>(specify brand or homemade recipe)</i>	Target Pest <i>(eg. Varroa, SHB, ...)</i>	Months used <i>(eg. Jan &amp; Jul)</i>	% of colonies treated <i>[1-100%]</i>	Dose/Concentration & Delivery method <i>(per colony; eg # of strips) (if applicable)</i>	# applications (per colony, over 12 months) & duration <i>(if applicable)</i>	Reason treatment applied <sup>(1)</sup>
-						
-						
-						
-						
-						
-						
-						

<sup>(1)</sup> Reason treatment applied: **A:** as part of my regular maintenance/calendar treatment; **B:** in response to personal monitoring; **C:** in response to an inspection/visit; **D:** in response to Lab Test results; **E:** in response to pest outbreaks in the local area (from hearsay); **F:** Don't know

**Between April 1, 2018 and April 1, 2019...**

37\* ... did you use any of the following **practices/equipment** to try to control VARROA mites?  
*(select all that apply)*

I did **not** use any practices or equipment

Drone Brood Removal  
How many times in the year?

What % of your colonies?  
*(Between 0-100%)*

How much did you remove each time? *(choose one)*

~ 1deep fr.     ~ 1medium fr.     ~ 1shallow fr.

Only drone brood built between frames

Other:

Screened bottom board  
What % of your colonies?  
*(Between 0-100%)*   
During which months?

Small cell size comb

Powdered sugar  
What % of your colonies?  
*(Between 0-100%)*   
During which months?

I made splits

I created a brood break

Other, please specify:

38\* ... did you use any of the following **techniques** to try to control SMALL HIVE BEETLES?  
*(select all that apply)*

I did **not** use any technique to control SHB

Coumaphos strips  
What % of your colonies?  
*(Between 0-100%)*   
During which months?

Soil drench, please specify product:   
What % of your colonies?  
*(Between 0-100%)*   
During which months?

In-hive traps     Bottom-board traps

What kind of trap?

Chemical     to Enclose  
 to Drown     Swiffer pads  
 Diatomaceous earth

Other:

What kind of bait?

None

During which months?

Nematodes

Other, please specify:

**Between April 1, 2018 and April 1, 2019...**

39\* ... did you feed a food supplement/substitute or stimulant to any of your colonies?     Yes     No *(skip Q40-41)*

40\* ... which, if any, of the following did you apply to any of your colonies? *(select all that apply)*

<input type="checkbox"/> None of the following	<input type="checkbox"/> High Fructose Corn Syrup (HFCS)	<input type="checkbox"/> Protein supplement (e.g. MegaBee, BeePro, UltraBee)
<input type="checkbox"/> Honey (capped frames)	<input type="checkbox"/> Sugar syrup (e.g. Sugar water, Pro-Sweet, liquid feed)	<input type="checkbox"/> Winter patties (e.g. ProWinter)
<input type="checkbox"/> Honey (excess extracted)	<input type="checkbox"/> Essential oils in sugar feed (e.g. VitaFeed Green/Gold, Honey-B-Healthy, Hive Alive, ProHealth)	<input type="checkbox"/> Grease patties (e.g. Crisco, vegetable oil)
<input type="checkbox"/> Dry sugar	<input type="checkbox"/> Probiotics	<input type="checkbox"/> Essential oils in patties (e.g. LaFore)
<input type="checkbox"/> Candy (e.g. Fondant)		
<input type="checkbox"/> Other, please specify: <input type="text"/>		

41 Please specify how and when you used the products selected in Q40 during the last year (April 1, 2018 to April 1, 2019):

Product used <i>(specify brand or homemade recipe)</i>	Months used <i>(e.g. Jan &amp; Jul)</i>	% of colonies fed <i>[1-100%]</i>	Dose (per colony; e.g. # of patties, frames; specify units) & Delivery method (if applicable)	Concentration <i>(if mixed) (e.g. 2 parts sugar/1 part water)</i>	# applications <i>(per colony, over 12 months)</i>	Was this amount <sup>(1)</sup>
-						
-						
-						
-						
-						
-						
-						

<sup>(1)</sup> Was this amount: **A:** on par with what I usually feed this month of the year; **B:** above what I usually feed this month of the year; **C:** below what I usually feed this month of the year; **D:** not applicable (first year beekeepers); **E:** Don't know.

