

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="text"/>	
<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 April 1, 2017 ?	<input type="text"/>
3*	How many colonies, splits and/or increases did you <u>make or buy</u> between April 1, 2017 and October 1, 2017?	<input type="text"/>
4*	How many colonies, splits and/or increases did you <u>sell or give away</u> between April 1, 2017 and October 1, 2017?	<input type="text"/>
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 type="text"/> # colonies that resulted from combination: <input type="text"/>	
6*	How many <u>living</u> colonies did you have last fall on October 1, 2017 ?	<input type="text"/>
7*	How many colonies, splits and/or increases did you <u>make or buy</u> between October 1, 2017 and April 1, 2018?	<input type="text"/>
8*	How many colonies, splits and/or increases did you <u>sell or give away</u> between October 1, 2017 and April 1, 2018?	<input type="text"/>
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 type="text"/> # colonies that resulted from combination: <input type="text"/>	
10*	How many total <u>living</u> colonies (overwinter surviving colonies plus purchase or splits) did you have on April 1, 2018 ?	<input type="text"/>
11	What was the <u>largest</u> number of living colonies you owned between April 1, 2017 and April 1, 2018?	<input type="text"/>
12	What was the <u>smallest</u> number of living colonies you owned between April 1, 2017 and April 1, 2018?	<input type="text"/>
13	Of the colonies in question 2, how many of those specific colonies were still alive on October 1, 2017?	<input type="text"/>
14	Of the colonies in question 6, how many of those specific colonies were still alive on April 1, 2018?	<input type="text"/>
15	What is the average size of your apiary or apiaries? <i>(How many colonies share the same location, on average)</i>	<input type="text"/>
16	In how many different apiaries do you keep your bees? (if stationary)	<input type="text"/>
17*	What percentage of loss, over the last winter, would you consider acceptable?	<input type="text"/> <i>Between 0-100%</i>
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 ⁽¹⁾ NHBS sampling code
 Bee Informed Tech Transfer Teams ⁽¹⁾ BIP Tech Team participant code
 Bee Informed Sentinel Apiary (real time disease monitoring) ⁽¹⁾ Sentinel Apiary participant code
 None of the above I prefer not to say I'm unsure

⁽¹⁾ 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 techniques did you use to monitor VARROA mites? (select all that apply)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Visual inspection of adult bees <input type="checkbox"/> Visual inspection of drone brood <input type="checkbox"/> Mite drop (sticky boards or other collection tray below the hive) <input type="checkbox"/> Powdered sugar roll <input type="checkbox"/> Ether roll <input type="checkbox"/> Alcohol wash <input type="checkbox"/> Samples collected by a BIP Tech Transfer Team (Lab Testing) <input type="checkbox"/> Samples collected for another monitoring effort (eg: APHIS NHBS, Sentinel Apiary) (Lab Testing) <input type="checkbox"/> I sent samples to another project (Lab Testing) <input type="checkbox"/> Other, please specify: <input style="width:400px;" type="text"/> 	<p>32 Which of the following techniques did you use to monitor NOSEMA levels? (select all that apply)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Looked for Nosema symptoms in and around the hive <input type="checkbox"/> Took samples and examined spores loads on my own <input type="checkbox"/> Samples collected by a BIP Tech Transfer Team (Lab testing) <input type="checkbox"/> Samples collected for another monitoring effort (eg: APHIS NHBS, Sentinel Apiary) (Lab testing) <input type="checkbox"/> I sent samples to another project (lab testing) <input type="checkbox"/> Other, please specify: <input style="width:400px;" type="text"/>
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Between April 1, 2017 and April 1, 2018...

<p>33* ...did you use a treatment to try to control VARROA mites? (choose one) <input type="radio"/> Yes <input type="radio"/> No</p>	<p>34* ...did you use a treatment to try to control NOSEMA? (choose one) <input type="radio"/> Yes <input type="radio"/> No</p>	<p>35* ...did you use a treatment 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;" 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&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 ⁽¹⁾

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

(1) 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 race of bees do you use in your operation?	
44	How old on average were the queens 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, how often 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 replace 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	How 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 introduced , 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 hive type 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 foundation 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 prepare for last winter (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 brood chamber 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 comb in your colonies? <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	55 Last year how many frames from the brood nest of your colonies did you replace on average? <i>(choose one)</i> <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?

