

Preview of the **2017-2018 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 <http://26.selectsurvey.net/beeinformed/TakeSurvey.aspx?SurveyID=LMS2018>)

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

1\* In what state(s)/territory did you keep your colonies between April 2017 and April 2018? *(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="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 and queen right nucs (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 <u>living</u> colonies did you have last spring on <b>April 1, 2017</b> ?	
3*	How many colonies, splits and/or increases did you <u>make or buy</u> between April 1, 2017 and October 1, 2017?	
4*	How many colonies, splits and/or increases did you <u>sell or give away</u> between April 1, 2017 and October 1, 2017?	
5*	Did you purposefully <u>combine</u> colonies between April 1, 2017 and October 1, 2017? <input type="radio"/> No <input type="radio"/> Yes    If yes: # colonies that were combined: <input style="width: 100px;" type="text"/> # colonies that resulted from combination: <input style="width: 100px;" type="text"/>	
6*	How many <u>living</u> colonies did you have last fall on <b>October 1, 2017</b> ?	
7*	How many colonies, splits and/or increases did you <u>make or buy</u> between October 1, 2017 and April 1, 2018?	
8*	How many colonies, splits and/or increases did you <u>sell or give away</u> between October 1, 2017 and April 1, 2018?	
9*	Did you purposefully <u>combine</u> colonies between October 1, 2017 and April 1, 2018? <input type="radio"/> No <input type="radio"/> Yes    If yes: # colonies that were combined: <input style="width: 100px;" type="text"/> # colonies that resulted from combination: <input style="width: 100px;" type="text"/>	
10*	How many total <u>living</u> colonies (overwinter surviving colonies plus purchase or splits) did you have on <b>April 1, 2018</b> ?	
11	What was the <u>largest</u> number of living colonies you owned between April 1, 2017 and April 1, 2018?	
12	What was the <u>smallest</u> number of living colonies you owned between April 1, 2017 and April 1, 2018?	
13	Of the colonies in question 2, how many of those specific colonies were <b>still</b> alive on October 1, 2017?	
14	Of the colonies in question 6, how many of those specific colonies were <b>still</b> alive on April 1, 2018?	
15	What is the average size of your apiary or apiaries? <i>(How many colonies share the same location, on average)</i>	
16	In how many different apiaries do you keep your bees? (if stationary)	
17*	What <b>percentage</b> of loss, over the last winter, would you consider acceptable?	
18	Was your winter loss this year higher or lower than last year? <i>(choose one)</i> <input type="radio"/> Higher <input type="radio"/> Same <input type="radio"/> Lower <input type="radio"/> I'm unsure <input type="radio"/> I did not keep bees last year	

19 What **percentage** of the colonies died over the winter (between October 1, 2017 and April 1, 2018) without dead bees in the hive or apiary?   None  
*Between 0-100%*

20 In your opinion, what factors were the most prominent cause(s) of colony death in your operation between October 1, 2017 and April 1, 2018? *(select all that apply)*

I did not experience winter loss     Queen failure     Starvation     Colony Collapse Disorder (CCD)  
 Varroa mites     Nosema disease     Small Hive Beetle     Natural disaster and the like (eg. flood, bear...)  
 Poor wintering conditions     Weak in the fall     Pesticides     I don't know  
 Other, please specify:

**Between April 1, 2017 and April 1, 2018...**

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

22 Approximately what **percentage** of your operation moved **across state lines** at least once between April 1, 2017 and April 1, 2018?   
*Between 0-100%*

23 What **percentage** of your hives did you send to or move into California almond orchards for pollination in 2018?   None  
*Between 0-100%*

24 Please indicate in which states/territory you kept bees for the months listed *(mark relevant months with an "x")*. Also list the number of living colonies you had **in each state** on December 31, 2017 *(note in the last column)*.

State	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Living colonies on 12/31/2017
-													
-													
-													
-													
-													

25 In what zip code is your operation based?

26 In what zip code do you live most of the year?

27 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?

AWESOME! You have just completed **Part 1** of the survey. Your information will be used to generate colony loss information, which is critical to establishing baseline knowledge about the health of your honey bee colonies. What follows next - **Part 2** - focusses on how you managed your colonies. This information allows us to understand how your management practices are connected to the health of your colonies.

