

Tier 2 survey (Beekeeper Management Survey)

The purpose of this survey is to evaluate the success of different beekeeper management practices. In order to do this in an unbiased way, we need to have an accurate picture of how well your bees did over the winter. The following questions are designed to help us quantify your losses.

This survey is composed of four parts.

- 1) 'Colony Winter Loss' questions are meant to determine how many colonies you lost over the last summer and winter. These are a repeat of some of the questions asked in the tier 1 (Winter Loss) survey.
- 2) 'Beekeeper Characteristics' questions are meant to help categorize the type of beekeeper you are.
- 3) 'Colony Location' questions are meant to determine where colonies were located for one year, between 1 April 2010 and 1 April 2011.
- 4) 'Colony Management' questions are about the practices you used to manage your colonies last year.
- 5) 'Colony Productivity' questions are about how productive your bees were last year.

The survey should take about 15 minutes to complete.

There are no known risks to you to take this survey. You must be at least 18 or older (19 or older in Nebraska and Alabama) to participate. Your answers to the questions are anonymous. Any reports prepared will be released only as summaries in which no individual's answers can be identified. This survey is voluntary. You are free to decide not to participate and can withdraw at anytime without harming your relationship with the researchers or institutions involved. This survey is approved by the University of Nebraska Institutional Review Board.

Should you have any questions or concerns please do not hesitate to contact us at askbeeinformed@gmail.com or at 443.296.2470

Colony Winter Loss

1. How many living colonies did you have on 1 October 2010?
2. How many living colonies did you have on 1 April 2011?
3. How many splits, increases, and / or colonies did you make / buy between 1 October 2010 and 1 April 2011?
4. How many splits, increases, and / or colonies did you sell or give away between 1 October 2010 and 1 April 2011?
5. What was the largest number of living colonies you owned between 1 April 2010 and 1 April 2011?

6. What was the smallest number of living colonies you owned between 1 April 2010 and 1 April 2011?

Colony Summer Loss

7. How many living colonies did you have last Spring (on 1 April 2010)?

8. How many splits, increases, and / or colonies did you make / buy over the Spring and Summer, between 1 April 2010 and 1 October 2010?

Instructions: "Increases" include successfully hived swarms and/or feral colonies.

9. How many splits, increases, and / or colonies did you sell or give away over the Spring and Summer between 1 April 2010 and 1 October 2010?

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Beekeeper Characteristics and Reasons for Keeping Bees

10. What percentage of your annual income was derived from your beekeeping activities last year?

I lost money

None

Less than 5 %

Between 5 – 50 %

Between 51 – 90%

Over 90 %

Prefer not to say

Don't know

11. Over the last year (1 April 2010 to 1 April 2011), which of the following activities did you use your colonies for (check all that apply)?

To pollinate agricultural crops

To make and sell honey

To make honey for personal use only

To make queens or package bees to sell to other beekeepers

For enjoyment

Other (please specify)

12. When choosing treatment or feeding strategies for your colonies, would you say that you are:

Not willing to use any "non-bee produced" products in the hive

Only willing to use "natural" or "organic" products in the hive

Prefer to use natural or organic products in the hive but will use synthetic products if needed

Willing to use any type of product in the hive provided it helps keep my colony alive

Other (please specify)

Colony Location

13. In which state(s) did you keep bees between 1 April 2010 and 1 April 2011?

List states

14. On December 31, 2010, please list the number of colonies you had in each state.

Instructions: If you are unsure how many colonies were alive on this exact date, assume all colonies that were alive when you last checked before December 31, 2010 were still alive (the total for all states will be calculated for you).

15. Did you move your honey bee colonies across state lines over the last year (between April 1 2010 and April 1 2011)?

- a. Yes
- b. No (*next page*)

16. Approximately what percentage of your operation moved across state lines at least once between 1 April 2010 and 1 April 2011?

17. Of those colonies you moved, how many times, on average, were each of those colonies moved between 1 April 2010 and 1 April 2011?

18. Please indicate in which states you kept bees for the months listed.

Matrix

Columns: all year then months

Rows: All states

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Colony Management Questions

The following questions are meant to document which management practices you implemented in your operation.

Chemical/organic pathogen and parasite control products

19. For the products listed below, indicate in which months you applied the product to a majority of your colonies. If you did not use the product please indicate so.

