

Hive Inspections: When Things Go Wrong

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February 2020



When Things Go Right

- Queen-Right hive
- Beautiful brood pattern
- No obvious symptoms of disease
- Pollen stores
- Nectar stores



When Things Go Right

- Bees pollinate



When Things Go Right

- They collect pollen and nectar



When Things Go Right

- The hive is humming along, even swarms



When Things Go Wrong

*Observation
from the
Outside of
the Hive*

*First Look
Inside the
Hive &
Unlocking
the Story*

*Deeper Look
Inside the
Hive &
Testing for
Problems*



From the Outside

*Observation
from the
Outside of
the Hive*

- Observe as you approach
- What is in front?
- What is the level of activity?
- What does the activity at the entrance look like?



From the Outside

*Observation
from the
Outside of
the Hive*

- Observe as you approach
 - Is the hive in tact? Any external threats?
 - Are you seeing activity you'd expect based on the conditions?
 - Assess the mood of the hive compared to other inspections.



From the Outside

*Observation
from the
Outside of
the Hive*

- What is in front?
 - Are there bees in front and what is their condition?
 - Is it different from what you would expect or what you've seen from previous visits?



From the Outside

*Observation
from the
Outside of
the Hive*

- What is in front?



From the Outside

*Observation
from the
Outside of
the Hive*

- What is the level of activity?
- What does the activity at the entrance look like?
 - Is it ‘normal’ or ‘frenzied’ or below expectations?
 - Do you see pollen on returning foragers?



From the Outside

*Observation
from the
Outside of
the Hive*

- What kind of activity is there?



From the Outside

*Observation
from the
Outside of
the Hive*

- Do you see pollen on foragers?



From the Outside

*Observation
from the
Outside of
the Hive*

- What if it's a robbing situation?
 - Is it too late?
 - What you can try:
 - Reducing the entrance (wood, screen, purchased robbing screen)
 - Wet sheet over it
- If you are successful, wait a few days for the colony to settle back



First Look Inside

*First Look
Inside the
Hive &
Unlocking
the Story*

- Evaluating resources
- Brood pattern observation
- Evaluating space needs
- How does this compare to expectations?