Between April 1, 2017 and April 1, 2018...

<p>28 ... how often did you monitor VARROA mites in your colonies per month? (eg. May 3x)  <input type="radio"/> Never (skip Q31)</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Apr <input style="width:40px;" type="text"/></td> <td style="width:50%;">Oct <input style="width:40px;" type="text"/></td> </tr> <tr> <td>May <input style="width:40px;" type="text"/></td> <td>Nov <input style="width:40px;" type="text"/></td> </tr> <tr> <td>Jun <input style="width:40px;" type="text"/></td> <td>Dec <input style="width:40px;" type="text"/></td> </tr> <tr> <td>Jul <input style="width:40px;" type="text"/></td> <td>Jan <input style="width:40px;" type="text"/></td> </tr> <tr> <td>Aug <input style="width:40px;" type="text"/></td> <td>Feb <input style="width:40px;" type="text"/></td> </tr> <tr> <td>Sep <input style="width:40px;" type="text"/></td> <td>Mar <input style="width:40px;" type="text"/></td> </tr> </table>	Apr <input style="width:40px;" type="text"/>	Oct <input style="width:40px;" type="text"/>	May <input style="width:40px;" type="text"/>	Nov <input style="width:40px;" type="text"/>	Jun <input style="width:40px;" type="text"/>	Dec <input style="width:40px;" type="text"/>	Jul <input style="width:40px;" type="text"/>	Jan <input style="width:40px;" type="text"/>	Aug <input style="width:40px;" type="text"/>	Feb <input style="width:40px;" type="text"/>	Sep <input style="width:40px;" type="text"/>	Mar <input style="width:40px;" type="text"/>	<p>29 ...how often did you monitor NOSEMA levels in your colonies per month? (eg. May 3x)  <input type="radio"/> Never (skip Q32)</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Apr <input style="width:40px;" type="text"/></td> <td style="width:50%;">Oct <input style="width:40px;" type="text"/></td> </tr> <tr> <td>May <input style="width:40px;" type="text"/></td> <td>Nov <input style="width:40px;" type="text"/></td> </tr> <tr> <td>Jun <input style="width:40px;" type="text"/></td> <td>Dec <input style="width:40px;" type="text"/></td> </tr> <tr> <td>Jul <input style="width:40px;" type="text"/></td> <td>Jan <input style="width:40px;" type="text"/></td> </tr> <tr> <td>Aug <input style="width:40px;" type="text"/></td> <td>Feb <input style="width:40px;" type="text"/></td> </tr> <tr> <td>Sep <input style="width:40px;" type="text"/></td> <td>Mar <input style="width:40px;" type="text"/></td> </tr> </table>	Apr <input style="width:40px;" type="text"/>	Oct <input style="width:40px;" type="text"/>	May <input style="width:40px;" type="text"/>	Nov <input style="width:40px;" type="text"/>	Jun <input style="width:40px;" type="text"/>	Dec <input style="width:40px;" type="text"/>	Jul <input style="width:40px;" type="text"/>	Jan <input style="width:40px;" type="text"/>	Aug <input style="width:40px;" type="text"/>	Feb <input style="width:40px;" type="text"/>	Sep <input style="width:40px;" type="text"/>	Mar <input style="width:40px;" type="text"/>	<p>30 ...how often did you inspect your colonies for BROOD diseases per month? (eg. May 3x)  <input type="radio"/> Never</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Apr <input style="width:40px;" type="text"/></td> <td style="width:50%;">Oct <input style="width:40px;" type="text"/></td> </tr> <tr> <td>May <input style="width:40px;" type="text"/></td> <td>Nov <input style="width:40px;" type="text"/></td> </tr> <tr> <td>Jun <input style="width:40px;" type="text"/></td> <td>Dec <input style="width:40px;" type="text"/></td> </tr> <tr> <td>Jul <input style="width:40px;" type="text"/></td> <td>Jan <input style="width:40px;" type="text"/></td> </tr> <tr> <td>Aug <input style="width:40px;" type="text"/></td> <td>Feb <input style="width:40px;" type="text"/></td> </tr> <tr> <td>Sep <input style="width:40px;" type="text"/></td> <td>Mar <input style="width:40px;" type="text"/></td> </tr> </table>	Apr <input style="width:40px;" type="text"/>	Oct <input style="width:40px;" type="text"/>	May <input style="width:40px;" type="text"/>	Nov <input style="width:40px;" type="text"/>	Jun <input style="width:40px;" type="text"/>	Dec <input style="width:40px;" type="text"/>	Jul <input style="width:40px;" type="text"/>	Jan <input style="width:40px;" type="text"/>	Aug <input style="width:40px;" type="text"/>	Feb <input style="width:40px;" type="text"/>	Sep <input style="width:40px;" type="text"/>	Mar <input style="width:40px;" type="text"/>
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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:  <input style="width:400px; height:20px;" type="text"/></li> </ul>	<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 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 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:  <input style="width:400px; height:20px;" type="text"/></li> </ul>
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Between April 1, 2017 and April 1, 2018...