**Between April 1, 2018 and April 1, 2019 ...**

42*	... did you start or obtain any <b>new colonies</b> ?	<input type="radio"/> Yes	<input type="radio"/> No <i>(skip Q43-44)</i>	
43	<b>How did you start</b> or obtain your new colonies last year? <i>(select all that apply)</i>			
	<input type="checkbox"/> Swarms	<input type="checkbox"/> Packages	From what state(s)?	<input style="width:100%;" type="text"/>
	<input type="checkbox"/> Splits	<input type="checkbox"/> Nucs	From what state(s)?	<input style="width:100%;" type="text"/>
		<input type="checkbox"/> Full colonies	From what state(s)?	<input style="width:100%;" type="text"/>
44	To start your colonies, what <b>equipment</b> did you use? <i>(select all that apply)</i>			
	<input type="checkbox"/> New equipment	<input type="checkbox"/> Old equipment from my operation	<input type="checkbox"/> Old equipment from other beekeeper(s)	
45*	What type or <b>race of queens</b> do you use in your operation? <i>(e.g. Carniolan, Italian, Russian)</i>	<input style="width:100%;" type="text"/>		
46	<b>How old</b> on average were the <b>queens</b> that headed a majority (>50%) of your colonies on 1 October 2018? <i>(choose one)</i>	47	<b>Generally, how often</b> do you replace the queens in your colonies? <i>(choose one)</i>	
	<input type="radio"/> Less than 6 months		<input type="radio"/> Never (let them re-queen on their own)	
	<input type="radio"/> 6 months – 1 year		<input type="radio"/> Only to correct behavior / disease susceptibility	
	<input type="radio"/> 1 – 2 years		<input type="radio"/> Every 2 to 3 years	
	<input type="radio"/> Older than 2 years		<input type="radio"/> Every year	
	<input type="radio"/> I don't know		<input type="radio"/> Twice a year	
			<input type="radio"/> More than twice a year	
48*	Last year, did you <b>kill and/or replace</b> the queen of any of your previously established colonies?	<input type="radio"/> Yes	<input type="radio"/> No <i>(skip Q49-51)</i>	
49	If yes, in what percentage of your colonies did you kill and/or replace queens over the last year?	<input style="width:100%;" type="text"/>	<input type="checkbox"/> None	
		<i>Between 0-100%</i>		
50	<b>How</b> did you re-queen these colonies? <i>(select all that apply)</i>			
	<input type="checkbox"/> Introduced mated queens	<input type="checkbox"/> Introduced virgin queens	<input type="checkbox"/> Introduced queen cells	
	<input type="checkbox"/> Introduced queen right nucs	<input type="checkbox"/> Permitted colony or split to rear their own queens (natural re-queening)		
	<input type="checkbox"/> Other, please specify: <input style="width:100%;" type="text"/>			
51	If <b>introduced</b> , where did you get most of the queens from? <i>(select all that apply)</i>			
	<input type="checkbox"/> I reared them myself	<input type="checkbox"/> from a beekeeper (non-commercial)		
	<input type="checkbox"/> from a commercial queen producer(s)	If known, which suppliers and states?	<input style="width:100%;" type="text"/>	
	<input type="checkbox"/> I don't know	<input type="checkbox"/> Other, please specify:	<input style="width:100%;" type="text"/>	
52	If you made <b>splits</b> last year, where did you get most of their new queens from? <i>(select all that apply)</i>			
	<input type="checkbox"/> I reared them myself	<input type="checkbox"/> from a beekeeper (non-commercial)	<input type="checkbox"/> Walk away split	
	<input type="checkbox"/> from a commercial queen producer(s)	If known, which suppliers and states?	<input style="width:100%;" type="text"/>	
	<input type="checkbox"/> I don't know	<input type="checkbox"/> Other, please specify:	<input style="width:100%;" type="text"/>	