First Look Inside

*First Look
Inside the
Hive &
Unlocking
the Story*

- Evaluating resources
 - Pollen & Nectar, time of year
 - Volume/type of brood



First Look Inside

*First Look
Inside the
Hive &
Unlocking
the Story*

- Brood Pattern Observation



First Look Inside

- Brood Pattern Observation

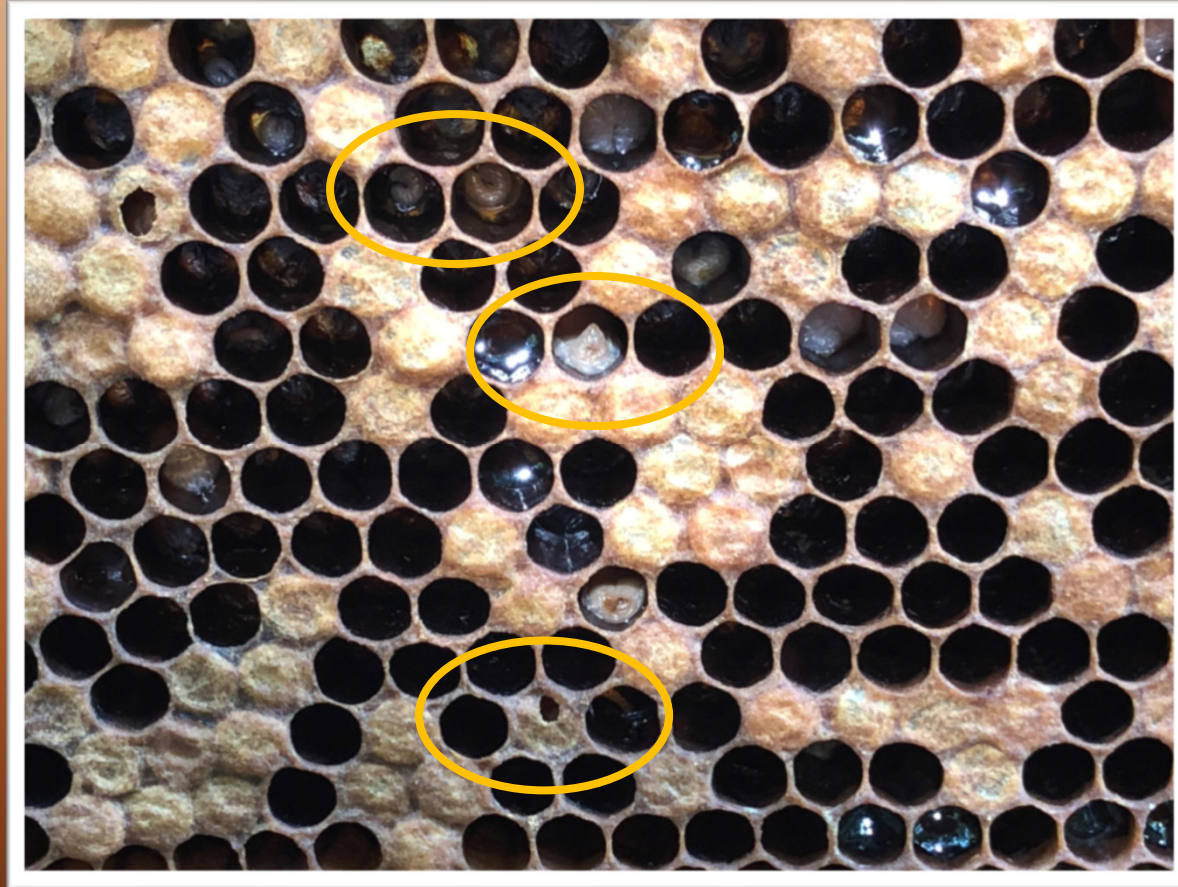
*First Look
Inside the
Hive &
Unlocking
the Story*



First Look Inside

*First Look
Inside the
Hive &
Unlocking
the Story*

- Brood Pattern Observation



First Look Inside

*First Look
Inside the
Hive &
Unlocking
the Story*

- Evaluate the Space
 - Honey bound?
 - Brood bound?
- Consider adding boxes and frames before it's overcrowded