<p>33* ...did you use a <b>treatment</b> to try to control VARROA mites? (choose one)  <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)  <input type="radio"/> Yes <input type="radio"/> No</p>	<p>35* ...did you use a <b>treatment</b> to try to control SMALL HIVE BEETLES? (choose one)  <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.

36\* Which, if any, of the following did you apply to any of your colonies between April 1, 2017 and April 1, 2018?

<input type="checkbox"/> None of the following	<input type="checkbox"/> Amitraz-based product (Apivar/other)	<input type="checkbox"/> Fluralinate-based product (Apistan)
<input type="checkbox"/> Fumagillin (Fumadil B)	<input type="checkbox"/> Thymol-based product (ApiLife VAR, ApiGuard)	<input type="checkbox"/> Coumaphos-based product (CheckMite+)
<input type="checkbox"/> Terramycin	<input type="checkbox"/> Menthol-based product (Mite-A-Thol)	<input type="checkbox"/> Tylan-based product (Tylosin)
<input type="checkbox"/> Hop oil based product (HopGuard)	<input type="checkbox"/> Formic Acid (MiteAway QuickStrips - MAQS)	<input type="checkbox"/> Essential oils
<input type="checkbox"/> Mineral oils	<input type="checkbox"/> Oxalic Acid	
<input type="checkbox"/> Other, please specify: <input style="width:600px; height:20px;" type="text"/>		

37 Please specify how and when you used the products selected in Q36 during the last year (April 1, 2017 to April 1, 2018):

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> Motive of use: **A:** as part of my regular maintenance/calendar treatment; **B:** in response to personal monitoring; **C:** in response to Lab Test results; **D:** in response to pest outbreaks in the local area (from hearsay) ; **E:** Don't know

**Between April 1, 2017 and April 1, 2018 ...**

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

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

Drone Brood Removal  
How many times in the year?   
What % of your colonies?

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?   
During which months?

Small cell size comb

Powder sugar  
What % of your colonies?   
During which months?

Other, please specify:

39 ... 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?   
During which months?

Soil drench specify product:  
What % of your colonies?   
During which months?

In-hive traps       Bottom-board traps  
What kind of trap?       Chemical    Enclose    Drown  
 Diatomaceous earth    Other:   
What kind of bait?        None  
During which months?

Nematodes

Other, please specify:

**Between April 1, 2017 and April 1, 2018 ...**

40\* ... did you feed a food supplement/substitute or stimulant to any of your colonies?       Yes       No *(skip Q41-42)*

41 Which, if any, of the following did you apply to any of your colonies between April 1, 2017 and April 1, 2018?

<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 (sucrose, sugar water, Pro-Sweet, liquid feed)	<input type="checkbox"/> Winter patties (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 (Crisco, vegetable oil)
<input type="checkbox"/> Dry sugar	<input type="checkbox"/> Probiotics	<input type="checkbox"/> Essential oils in patties (LaFore, Wintergreen)
<input type="checkbox"/> Candy (Fondant)		
<input type="checkbox"/> Other, please specify: <input type="text"/>		

42 Please specify how and when you used the products selected in Q41 during the last year (April 2017 to April 2018):

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

<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, 2017 and April 1, 2018 ...