## Between April 1, 2018 and April 1, 2019 ...

<p>53 What <b>hive type</b> did you use to maintain your colonies? <i>(select all that apply)</i></p> <p><input type="checkbox"/> Langstroth 10 frame hive bodies (even if use less than 10 frames in it)</p> <p><input type="checkbox"/> Langstroth 8 frame hive bodies (even if use less than 8 frames in it)</p> <p><input type="checkbox"/> Home-made (NOT Langstroth dimensions)</p> <p><input type="checkbox"/> Other, please specify: _____</p>	<p><input type="checkbox"/> Top bar hives</p> <p><input type="checkbox"/> Warre</p> <p><input type="checkbox"/> Nuc boxes</p>
<p>54 When adding new frames, what type of <b>foundation</b> did you use? <i>(select all that apply)</i></p> <p><input type="checkbox"/> Foundation-less</p> <p><input type="checkbox"/> Plastic foundation</p> <p><input type="checkbox"/> Wax foundation</p> <p><input type="checkbox"/> Other, please specify: _____</p>	
<p>55 On average, how old is the brood <b>comb</b> in your colonies? <i>(choose one)</i></p> <p><input type="radio"/> Less than 1 year old</p> <p><input type="radio"/> 1 – 2 years</p> <p><input type="radio"/> 2 – 3 years</p> <p><input type="radio"/> 3 – 4 years</p> <p><input type="radio"/> 4 – 5 years</p> <p><input type="radio"/> More than 5 years old</p> <p><input type="radio"/> I don't know</p>	<p>56 On average, how many <b>brood nest frames</b> did you replace from each colony last year? <i>(choose one)</i></p> <p><input type="radio"/> I did not replace any frames</p> <p><input type="radio"/> I only replaced broken frames</p> <p><input type="radio"/> ~10% (e.g. 1 frame per brood box)</p> <p><input type="radio"/> ~20% (e.g. 2 frames per brood box)</p> <p><input type="radio"/> 25 – 50% (e.g. between 3 to 5 frames per brood box)</p> <p><input type="radio"/> More than 50% of frames (&gt;5 frames per brood box)</p> <p><input type="radio"/> I don't know</p>
<p>57 What did you do <b>before your re-used brood comb</b> that you had taken out of production or purchased/obtained?</p> <p><input type="checkbox"/> I did not reuse any old brood comb</p> <p><input type="checkbox"/> I did not treat the comb in any particular way</p> <p><input type="checkbox"/> I froze the comb</p> <p><input type="checkbox"/> I irradiated the comb</p> <p><input type="checkbox"/> Other, please specify: _____</p> <p><input type="checkbox"/> I culled any particularly old or bad comb and replaced it</p> <p><input type="checkbox"/> I fumigated the comb with acetic acid</p> <p><input type="checkbox"/> I stored the comb with paradichlorobenzene crystals (moth crystals)</p> <p><input type="checkbox"/> I stored the comb with naphthalene (moth balls)</p>	
<p>58 Generally, when you found a dead colony in your operation between April 1, 2018 and October 1, 2019 (<b>Summer</b>), you: <i>(choose one)</i> Note: Excluding colonies killed by AFB</p> <p><input type="radio"/> Immediately replaced it by splitting frames of bees/brood from other colonies into the dead out equipment</p> <p><input type="radio"/> Packed up the dead out's equipment and stored it for re-use at a later date</p> <p><input type="radio"/> A mixture of both, I immediately replaced some and packed up others</p> <p><input type="radio"/> I did not find dead colonies</p> <p><input type="radio"/> Other, please specify: _____</p>	
<p>59 Which of the following (other than feeding), did you use to <b>prepare for last winter</b> (2018-2019)? <i>(select all that apply)</i></p> <p><input type="checkbox"/> I did not prepare my colonies for winter</p> <p><input type="checkbox"/> I created or engaged an upper entrance</p> <p><input type="checkbox"/> I used an entrance reducer</p> <p><input type="checkbox"/> I equalized colony strength</p> <p><input type="checkbox"/> I moved my colonies to a warmer region</p> <p><input type="checkbox"/> Other (but NOT feeding), please specify: _____</p> <p><input type="checkbox"/> I wrapped my colonies with insulation</p> <p><input type="checkbox"/> I wrapped my colonies with tar paper or wintering sleeve</p> <p><input type="checkbox"/> I placed extra insulation on top of the colonies</p> <p><input type="checkbox"/> I used mouse guards</p> <p><input type="checkbox"/> I moved my colonies to inside wintering buildings</p>	
<p>60 What <b>hive type</b> did you use to <b>overwinter</b> the majority of your colonies? <i>(select one)</i></p> <p><input type="checkbox"/> Langstroth 10 frame (even if use less than 10 frames in it)</p> <p><input type="checkbox"/> Langstroth 8 frame (even if use less than 8 frames in it)</p> <p><input type="checkbox"/> Home-made (NOT Langstroth dimensions)</p> <p><input type="checkbox"/> Other, please specify: _____</p> <p><input type="checkbox"/> Top bar hives</p> <p><input type="checkbox"/> Warre</p> <p><input type="checkbox"/> Nuc boxes</p>	
<p>61 If Langstroth, in how many <b>hive bodies</b> did the majority of your bees overwinter?</p> <p>_____ deeps AND _____ mediums AND _____ shallows</p>	
<p>62 <b>How strong</b> was your average colony on October 1, 2018 (pre-wintering)? Estimate the "frames of bees". _____ <i>job</i></p> <p>Note: 1 "frame of bees" = 1 Langstroth deep frame fully occupied by bees on both sides.</p>	