Deeper Look

*Deeper
Look Inside
the Hive &
Testing for
Problems*

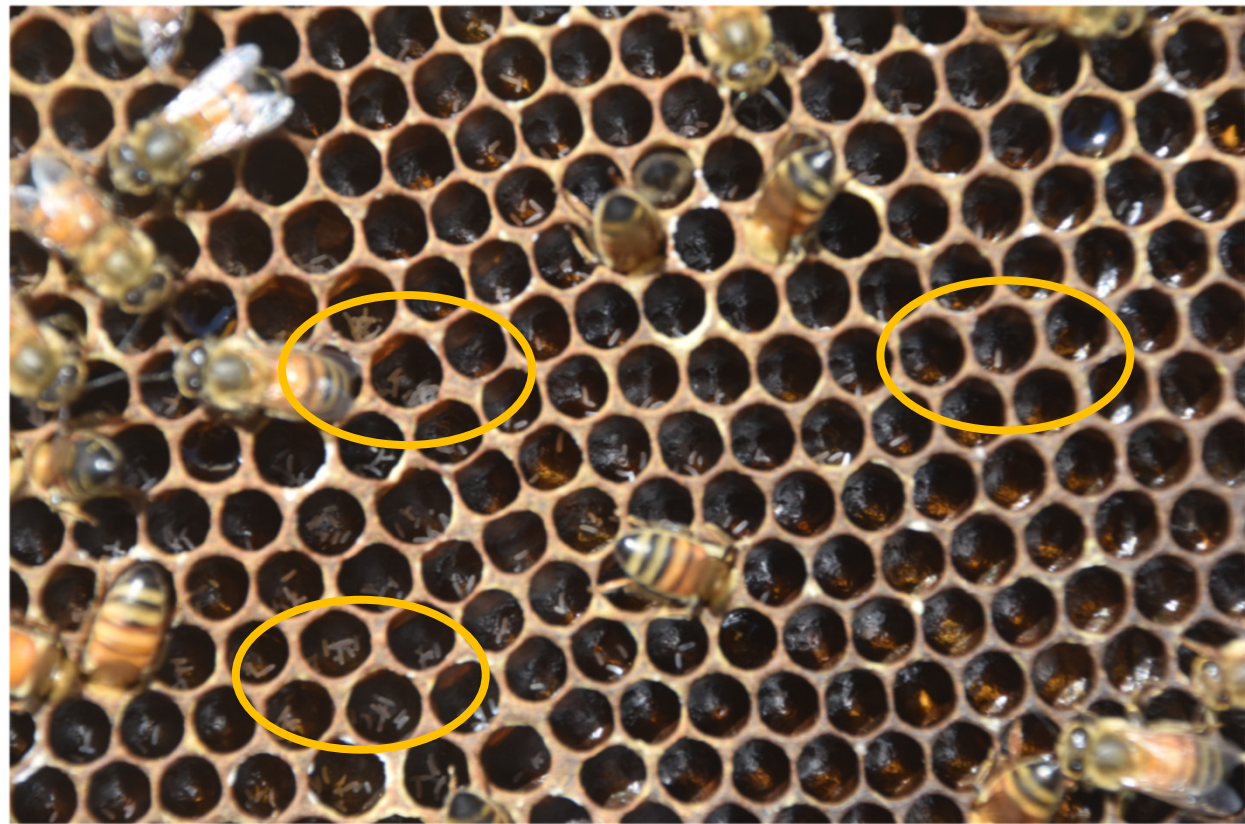
- Laying Workers
- Pests
- Disease



Deeper Look

*Deeper
Look
Inside the
Hive &
Testing
for
Problems*

- Laying Workers



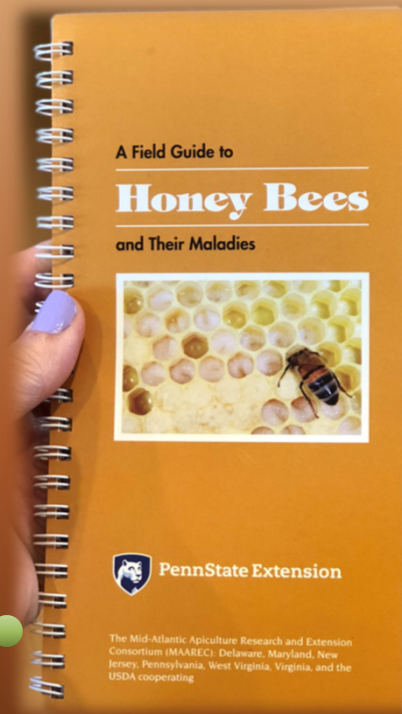
Deeper Look

*Deeper
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- Pests
 - Small hive beetles
 - Varroa mites
 - Wax moths



I highly
recommend
this!



Deeper Look

*Deeper
Look
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Testing
for
Problems*

- Pests, SHB



Deeper Look

*Deeper
Look
Inside the
Hive &
Testing
for
Problems*

- Pests, Mites



Deeper Look

*Deeper
Look
Inside the
Hive &
Testing
for
Problems*

- Pests, Mites



Deeper Look

*Deeper
Look
Inside the
Hive &
Testing
for
Problems*

- Pests, Wax Moths
 - After hive has died
 - Keep hive healthy first
 - Close off hive, remove frames for future use to prevent moth infestation



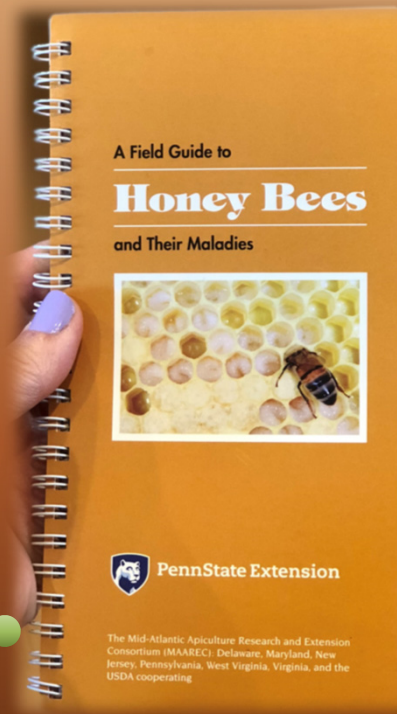
Deeper Look

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- Disease
 - Chalkbrood
 - Parasitic mite syndrome
 - European foulbrood
 - American foulbrood



I still highly
recommend
this!