43*	What type or <b>race of bees</b> do you use in your operation?	
44	<b>How old</b> on average were the <b>queens</b> that headed a majority (>50%) of your colonies on 1 October 2017? <i>(choose one)</i> <input type="radio"/> Less than 6 months <input type="radio"/> 6 months – 1 year <input type="radio"/> 1 – 2 years <input type="radio"/> Older than 2 years <input type="radio"/> I don't know	45 Generally, <b>how often</b> do you replace the queens in your colonies? <i>(choose one)</i> <input type="radio"/> Never (let them re-queen on their own) <input type="radio"/> Only to correct behavior / disease susceptibility <input type="radio"/> Every 2 to 3 years <input type="radio"/> Every year <input type="radio"/> Twice a year <input type="radio"/> More than twice a year
46*	... did you <b>replace</b> the queen of any of your colonies? <i>(say yes also if natural re-queening)</i> <input type="radio"/> Yes <input type="radio"/> No <i>(skip Q47-49)</i>	
47	In what percentage of your colonies did you replace queens over the last year?	<input type="text"/> <i>Between 0-100%</i> <input type="checkbox"/> None
48	<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 type="text"/>	
49	If <b>introduced</b> , where did you get the majority (>50%) of the queens? <i>(select all that apply)</i>	
	<input type="checkbox"/> from a beekeeper (noncommercial) <input type="checkbox"/> I reared them myself <input type="checkbox"/> from a commercial producer(s) If known, which suppliers and states? <input type="text"/> <input type="checkbox"/> I don't know <input type="checkbox"/> Other, please specify: <input type="text"/>	

## Between April 1, 2017 and April 1, 2018 ...

50	What <b>hive type</b> do you use to keep your colonies? <i>(select all that apply)</i>	
	<input type="checkbox"/> Langstroth 10 frame hive bodies (even if use less than 10 frames in it) <input type="checkbox"/> Top bar hives <input type="checkbox"/> Langstroth 8 frame hive bodies (even if use less than 8 frames in it) <input type="checkbox"/> Warre <input type="checkbox"/> Home-made (NOT Langstroth dimensions) <input type="checkbox"/> Nucs boxes <input type="checkbox"/> Other, please specify: <input type="text"/>	
51	When adding new frames, what type of <b>foundation</b> did you use? <i>(select all that apply)</i>	
	<input type="checkbox"/> Foundation-less <input type="checkbox"/> Wax foundation <input type="checkbox"/> Plastic foundation <input type="checkbox"/> Duragilt <input type="checkbox"/> Other, please specify: <input type="text"/>	
52	Which of the following (other than feeding), did you use to <b>prepare for last winter</b> (2017-2018)? <i>(select all that apply)</i>	
	<input type="checkbox"/> I did not prepare my colonies for winter <input type="checkbox"/> I wrapped my colonies with insulation <input type="checkbox"/> I created or engaged an upper entrance <input type="checkbox"/> I wrapped my colonies with tar paper or wintering sleeve <input type="checkbox"/> I used an entrance reducer <input type="checkbox"/> I placed extra insulation on top of the colonies <input type="checkbox"/> I equalized colony strength <input type="checkbox"/> I used mouse guards <input type="checkbox"/> I moved my colonies to a southern location <input type="checkbox"/> I moved my colonies to inside wintering buildings <input type="checkbox"/> Other (but NOT feeding), please specify: <input type="text"/>	
53	On October 1, 2017, how many frames did the <b>brood chamber</b> of each of your hives consist of? <i>(please enter number of hive boxes for your configuration)</i>	
	<input type="radio"/> Equivalent to ~ <input type="text"/> deeps AND <input type="text"/> mediums AND <input type="text"/> shallows <input type="radio"/> Nucs of ~ <input type="text"/> deep frames <input type="radio"/> Other: <input type="text"/> <input type="radio"/> I did not keep bees on that date <input type="radio"/> I don't know	
54	On average, how old is the brood <b>comb</b> in your colonies? <i>(choose one)</i>	55 Last year how many <b>frames</b> from the brood nest of your colonies did you replace on average? <i>(choose one)</i>
	<input type="radio"/> Less than 1 year old <input type="radio"/> 1 – 2 years <input type="radio"/> 2 – 3 years <input type="radio"/> 3 – 4 years <input type="radio"/> 4 – 5 years <input type="radio"/> More than 5 years old <input type="radio"/> I don't know	<input type="radio"/> I did not replace any frames <input type="radio"/> I only replaced broken frames <input type="radio"/> ~10% (e.g. 1 frame per brood box) <input type="radio"/> ~20% (e.g. 2 frames per brood box) <input type="radio"/> 25 – 50% (e.g. between 3 to 5 frames per brood box) <input type="radio"/> More than 50% of frames (>5 frames per brood box) <input type="radio"/> I don't know

