



4H Beekeeping **Work Book** (*Record Book*)



Name: _____

Age: _____

Club Name: Beekeeping Club

Club Leader & Author: Brian Rowe

310 Milltown Road, Bridgewater, NJ 08807-3587

Edition: 2009

Why complete a record book?

A record book is not meant to be a chore. Instead, it is a way for you to learn. Here are some important reasons why 4-H expects you to complete a 4-H record book for your project.

Keeping a 4-H record book will help you ...

- Learn how to organize yourself
- Learn how to set reasonable goals for yourself
- Appreciate what you've learned this year from the goals you reached
- Recognize what things you learned in your 4-H project
- Explain what you've learned
- Keep track of costs of your project
- Gather information needed to apply for awards and scholarships
- Complete applications and resumes for jobs and college
- Meet requirements to participate in some county, state, or national 4-H events.

Member in good standing requirements

In general, all 4-H members are expected to meet the following standards each year. These are the minimum requirements. Your club may have additional requirements.

- Attend at least 70 percent of regular club meetings and/or activities.
- Complete a 4-H project- your own work with minimal assistance from parents.
- Give a club or county 4-H public presentation.
- Complete a project record book (like this one).



Starting Out - My goals for the 4-H year

The beginning of the 4-H year is a good time to begin thinking about what you'd like to do or learn in 4-H during the upcoming months. List some of your goals for the year and what plan you have to accomplish your goals. Talk to your leader and parents, decide what goals are realistic to try and possible to finish this year.

My goals for this year

Example: I will learn how to give a public presentation

- 1.
- 2.
- 3.

What I need to do to reach this goal

Attend county public presentation workshop. Have my leader and parents help me pick a topic. Practice my presentation. Give the presentation at a club meeting

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Signatures for goal setting

I will work toward the above goals I have set for myself for the upcoming 4-H year to the best of my ability:

(Member signature) _____

(Date) _____

I will support my son's/daughter's goals for the upcoming 4-H year:

(Parent signature) _____

(Date) _____

I will help support this member's goals for the upcoming 4-H year:

(4-H Leader signature) _____

(Date) _____

Basic Knowledge Test



1. A honey bee is an insect because?
 - a. -
 - b. -
 - c. -
2. Name the three types of casts in a honey bee colony and what they are responsible for.

	<u>Name</u>	<u>Number per colony</u>	<u>Job</u>
a.	-		
b.	-		
c.	-		
3. Why do people keep bees?
 - a. -
 - b. -
 - c. -
 - d. -
4. The diet of a honey bee is:
 - a. -
 - b. -
5. Name the parts of your bee hive
 - a. -
 - b. -
 - c. -
 - d. -
 - e. -
 - f. -
 - g. -
6. What basic steps should you follow to prevent an unexpected swarm?
7. Describe the queen, and tell how her body shape, wing size, and stinger are important?
8. What do you find most interesting about the queen bee?
9. How many days does it take to develop a queen from egg to adult?
10. What is the brood? Where is it located?
11. What is a drone and what does it do?
12. What are the duties of the worker bee?
13. Why are Africanized Bees bad? Why are Africanized Bees good?
14. What is burr comb? Why is it made?
15. Explain how the frames are built to maintain the "bee space." Who discovered the space?

16. Name three different things that can be found in the cells of honey comb.

- a. _____
- b. _____
- c. _____



17. Why is it necessary to have your hive elevated off the ground? Name two reasons:

- a. -
- b. -

18. Name three animals that might attack a hive and what would happen if they do.

- a. -
- b. -
- c. -

19. Name three bugs or parasites that might attack the hive and what would happen if they do.

- a. -
- b. -
- c. -

20. Name three diseases that might infest the hive. What indicates they have been infested?

- a. -
- b. -
- c. -

21. What are two methods or tools you use to prevent infestation of parasites or diseases?

- a. -
- b. -

22. Draw a picture of honey comb in the box:



Using the "Glossary of Flower Parts," label the following parts of a flower:

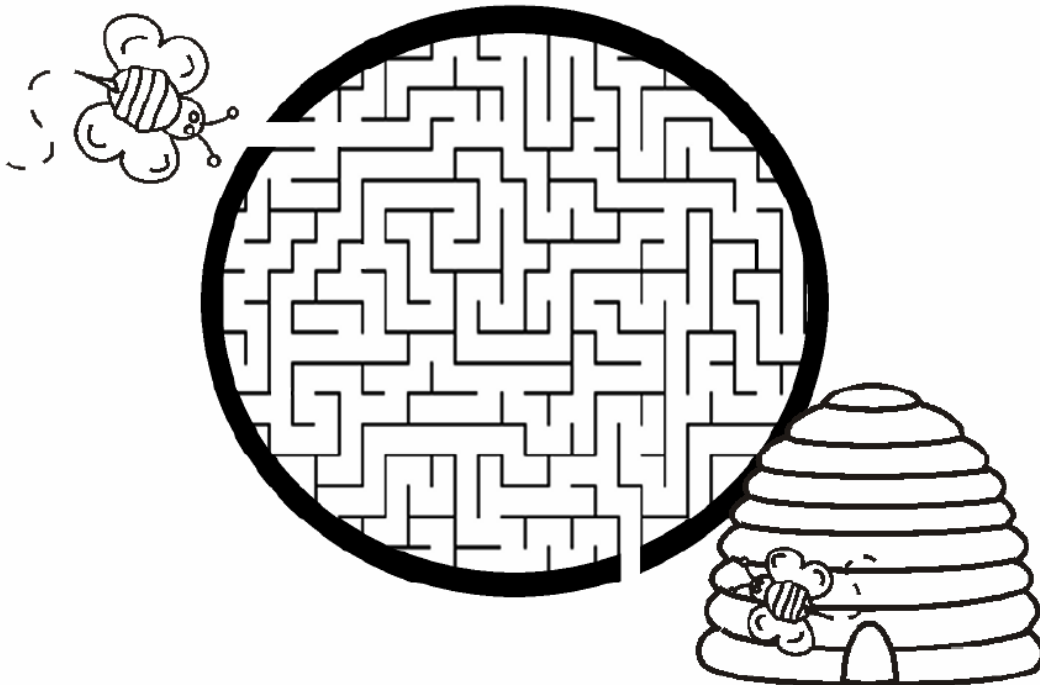
- | | |
|----------|---------------|
| Anther | Pollen grains |
| Filament | Sepal |
| Ovary | Stigma |
| Petals | Style |

NJ Crop Profile

Fill out the chart below to identify the flowers blooming in your area. This will help us understand where our honey comes from. Begin your observations early in the spring and continue through the year. Remember, you will find blooms on many trees, vines, bushes and smaller plants. Bees get most of the nectar they use from wild flowers.



Name of Plant	Description (size, color, etc.)	Location	Blooming Dates	Bees on Blooms? What are their activities?
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				



Colony Observations

Name: _____ County: Somerset State: New Jersey
4H Club: Beekeeping Parents Name: _____
Address: _____ City: _____



Age: _____ # of Years in 4H: _____ # of Years in Beekeeping Club: _____

Dates You Observed the Hive Entrance and Surrounding Area

	Date:	Observations	Conclusions (or Cause)
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____
16.	_____	_____	_____
17.	_____	_____	_____

Colony Inspections

Name: _____ County: Somerset State: New Jersey
 4H Club: Beekeeping Parents Name: _____
 Address: _____ City: _____

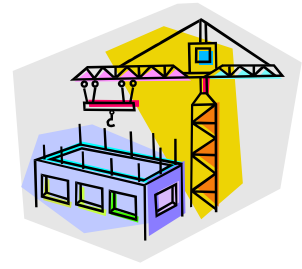
Age: _____ # of Years in 4H: _____ # of Years in Beekeeping Club: _____



Dates You Opened the Hive

	Date:	Reason for Opening / Inspecting	Observations
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____
16.	_____	_____	_____
17.	_____	_____	_____

Equipment Log



Name: _____

Year: _____

Please list all equipment purchased this year. Do not include bee cost, supplies, etc.

When deciding end of year value subtract 5 to 10% for normal wear & tear. Subtract more if visible wear or damage is present. There are a few things that do go up in value.

Frames once drawn may be valued at \$8 for a deep, and \$6 for a medium. Each deep frame where healthy brood is clearly visible and present may be valued at \$10.

