



The Managed Mentoring Program on getting started in beekeeping.

Managed Mentoring



Managed Mentoring

Initial Inspections

Lesson | Performing Inspections



What is Covered in this Module

Inspection Frequency

First Inspection

Colony Layout

A Basic Inspection



Hive Inspections

Overview of the process



Inspection Cadence

- **Need for Inspection**
 - Really, checking the hive is for your benefit
 - *If after the first week or so things look normal, it is highly likely that if being fed they will chug away and build out with no further intervention*
 - Checking is prudent
 - *Still, making sure is a trust but verify posture*



How Often

- **How Often**
 - First Inspection Within One Week
 - Future Inspections - Package
 - *Then every 10 to 14 days*
 - Check the food
 - Monitor comb progress – building quality comb, no oops...
 - Review the queen laying patterns,
 - Ensure no queen replacement cells
 - Future Inspections – Nuc
 - *After nucleus install – ever 7 to 10 days*
 - Same checks as the package list above



7

First Inspection

□ What is the objective

- *For the first time, we will help you out.*
- *Objective = queen operation and food*
 - How are the bees doing at building out wax
 - Is the comb well formed?
 - Are they building out any errant comb in ways, or places, that they should not be?
 - How is the queen doing: Is she laying? Is there a brood nest yet?
- *Are there any problems?*



First Inspection

□ Before you go in

- *Consider the conditions*

- Heavy forage time, when it is full sun, during the middle of the day, and with a nectar flow is the ideal time
- Weather swings are the wrong time, especially with storms coming
- Conditions to avoid:
 - In the early morning
 - At dusk
 - When it is cold
 - In the first few days after installation

Use common sense and avoid these if you can



Where things are located matters

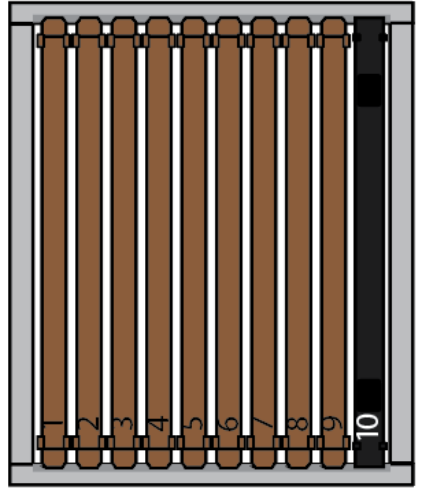
- **Know before you go in**
 - The population of bees in the nest are in the hive
 - *And the queen is likely there too.*
 - If you go in the frames, nest first, you chance killing bees by rolling them on the comb
 - *As you pull a frame, it can rub (also smash) bees against the combs adjacent.*
 - Start where the population is lower (normally the outside)