**Between April 1, 2018 and April 1, 2019 ...**

63 What best describes the **environment** around the majority of your apiary(ies)? (Consider ~3 miles radius)  
*(select all that apply and specify the % in total area; the total should add up to 100%)*

Natural  %  Agricultural  %  Urban  %  Suburban  %

64 Were there any **crops** in proximity of the majority (>50%) of your colonies?  
 I don't know  No crop  Urban environment  
 Please specify the **crops**:

65\* ... did you harvest or remove **honey** from your colonies?  Yes  Not last year  I **never** attempt to *(skip Q66-68)*

66 If yes, **how much** honey did your average colony produce?  *in lbs per colony*

67 If yes, during which **months** did you harvest or remove honey?

68 In your opinion, what was the main nectar source(s) for your honey?

**Between April 1, 2018 and April 1, 2019 ...**

69 ... did you use any of your colonies for pollination of **agricultural** crops?  Yes  No *(skip Q70-71)*

70 If yes, did you derive an income by renting your colonies for pollination?  Yes  No  Prefer not to say

71 If yes, how many colonies did you rent for each crop last year?

Crop	# of colonies rented	Crop	# of colonies rented
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Thank you for your ideas so far!**

We would appreciate **10 more minutes of your time to fill out these socio-economic questions** from our University of Minnesota team members.

The better we understand beekeepers like you, through your goals and practices, the better we can target outreach and information to address barriers that beekeepers are facing and thus help improve beekeeping across the spectrum, from commercial to backyard.