56 Last year, what did you do if you **re-used brood comb** that you had taken out of production or purchased?

<input type="checkbox"/> I did not reuse any old brood comb	<input type="checkbox"/> I culled any particularly old or bad comb and replaced it
<input type="checkbox"/> I did not treat the comb in any particular way	<input type="checkbox"/> I fumigated the comb with acetic acid
<input type="checkbox"/> I froze the comb	<input type="checkbox"/> I stored the comb with paradichlorobenzene crystals (moth crystals)
<input type="checkbox"/> I irradiated the comb	<input type="checkbox"/> I stored the comb with naphthalene (moth balls)
<input type="checkbox"/> Other, please specify: <input style="width: 600px;" type="text"/>	

57 Generally, when you found a **dead colony** in your operation over the last year you would: *(choose one)*  
*Note: Excluding colonies killed by AFB*

Immediately replaced dead colony by splitting frames of bees/brood from other colonies into the dead out equipment

Packed up the dead equipment and stored it for re-use at a later date

A mixture of both, I immediately replaced some and packed up others

I did not find dead colonies       Other, please specify:

**Between April 1, 2017 and April 1, 2018 ...**

58\* ... did you start or obtain any **new colonies**?       Yes       No *(skip Q59-60)*

59 **How** did you start or obtain new colonies last year? *(select all that apply)*

<input type="checkbox"/> I caught and installed swarms	
<input type="checkbox"/> I made increases by splitting strong colonies	
<input type="checkbox"/> I bought and installed packages	From what state? <input style="width: 150px;" type="text"/>
<input type="checkbox"/> I bought and installed nucs	From what state? <input style="width: 150px;" type="text"/>
<input type="checkbox"/> I bought (or received) hives from another beekeeper	From what state? <input style="width: 150px;" type="text"/>

60 What percentage of the colonies in your operation that were alive on April 1, 2018 came from splits, increases, or packages established or made the previous spring and summer, after April 1, 2017? *(In other words, what % of your colonies successfully overwintered for the first time)*        
*Between 0-100%*

**Between April 1, 2017 and April 1, 2018 ...**

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

<input type="checkbox"/> Natural	<input style="width: 50px;" type="text"/> %	<input type="checkbox"/> Agricultural	<input style="width: 50px;" type="text"/> %	<input type="checkbox"/> Urban	<input style="width: 50px;" type="text"/> %	<input type="checkbox"/> Suburban	<input style="width: 50px;" type="text"/> %
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62\* ... did you harvest or remove **honey** from your colonies?       Yes       Not last year       I **never** attempt to *(skip Q63-66)*

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

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

65 How was it compared to previous years?

	No harvest	Above average	Average	Below average
<b>Spring</b> Honey (April to June)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Summer</b> Honey (July to Sept)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Fall</b> Honey (Oct to Dec)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Winter</b> Honey (Jan to March)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

66 If yes, were any **crops** in proximity of the majority (>50%) of your colonies when they were producing honey?

I don't know       No crop       Urban environment

Please specify the **crops**:

67\* ... did you use any of your colonies for pollination of **agricultural crops**?       Yes       No *(skip Q68-69)*

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

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

Crop	# of colonies rented	Crop	# of colonies rented

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

Results will be posted at the [beeinformed.org](http://beeinformed.org) web site as they become available.

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, 2017 and April 1, 2018 ...**