Matrix: columns: did not use, then months

Rows:

- Fluvalinate-based product (i.e., Apistan)
- Coumaphos-based product (i.e., CheckMite+)
- Amitraz-based product
- Fenpyroximate (i.e., Hivastan)
- ApiLife VAR
- ApiGuard
- Formic Acid (i.e., Mite Away II)
- Oxalic Acid
- Mite-A-Thol (menthol)
- Honey B Healthy
- Sucroside
- Fumagillin (Fumadil B)

Nosevet
Terramycin
Tylosin (Tylan)

Did not use

Apr '10

May '10

Jun '10

Jul '10

Aug '10

Sep '10

Oct '10

Nov '10

Dec '10

Jan '11

Feb '11

Mar '11

20. Did you place any products in your hive to control small hive beetles last year?

- a. Don't know
- b. Prefer not to say
- c. No
- d. Yes (please specify)

21. Did you use any other disease or parasite control product in a majority of your colonies that was not listed in question 19 or 20 above?

- a. Don't know
- b. Prefer not to say
- c. No
- d. Yes (please specify)

22. On average, how often did you sample colonies to quantify nosema levels over the last year (April 1 2010 to April 1 2011)?

- Never
- Once
- About once every 4 months (3 times)
- About once every 3 months (4 times)
- About once every 2 months (6 times)
- About once a month (12 times)
- More than once a month
- Other (specify how many times)

23. Which of the following techniques did you use over the last year (April 1 2010 to April 1 2011) to monitor varroa mite populations in your colonies?

- Mite drop (sticky boards or other collection tray below the hive)
- Powdered sugar roll

Ether roll
Visual inspection of adult bees
Visual inspection of drone brood
I did not monitor varroa mites
Other (please specify)

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Colony Management: Feeding strategies

24. For the products listed below, indicate which months you fed the product to a majority of your colonies. If you did not use the product please indicate so.

Matrix: columns: did not use months

Rows:

Self-made protein feed containing pollen

Self-made protein feed without real pollen

Bee Pro

Ener-G Plus bee diet

MegaBee

Global Patties

Vitafeed gold

Vitafeed green

Api go

Sugar (Sucrose) syrup

Sucrose candy (i.e., Fondant)

High fructose corn syrup

Excess extracted honey

Honey in the comb (added unextracted frames)

Wet honey supers

25. Did you use any other feed products or types in a majority of your colonies that was not listed in question 24 above?

Don't know

No

Yes (please specify)

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Colony Management: Non-chemical practices

26. Over the last year, in what proportion (percentage) of your colonies did you employ the practices/equipment listed below?

Matrix:

Columns: None 0- 50% 0-99% all colonies

Rows

Drone comb removal

Small cell size comb

Small hive beetle trap

27. Did you use screen bottom boards in any of the colonies in your operation?
- a. Yes (go to 30)
 - b. No (next page)
28. In which months did you have your screen bottom board engaged (turned on or open)?
- All months
 - List months
 - Don't know
 - Other (please specify)
29. In what proportion of your operation did you use screen bottom boards.
- All
 - Most (51 % or more)
 - A minority (less than 50% but more than 0%)
 - Don't know
 - Other (please specify)

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Colony Management: Comb replacement and winter management

30. On average, how old is the brood comb in your colonies?
- More than 5 years old
 - Less than 5 years old
 - Less than 4 years old
 - Less than 3 years old
 - Less than 2 years old
 - Less than 1 year old
 - Don't know
 - Other (please specify)
31. On average, how many frames from the brood nest of your colonies did you replace last year?
- Did not replace any frames
 - 10% (for example ~1 frame per brood box)
 - 20% (for example ~2 frames per brood box)
 - Between 25 and 50% (for example between 3 – 5 frames per brood box)
 - More than 50% of frames (more than 5 frames per brood box)
 - Don't know
 - Other (please specify)
32. Did you do any of the following to prepare for this last winter (2010-2011)?
- Create or engage an upper entrance
 - Wrap colonies with insulation
 - Wrap colonies with tar paper or wintering sleeve
 - Place extra insulation on top of colony
 - Place mouse guard at entrance

Equalize colony strength
Move colonies to southern location
Move colonies to inside wintering buildings
I do not prepare my colonies for winter
Other (please specify)

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Colony Management: Queen type and replacement

33. What type or race of bees do you use in your operation? Select all that apply

New World Carniolan
New World Carniolan hybrid
Caucasian
Caucasian hybrid
Italian
Italian hybrid
Buckfast
Buckfast hybrid
Russian
Russian hybrid
Varroa Sensitive Hygienic (VSH)
Minnesota Hygienic
German black
Local selected
Africanized
Don't know
Other (please specify)

34. On average how old were the queens that headed a majority of your colonies on 1 October 2010?

Less than 6 months
Between 6 months and 1 year
Between 1 and 2 years
Older than 2 years
Don't know
Other (please specify)

35. Did you replace the queens in any of your colonies between 1 April 2010 and 1 April 2011?

a. Yes (go to 36)
b. No (next page)

36. You indicated that you replaced the queens in at least some of your colonies. In what percentage of the colonies in your operation did you replace queens over the last year.