**Between April 1, 2018 and April 1, 2019 ...**

72 How much **total time** over the course of the entire year would you estimate that you and/or others spend caring for all of your colonies?  *in total hours*  I don't know  I prefer not to say

73 How many people (including yourself) worked your colonies over the last year (between April 1, 2018 and April 1, 2019)?  Full-time employees  Part-time employees

74 How much (in US \$) would you value your average colony if you had to sell it at the following times of year?  
**October**  *in \$* **February**  *in \$* **April**  *in \$*

75 How much money over the last year did you spend on **feed** (protein and/or carbohydrates)?  *in \$*

76 How much money over the last year did you spend on **equipment**?  *in \$*

77 How much money over the last year did you spend on **treatments/controls**?  *in \$*

**Between April 1, 2018 and April 1, 2019 ...**

78 ... what were your **management goals** for beekeeping? *(select three)*

To keep my bees healthy and alive  To increase the number of colonies I keep/manage  
 To produce honey  To become more educated about bees and beekeeping  
 To increase profit from my operation  To pollinate my garden, or commercial crops  
 To protect bees in general  To maintain the same number of colonies  
 Other, please specify:

79	... why did you keep bees? <i>(select all that apply)</i>	
	<input type="checkbox"/> For pollination <input type="checkbox"/> For queen production <input type="checkbox"/> For package production <input type="checkbox"/> For nuc production <input type="checkbox"/> Other, please specify: <input type="text"/>	<input type="checkbox"/> For honey/pollen/wax production for sale <input type="checkbox"/> For honey/pollen/wax production for personal use only <input type="checkbox"/> For enjoyment/hobby <input type="checkbox"/> For teaching/education
80	... were you <b>expecting</b> to derive an income from your beekeeping activities? <i>(choose one)</i>	
	<input type="radio"/> No, beekeeping is a hobby <input type="radio"/> No, but I occasionally derive an unpredictable income (occasional honey, wax, package...) <input type="radio"/> Yes, I was expecting my beekeeping activities to supplement my income <input type="radio"/> Yes, I was expecting my beekeeping activities to provide me with the majority or all of my income	
81	... what percentage of your annual <b>income was</b> derived from your beekeeping activities? <i>(choose one)</i>	
	<input type="radio"/> None <input type="radio"/> Less than 5% <input type="radio"/> I lost money <input type="radio"/> Between 5 to 50% <input type="radio"/> I prefer not to say <input type="radio"/> Between 51 to 90% <input type="radio"/> I don't know <input type="radio"/> Over 90%	
82	Please indicate the range that best represents the total yearly income, before taxes, of all immediate family living in your household. <i>(Select one category)</i>	
	<input type="radio"/> under \$25,000 <input type="radio"/> \$75,000-\$99,999 <input type="radio"/> over \$250,000 <input type="radio"/> \$25,000-\$34,999 <input type="radio"/> \$100,000-\$149,999 <input type="radio"/> I don't know <input type="radio"/> \$35,000-\$49,999 <input type="radio"/> \$150,000-\$199,999 <input type="radio"/> I prefer not to say <input type="radio"/> \$50,000-\$74,999 <input type="radio"/> \$200,000-\$250,000	
83	Please indicate your gender: <input type="text"/>	
84	Please indicate your age: <i>(Select one category)</i>	
	<input type="radio"/> 18-24 years old <input type="radio"/> 55-64 years old <input type="radio"/> 25-34 years old <input type="radio"/> 65-74 years old <input type="radio"/> 35-44 years old <input type="radio"/> 75-84 years old <input type="radio"/> 45-54 years old <input type="radio"/> 85 years old or older	
85	Approximately how many <b>years</b> have <b>you</b> been keeping bees?	<input type="text"/> in years
86	On average, how many <b>years</b> have <b>your staff</b> been keeping bees? <i>(if applicable)</i>	<input type="text"/> in years/person
87	How did you first learn beekeeping? <i>(select all that apply)</i>	88 Are you a member of a beekeeping organization? <i>(select all that apply)</i>
	<input type="checkbox"/> From a mentor beekeeper and/or friend or family <input type="checkbox"/> On my own (books, internet...) <input type="checkbox"/> From a beekeeping class (bee group/club/master class...) <input type="checkbox"/> Other, please specify: <input type="text"/>	<input type="checkbox"/> Local beekeeping group <input type="checkbox"/> State/regional beekeeping organization <input type="checkbox"/> National beekeeping organization <input type="checkbox"/> No, I'm not a member of any beekeeping organization <input type="checkbox"/> I prefer not to say
89	What are your primary sources of bee <b>health information</b> ? <i>(select all that apply)</i>	
	<input type="checkbox"/> Other beekeepers (mentor, friends, family, neighbors...) <input type="checkbox"/> Beekeeping class <input type="checkbox"/> Beekeeping club / association / organization meetings <input type="checkbox"/> Online (blogs, videos, media...) <input type="checkbox"/> Books <input type="checkbox"/> Bee journals or magazines <input type="checkbox"/> Scientific publications <input type="checkbox"/> Beekeeping association newsletters <input type="checkbox"/> Beekeeping conventions <input type="checkbox"/> Suppliers (of beekeeping equipment) <input type="checkbox"/> Apiary inspector (or any state officials) <input type="checkbox"/> University Extension / Outreach <input type="checkbox"/> Bee Informed Partnership <input type="checkbox"/> Other, please specify: <input type="text"/>	
90	When choosing treatment or feeding <b>strategies</b> for your colonies, would you say that you: <i>(choose one)</i>	
	<input type="radio"/> Are only willing to use bee-produced products in the hive <input type="radio"/> Are only willing to use natural or organic products in the hive <input type="radio"/> Prefer to use natural or organic products in the hive but will use synthetic products if needed <input type="radio"/> Will use synthetic products if needed <input type="radio"/> Have no preference <input type="radio"/> Other, please specify: <input type="text"/>	
91	Do you believe that you know what <b>Best Management Practices</b> are?	<input type="radio"/> Yes <input type="radio"/> No <i>(skip Q92-93)</i>
92	If so, do you believe that you are using <b>Best Management Practices</b> in your colonies? <i>(choose one)</i>	
	<input type="radio"/> Yes, always <input type="radio"/> Sometimes <input type="radio"/> In some hives and not others <input type="radio"/> With some aspects of beekeeping and not others <input type="radio"/> No <input type="radio"/> I don't know <input type="radio"/> I don't know what best practices are <input type="radio"/> I don't think best management practices work	