70	How much <b>time</b> over the course of the entire year would you estimate that you and/or others spend caring for all of your colonies?	<input type="text"/>	<input type="radio"/> I don't know <input type="radio"/> I prefer not to say
		<i>in total hours</i>	
71	Of the time spent caring for your colonies, what percentage of time was spent on the following activities? <i>(the total should add up to 100%)</i>	<b>% of my beekeeping time</b>	
	<b>Travel</b> (time spent to and from your apiary(ies))	<input type="text"/>	
	<b>Feeding</b> (or adding food substitute or stimulant)	<input type="text"/>	
	<b>Honey</b> (harvest and production)	<input type="text"/>	
	<b>Normal Seasonal Management</b> (visit to the hives, prevention of swarming...)	<input type="text"/>	
	<b>Pest monitoring</b> (checking for Varroa, Nosema...)	<input type="text"/>	
	Applying <b>chemical treatments</b> (as selected earlier in the survey)	<input type="text"/>	
	Displaying <b>other pest control techniques</b> (drone brood removal, SHB traps...)	<input type="text"/>	
	<b>Other</b>	<input type="text"/>	
72	How much (in US \$) would you value your average colony if you had to sell it at the following times of year?		
	<b>October</b> <input type="text"/> <i>in \$</i>	<b>February</b> <input type="text"/> <i>in \$</i>	<b>April</b> <input type="text"/> <i>in \$</i>
73	How much money over the last year did you spend on <b>feed</b> (protein and/or carbohydrates)?	<input type="text"/>	<i>in \$</i>
74	How much money over the last year did you spend on <b>equipment</b> ?	<input type="text"/>	<i>in \$</i>
75	How much money over the last year did you spend on <b>treatments/controls</b> ?	<input type="text"/>	<i>in \$</i>

**Between April 1, 2017 and April 1, 2018 ...**

76	... what were your <b>management goals</b> for beekeeping? <i>(select three)</i>
	<input type="checkbox"/> To keep my bees healthy and alive <input type="checkbox"/> To increase the number of colonies I keep/manage <input type="checkbox"/> To produce honey <input type="checkbox"/> To become more educated about bees and beekeeping <input type="checkbox"/> To increase profit from my operation <input type="checkbox"/> To pollinate my garden, or commercial crops <input type="checkbox"/> To protect bees in general <input type="checkbox"/> To maintain the same number of colonies <input type="checkbox"/> Other, please specify: <input type="text"/>
77	... why did you keep bees? <i>(select all that apply)</i>
	<input type="checkbox"/> For pollination <input type="checkbox"/> For honey/pollen/wax production for sale <input type="checkbox"/> For queen production <input type="checkbox"/> For honey/pollen/wax production for personal use only <input type="checkbox"/> For package production <input type="checkbox"/> For enjoyment/hobby <input type="checkbox"/> For nuc production <input type="checkbox"/> For teaching/education <input type="checkbox"/> Other, please specify: <input type="text"/>
78	... 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
79	... 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"/> I lost money <input type="radio"/> I prefer not to say <input type="radio"/> I don't know <input type="radio"/> Less than 5% <input type="radio"/> Between 5 to 50% <input type="radio"/> Between 51 to 90% <input type="radio"/> Over 90%