Deeper Look

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Look
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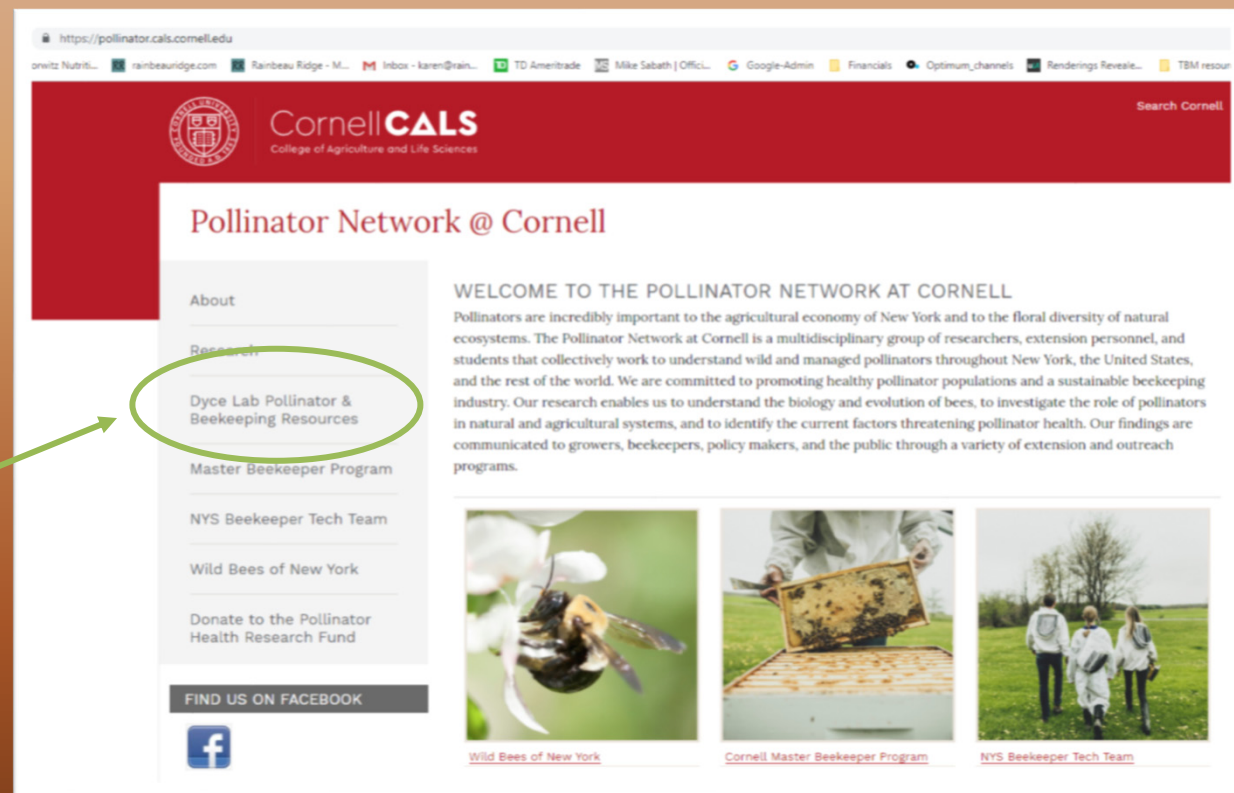
- Disease, Chalkbrood



Deeper Look

*Deeper Look
Inside the
Hive &
Testing
for
Problems*


- Cornell Resources



The screenshot shows the Cornell Pollinator Network website. The header includes the Cornell CALS logo and a search bar. The main content area is titled "Pollinator Network @ Cornell" and features a "WELCOME TO THE POLLINATOR NETWORK AT CORNELL" section. A sidebar on the left lists various resources, with "Dyce Lab Pollinator & Beekeeping Resources" circled in green. Below the sidebar, there is a "FIND US ON FACEBOOK" button and a Facebook icon. The main content area also includes three images: a close-up of a bee on a flower, a person holding a beehive, and a group of people in a field.