I did not reuse any old brood comb I culled any particularly old or bad comb and replaced it

I did not treat the comb in any particular way I fumigated the comb with acetic acid

I froze the comb I stored the comb with paradichlorobenzene crystals (moth crystals)

I irradiated the comb I stored the comb with naphthalene (moth balls)

Other, please specify:

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)*

I caught and installed swarms

I made increases by splitting strong colonies

I bought and installed packages From what state?

I bought and installed nucs From what state?

I bought (or received) hives from another beekeeper From what state?

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%)

Natural % Agricultural % Urban % Suburban %

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
Spring Honey (April to June)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Summer Honey (July to Sept)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fall Honey (Oct to Dec)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Winter 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 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 time 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>	% of my beekeeping time	
	Travel (time spent to and from your apiary(ies))	<input type="text"/>	
	Feeding (or adding food substitute or stimulant)	<input type="text"/>	
	Honey (harvest and production)	<input type="text"/>	
	Normal Seasonal Management (visit to the hives, prevention of swarming...)	<input type="text"/>	
	Pest monitoring (checking for Varroa, Nosema...)	<input type="text"/>	
	Applying chemical treatments (as selected earlier in the survey)	<input type="text"/>	
	Displaying other pest control techniques (drone brood removal, SHB traps...)	<input type="text"/>	
	Other	<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?		
	October <input type="text"/> <i>in \$</i>	February <input type="text"/> <i>in \$</i>	April <input type="text"/> <i>in \$</i>
73	How much money over the last year did you spend on feed (protein and/or carbohydrates)?	<input type="text"/>	<i>in \$</i>
74	How much money over the last year did you spend on equipment ?	<input type="text"/>	<i>in \$</i>
75	How much money over the last year did you spend on treatments/controls ?	<input type="text"/>	<i>in \$</i>

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

76	... what were your management goals for beekeeping? (<i>select three</i>)
	<input type="checkbox"/> To keep my bees healthy and alive <input type="checkbox"/> To produce honey <input type="checkbox"/> To increase profit from my operation <input type="checkbox"/> To protect bees in general <input type="checkbox"/> Other, please specify: <input type="text"/>
	<input type="checkbox"/> To increase the number of colonies I keep/manage <input type="checkbox"/> To become more educated about bees and beekeeping <input type="checkbox"/> To pollinate my garden, or commercial crops <input type="checkbox"/> To maintain the same number of colonies
77	... 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
78	... were you expecting 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 income was 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%

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 years have you been keeping bees?		<input type="text"/> in years
84	How did you first learn beekeeping? <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"/>		
85	Are you a member of a beekeeping organization? <i>(select all that apply)</i>		
	<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		
86	What are your primary sources of bee health information ? <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 strategies 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 Best Management Practices 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 barriers 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 (Proceed to Q92)	AND/OR	<input type="checkbox"/> Disadvantages? (Proceed to Q93)
92	What do you believe are the main advantages of managing for VARROA mites? (Select no more than five)			
	<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: _____		
93	What do you believe are the main disadvantages of managing for VARROA mites? (Select no more than five)			
	<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: _____	
94	How much control 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 expectations of people whose opinion you value regarding management for VARROA mites? Their expectations are that beekeepers... (Select no more than five)			
	<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"/> Manage/treat cautiously or only under certain conditions	<input type="checkbox"/> Tolerate Varroa mites – they are not really a problem	<input type="checkbox"/> Avoid spreading VARROA mites to others	
	<input type="checkbox"/> Medicate their colonies/use chemical treatments	<input type="checkbox"/> Just let their bees manage Varroa mite infestations	<input type="checkbox"/> Have strong, healthy bees and colonies	
	<input type="checkbox"/> I am unsure or don't know their expectations	<input type="checkbox"/> Breed stronger, hygienic, Varroa mite resistant bees	<input type="checkbox"/> Practice treatment free beekeeping	
	<input type="checkbox"/> Other, please specify: _____	<input type="checkbox"/> Let natural selection defeat Varroa mites	<input type="checkbox"/> Manage/control mites	
		<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	
96	How much are you inclined to agree 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 good steward of your colonies and beekeeping in general? To be a good bee colony steward, I must... (Select three)			
	<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: _____			

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 for insights on how the results of this survey can improve your colony management decision making!