80	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"/> \$25,000-\$34,999	<input type="radio"/> \$35,000-\$49,999
	<input type="radio"/> \$75,000-\$99,999	<input type="radio"/> \$100,000-\$149,999	<input type="radio"/> \$150,000-\$199,999
	<input type="radio"/> over \$250,000	<input type="radio"/> I don't know	<input type="radio"/> I prefer not to say
81	Please indicate your gender: <input type="text"/>		
82	Please indicate your age: <i>(Select one category)</i>		
	<input type="radio"/> 18-24 years old	<input type="radio"/> 25-34 years old	<input type="radio"/> 35-44 years old
	<input type="radio"/> 55-64 years old	<input type="radio"/> 65-74 years old	<input type="radio"/> 45-54 years old
			<input type="radio"/> 75-84 years old
			<input type="radio"/> 85 years old or older
83	Approximately how many <b>years</b> have you been keeping bees?		<input type="text"/> in years
84	How did you first learn beekeeping? <i>(select all that apply)</i>	85 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"/> Local beekeeping group	
	<input type="checkbox"/> On my own (books, internet...)	<input type="checkbox"/> State/regional beekeeping organization	
	<input type="checkbox"/> From a beekeeping class (bee group/club/master class...)	<input type="checkbox"/> National beekeeping organization	
	<input type="checkbox"/> Other, please specify: <input type="text"/>	<input type="checkbox"/> No, I'm not a member of any beekeeping organization	
		<input type="checkbox"/> I prefer not to say	
86	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 association newsletters	
	<input type="checkbox"/> Beekeeping class	<input type="checkbox"/> Beekeeping conventions	
	<input type="checkbox"/> Beekeeping club / association / organization meetings	<input type="checkbox"/> Suppliers (of beekeeping equipment)	
	<input type="checkbox"/> Online (blogs, videos, media...)	<input type="checkbox"/> Apiary inspector (or any state officials)	
	<input type="checkbox"/> Books	<input type="checkbox"/> University Extension / Outreach	
	<input type="checkbox"/> Bee journals or magazines	<input type="checkbox"/> Bee Informed Partnership	
	<input type="checkbox"/> Scientific publications	<input type="checkbox"/> Other, please specify: <input type="text"/>	
87	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"/>		
88	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"/> No	
	<input type="radio"/> Sometimes	<input type="radio"/> I don't know	
	<input type="radio"/> In some hives and not others	<input type="radio"/> I don't know what best practices are	
	<input type="radio"/> With some aspects of beekeeping and not others	<input type="radio"/> I don't think best management practices work	
89	If not always, what is stopping you from adopting best management practices? <i>(select all that apply)</i>		
	<input type="checkbox"/> Not enough information	<input type="checkbox"/> Too costly	<input type="checkbox"/> Too labor-intensive
	<input type="checkbox"/> Other, please specify: <input type="text"/>		
90	What were the top three <b>barriers</b> that hindered your management of your honey bee colonies? <i>(Select three)</i>		
	<input type="checkbox"/> Aggressive bees, swarming, or other unexpected bee behavior	<input type="checkbox"/> Quality/Reliability of beekeeping research	<input type="checkbox"/> Queen production
	<input type="checkbox"/> Dead bees, die outs, or colony collapse disorder	<input type="checkbox"/> Neighbors attitude toward beekeeping	<input type="checkbox"/> Weather
	<input type="checkbox"/> Chemicals/Pesticides coming into contact with bees	<input type="checkbox"/> Cost and quality of equipment	<input type="checkbox"/> Diseases/Bee health
	<input type="checkbox"/> My own experience and knowledge of beekeeping	<input type="checkbox"/> My age and personal health	<input type="checkbox"/> Varroa mites
	<input type="checkbox"/> My decision-making about when and how to treat bees	<input type="checkbox"/> The distance to my hives	<input type="checkbox"/> Other pests
	<input type="checkbox"/> No mentor or reliable beekeeping social network	<input type="checkbox"/> Availability of forage	<input type="checkbox"/> None
	<input type="checkbox"/> My schedule (work, time, or other family obligations)	<input type="checkbox"/> Government regulations	
	<input type="checkbox"/> Other, please specify: <input type="text"/>		