**Ok, let's wrap things up...**

102 Did you take part in any of the following monitoring efforts? *(select all that apply)*

APHIS National Honey Bee Survey <sup>(1)</sup> -----> NHBS sampling code

Bee Informed Tech Transfer Teams <sup>(1)</sup> -----> BIP Tech Team participant code

Bee Informed Sentinel Apiary (real time disease monitoring) <sup>(1)</sup> ----> Sentinel Apiary participant code

None of the above                       I prefer not to say                       I'm unsure

<sup>(1)</sup> *If you participated in any of the BIP sampling programs, or the APHIS NHBS survey, would you be willing to provide your participant code (above) and/or contact information so we can link your survey responses with your bee health measures?*

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103 We may wish to contact you if we have questions about your responses. Is this ok?                       Yes                       No

104 Would you be willing to participate in future beekeeping surveys?                       Yes                       No

105 If you agree to be contacted, please enter your email address here:  
*The Bee Informed Partnership does not share any email addresses*

106 Did you complete this survey on behalf of someone else?                       Yes                       No, for myself

107 Is this the first year you are participating in our survey?                       Yes                       No

108 Where did you hear about this survey? *(select all that apply)*

Organization newsletter                       Bee meeting                       Friend or neighbor                       State apiarist

Website                       BIP (we emailed you)                       Paper survey

Other, please specify:

109 Any comments?

# Thank You!

Thank you for your time in answering our Colony Loss and Management Survey!

The Bee Informed Partnership is a non-profit organization that endeavors to decrease managed honey bee colonies losses.

By answering those questions on colony loss and management, you are helping us describe a realistic picture of the losses in the US and to better understand factors that contribute to reducing colony losses.

Please visit [beeinformed.org](http://beeinformed.org) for insights on how the results of this survey can improve your colony management decision making!