None
All
Most (80% or more)
A majority (more than 50% but less than 80%)
A minority (less than 50% but more than 20%)
Few (less than 20%)

Don't know
Other (please specify)

37. How did you re-queen the colonies that you re-queened last year? (Select all that apply)

Introduced mated queens
Introduced virgin queens
Introduced queen cells
Permitted colony or split to rear a new replacement queen on its' own
Don't know
Other (please specify)

38. If you introduced mated or virgin queens and/or queen cells, where did you get the majority of these queens?

From commercial producers
Reared them myself
Don't know
Question not applicable
Other (please specify)

39. Which suppliers and states did you receive your commercially produced queens come from?

Don't Know
Prefer not to answer
Specify

New Page

Colony Management: Colony Replacement practices

40. Did you start or obtain any new colonies between 1 April 2010 and 1 April 2011?

a. Yes
b. No (go to next page)

41. What proportion (percentage) of the colonies in your operation that were alive on 1 October 2010 came from packages established or made the previous spring and summer, after 1 April 2010?

None
All
Most (80% or more)
A majority (more than 50% but less than 80%)
A minority (less than 50% but more than 20%)
Few (less than 20%)
Don't know
Don't want to answer
Other (please specify)

42. How did you start or obtain new colonies over the last year?

Made increases by splitting strong colonies
Bought and installed packages

Caught and installed swarms
Bought hives and/or nucs from another beekeeper
Other (please specify)

43. If you installed packages of bees over the last year, from what state or country did those packages come?
- Did not use packages
 - Don't know
 - List states and Australia
 - Other (please specify)

New Page

Colony Management: Replacing dead colonies and re-using equipment

44. Generally, when you found a dead and/or weak colony in your operation over the last year you would: Select all that apply

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

Pack up the dead equipment and store it for re-use at a later date.

Did not find dead colonies

Other (please specify)

45. Between 1 April 2010 and 1 April 2011, before you re-used brood comb that you had taken out of production or purchased did you? Check all that apply.

I did not reuse any old brood comb

Cull any particularly old or bad combs and replace them

Irradiate the comb

Fumigate the comb with acetic acid

Freeze the comb

Store the comb with paradichlorobenzene crystals (moth balls)

Did not treat the comb in any particular way

Other (please specify)

Next Page

Colony Production: Honey production and forage

46. Over the last year, during which months did you remove or harvest honey from your colonies.

a. List all months

b. Did not remove honey (go to next page)

47. Which of the following crops were the majority of your colonies in proximity to when they were producing honey? (select all that apply)

Corn

Sweet corn

Cotton

Cane crops (e.g., raspberries, blackberries, etc)
Citrus
Alfalfa
Canola (rape)
Soybeans
Blueberries
Cranberries
Watermelons
Cucumbers
Other melons
Squash
Sunflowers
Don't know
Other (please specify)
None of the above

48. In your opinion would you say that the amount of honey you produced in the following seasons was above average, average, or below average?

Matrix (include do not produce honey in this season)
Spring Honey (April – June)
Summer Honey (July – Sept)
Fall Honey (Oct – Dec)
Winter Honey (Jan – March)

New Page

Colony Production: Pollination

49. Did you derive income from your colonies by renting them out for pollination between April 1, 2010 and April 1, 2011?

- a. Yes
- b. No (new Page)

50. You indicated that you derived income from renting colonies for pollination last year. Which of the following crops were you paid to pollinate over the last year?

Almonds
Apples
Plums
Pears
Cherries
Cucumbers
Melons
Canola (rape seed)
Alfalfa (seed production)
Clover (seed production)

Blueberries – low bush
Blueberries – high bush
Cane berries (e.g., raspberries, blackberries)
Cranberries
Citrus
Squash
Sunflowers
Vegetable seed production
Other (please specify)

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Thank you for participating in this survey! Results will be posted at the beeinformed.org web site as they become available. We may wish to contact you if we have questions about your responses. Is this OK?

51. Select one of the following

No

Yes please provide your phone number

52. Would you be willing to participate in future beekeeping surveys? Select one of the following

Yes

No

53. If you said 'yes' to any of the questions above please provide your email address below.

Thank you for participating in the 2010-2011 honey bee winter loss survey. Should you have any questions or concerns please do not hesitate to contact us at askbeeinformed@gmail.com or at 443.296.2470

Please provide any comments about the survey in the space provided below.