91	Do you believe that managing for VARROA mites has...	<input type="checkbox"/> Advantages <i>(Proceed to Q92)</i>	AND/OR	<input type="checkbox"/> Disadvantages? <i>(Proceed to Q93)</i>
92	What do you believe are the main <b>advantages</b> of managing for VARROA mites? <i>(Select no more than five)</i>			
<input type="checkbox"/> It helps neighboring beekeepers avoid Varroa infection <input type="checkbox"/> It improves honey production/profit <input type="checkbox"/> It reduces colony loss <input type="checkbox"/> It reduces disease, pests, or spreading <input type="checkbox"/> It increases the number of bees <input type="checkbox"/> It reduces stress to bees <input type="checkbox"/> It helps bees do their normal activities <input type="checkbox"/> It keeps bees healthy and alive <input type="checkbox"/> I don't know <input type="checkbox"/> None <input type="checkbox"/> Other, please specify: <input style="width: 600px;" type="text"/>				
93	What do you believe are the main <b>disadvantages</b> of managing for VARROA mites? <i>(Select no more than five)</i>			
<input type="checkbox"/> Treatment products are low quality and may not work <input type="checkbox"/> Chemical exposure to beekeeper <input type="checkbox"/> Chemicals end up in honey <input type="checkbox"/> It requires extra work for the beekeeper <input type="checkbox"/> It unnecessarily disrupts a hive <input type="checkbox"/> The cost of treatments <input type="checkbox"/> Chemicals end up inside the colony <input type="checkbox"/> It kills, weakens, or hurts bees <input type="checkbox"/> It weakens bee genes <input type="checkbox"/> It interferes with natural selection <input type="checkbox"/> It increases mite resistance <input type="checkbox"/> It takes extra time <input type="checkbox"/> I don't know <input type="checkbox"/> None <input type="checkbox"/> Other, please specify: <input style="width: 600px;" type="text"/>				
94	How much <b>control</b> do you believe you have over managing your colonies for VARROA mites?			
<input type="radio"/> No control <input type="radio"/> Minimal control <input type="radio"/> Some control <input type="radio"/> Lots of control <input type="radio"/> Complete control				
95	In general, what are the <b>expectations</b> of people whose opinion you value regarding management for VARROA mites? Their expectations are that beekeepers... <i>(Select no more than five)</i>			
<input type="checkbox"/> No expectations <input type="checkbox"/> Manage/treat with a natural, organic or IPM approach <input type="checkbox"/> Avoid chemical use in their colonies <input type="checkbox"/> Tolerate Varroa mites – they are not really a problem <input type="checkbox"/> Avoid spreading VARROA mites to others <input type="checkbox"/> Just let their bees manage Varroa mite infestations <input type="checkbox"/> Have strong, healthy bees and colonies <input type="checkbox"/> Manage/treat cautiously or only under certain conditions <input type="checkbox"/> Breed stronger, hygienic, Varroa mite resistant bees <input type="checkbox"/> Practice treatment free beekeeping <input type="checkbox"/> Medicate their colonies/use chemical treatments <input type="checkbox"/> Let natural selection defeat Varroa mites <input type="checkbox"/> Manage/control mites <input type="checkbox"/> I am unsure or don't know their expectations <input type="checkbox"/> Just minimize losses and keep bees alive <input type="checkbox"/> Manage/treat aggressively <input type="checkbox"/> Completely eliminate mites from their colonies <input type="checkbox"/> Monitor for Varroa mites regularly <input type="checkbox"/> Other, please specify: <input style="width: 600px;" type="text"/>				
96	How much are you inclined to <b>agree</b> with those expectations?			
<input type="radio"/> Strongly agree <input type="radio"/> Agree <input type="radio"/> Neutral <input type="radio"/> Disagree <input type="radio"/> Strongly disagree				
97	For you, what does it mean to be a <b>good steward</b> of your colonies and beekeeping in general? To be a good bee colony steward, I must... <i>(Select three)</i>			
<input type="checkbox"/> Remain educated about beekeeping issues and educate others <input type="checkbox"/> Minimize disruptions to my hives <input type="checkbox"/> Simply do my best <input type="checkbox"/> Make sure my actions do not hurt neighboring beekeepers <input type="checkbox"/> Manage/inspect hives regularly <input type="checkbox"/> Produce honey <input type="checkbox"/> Avoid chemicals and keep my hives as natural as possible <input type="checkbox"/> Keep my bees healthy and alive <input type="checkbox"/> Manage pest <input type="checkbox"/> Provide bees with adequate forage, food, and water <input type="checkbox"/> Maintain clean equipment <input type="checkbox"/> Manage disease <input type="checkbox"/> Provide a healthy environment for my bees <input type="checkbox"/> Protect bees in general <input type="checkbox"/> Help bees in general <input type="checkbox"/> Other, please specify: <input style="width: 600px;" type="text"/>				

## Let's wrap things up...

98	We may wish to contact you if we have questions about your responses. Is this ok?	<input type="radio"/> Yes	<input type="radio"/> No
99	Would you be willing to participate in future beekeeping surveys?	<input type="radio"/> Yes	<input type="radio"/> No
100	If you agree to be contacted, please enter your email address here: <i>The Bee Informed Partnership does not share any email addresses</i>	<input type="text"/>	
101	Did you complete this survey on behalf of someone else?	<input type="radio"/> Yes	<input type="radio"/> No, for myself
102	Is this the first year you are participating in our survey?	<input type="radio"/> Yes	<input type="radio"/> No
103	Where did you hear about this survey? <i>(select all that apply)</i>	<input type="checkbox"/> Organization newsletter <input type="checkbox"/> Bee meeting <input type="checkbox"/> Friend or neighbor <input type="checkbox"/> State apiarist <input type="checkbox"/> Website <input type="checkbox"/> BIP (we emailed you) <input checked="" type="checkbox"/> Paper survey <input type="checkbox"/> Other, please specify: <input type="text"/>	
104	Any comments?	<input type="text"/>	

## Thank You!

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

The Bee Informed Partnership is an extension project 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!