Purchases				End of Year Inventory-	
Item	#	Value	Date	#	Value
Outer Cover	-	-	-	-	-
Inner Cover	-	-	-	-	-
Honey Super	-	-	-	-	-
Super Frames	-	-	-	-	-
Hive Bodies	-	-	-	-	-
Deep Frames	-	-	-	-	-
IPM Screen	-	-	-	-	-
IPM Tray	-	-	-	-	-
Bottom Board	-	-	-	-	-
Feeder	-	-	-	-	-
Hive Tool	-	-	-	-	-
Smoker	-	-	-	-	-
Other	-	-	-	-	-

Total Value Eq. Purchased 7. _____

Eq. End Value 2. _____

(Do not fill in total until end of year)

Supply Log

Please include all perishable and replenishables. Do not include bee cost or equipment costs.



Item	Purchases			End of Year Inventory-	
	Amount	Value	Date	Amount	Value
Sugar	-	-	-	-	-
-	-	-	-	-	-
Pollen Patties	-	-	-	-	-
-	-	-	-	-	-
Pollen Substitute	-	-	-	-	-
-	-	-	-	-	-
Honey (Did you get any honey from your hive this year?)	-	-	-	Value = \$7 per lb)	-
-	-	-	-	-	-
-	-	-	-	-	-
Wax (Did you collect and filter any wax this year?)	-	-	-	Value = \$5 per lb of cleaned wax)	-
-	-	-	-	-	-
-	-	-	-	-	-
Jars	-	-	-	-	-
-	-	-	-	-	-
Other	-	-	-	-	-
-	-	-	-	-	-
Total Value		8. _____			3. _____

(Do not total until end of year. Sum all supply value purchased and present at end of year.)



End of Year Financial Summary



Before starting this page, check that all other financial pages are complete. This summary will show the cost or profit of your beekeeping operation for this year.

Live bees are valued at their current purchase price, if the hive is healthy. However, deduct \$10 from the value of the bees every following year to account for the queen getting older and eventually needing replacement.

Credits

- Total Value of (Live) Bees 1. _____
- Total Value of Equipment 2. _____
- Total Value of Supplies 3. _____
- Income from honey (or other) (consumed or sold) 4. _____
- Total (Add 1 through 4) 5. _____

Debits

- Total Cost of (Live) Bees (purchased this year) 6. _____
- Total Cost of Equipment (purchased this year) 7. _____
- Total Cost of Supplies (purchased this year) 8. _____
- Total Cost this year (Add 6, 7, and 8) 9. _____

Last Year (these are zero for first year members)

These numbers (10, 11, and 12) will come from last year's Financial Summary, under Credits.

Last Year's 1 = This Year's 10, Last Year's 2 = This Year's 11, Last Year's 3 = This Year's 12

- Total Value of (Live) Bees (*remember -\$10 per year for queen's age*) 10. _____
- Total Value of Equipment 11. _____
- Total Value of Supplies 12. _____
- Total (add 10, 11, 12) 13. _____

Total Debit (add 9 and 13) 14. _____

Total Profit This Year (5 minus 14) 15. _____

This is my _____ year of beekeeping. Please keep this page for next year's records.

Looking Back - What I learned this year

This section is to be completed at the end of the 4-H year. It is meant to help you look back on all that you learned during the past year. This section includes the following parts:

- My goals completed
- Knowledge and skills I gained
- The three most important things I learned
- Telling my story

My goals completed

Look back on the goals you set for yourself at the beginning of the year. How well did you meet those goals? If you added new goals during the year, add them and explain them below.



My goals for this year

Example: I will learn how to give a public presentation

- 1.
- 2.
- 3.

How well did each goal get met?

I attended county public presentation workshop. I had to change my topic three times. I should have practiced my presentation more before I gave it at the club meeting. I will start planning and practicing earlier next year!

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-
-

The three most important things I learned

Think of what was the most important for you. Then, list the three most important things you learned in this project during the past year in the boxes below. For instance, I learned how to groom my cat, I learned that working with senior citizens is challenging but also fun, or I learned to speak in front of my club without being afraid.

- 1.
- 2.
- 3.

Telling my story

Keeping in mind the knowledge and skills you said you learned from the club, write a story that explains what you gained this past year in 4-H. Use specific examples that are unique to you whenever possible. Feel free to relate what you learned in 4-H to school, family, or other activities in your life. It should be one page, 1000 words or less. Include your story with your workbook.

Attach photos or clippings on additional pages if it helps tell your story better. Don't forget to label them with captions if you do. These stories are great for school and community newspapers. Don't be shy to submit your work for publication.

Thinking Ahead - My goals for next year

Now is a good time to begin thinking about what you'd like to do or learn in 4-H next year. List some of your goals for next year and what plan you have to accomplish your goals.

- 1.
 - 2.
 - 3.
-