<https://pollinator.cals.cornell.edu>

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College of Agriculture and Life Sciences

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Research

Dyce Lab Pollinator & Beekeeping Resources


Master Beekeeper Program

NYS Beekeeper Tech Team

Wild Bees of New York


Donate to the Pollinator Health Research Fund


FIND US ON FACEBOOK




WELCOME TO THE POLLINATOR NETWORK AT CORNELL

Pollinators are incredibly important to the agricultural economy of New York and to the floral diversity of natural ecosystems. The Pollinator Network at Cornell is a multidisciplinary group of researchers, extension personnel, and students that collectively work to understand wild and managed pollinators throughout New York, the United States, and the rest of the world. We are committed to promoting healthy pollinator populations and a sustainable beekeeping industry. Our research enables us to understand the biology and evolution of bees, to investigate the role of pollinators in natural and agricultural systems, and to identify the current factors threatening pollinator health. Our findings are communicated to growers, beekeepers, policy makers, and the public through a variety of extension and outreach programs.

 Wild Bees of New York

 Cornell Master Beekeeper Program

 NYS Beekeeper Tech Team



You Know the Symptoms...

- Once you know the symptoms, what can you do to help your hive?
- Be honest with yourself
 - Is it the queen?
 - Is there a big disease problem?
 - Is there a treatment?



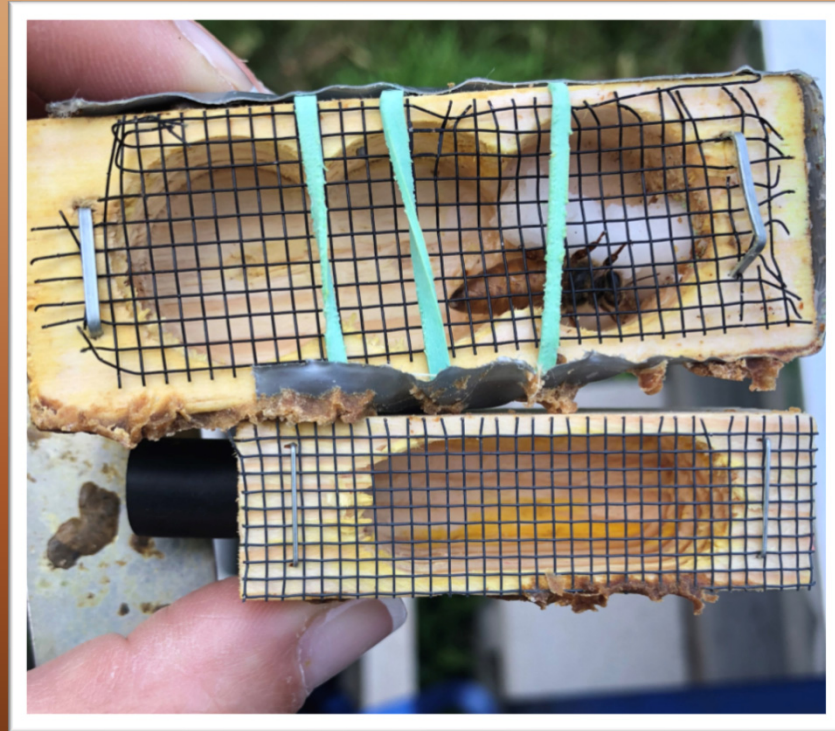
How to Tell it's the Queen...

- The queen is the source of the brood
 - Brood pattern, mix of brood
- Behavior can also be genetic
 - Overly aggressive hive
 - Hygienic breeding



How to Replace the Queen

- Reputable sourcing
- Find and remove the existing queen
- Introduce the new queen slowly
 - In a queen cage with candy to allow the workers to spread her new pheromone



Treatment Options

- When it's not the queen, but you want to consider treatments
- Your next course is about mites
- Quick preview:
 - Know your philosophy
 - Be prepared in advance about treatments



Don't Be Overwhelmed

- Be prepared with:
 - Tools
 - Books
 - Treatments
 - Resources
- Try to get a local mentor



Savor the Amazing-ness!



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