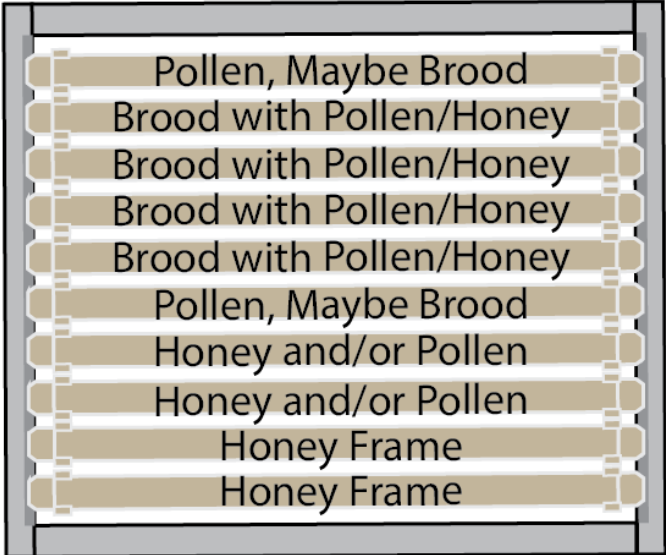
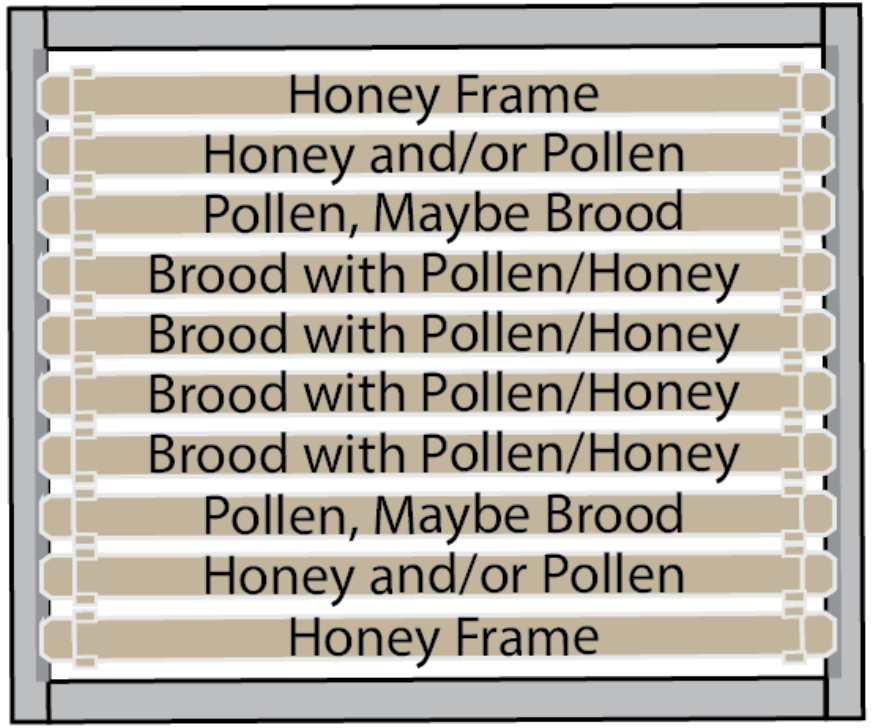
A typical colony layout

Start where the population is lower:
normally lower on the outside frames (Frame 1,2, 9, and 10)

↓ Ideal Layout



Back of the hive



< Do note that sometimes it looks like this...

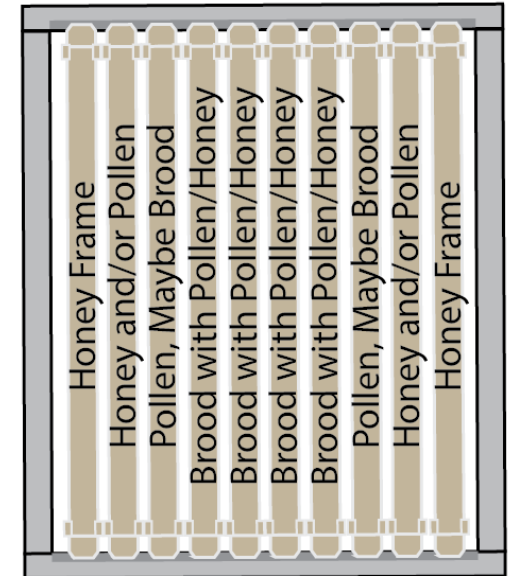
Brood shifted to one side



Prepping Entry

■ A basic inspection... described

- Observe the conditions and entrance, take notes
- Light the smoker. Don your gear. Smoke the entrance.
- ***From the back of the hive...***
 - *Do not work the bees from the front; that is in their flight path and in front of the guards*
- *Pull the roof, set it alongside the hive, upside-down*
- *Smoke the hole on the inner cover, pull the inner cover*
 - *Quick glance on the bees on the underside of the inner cover, check for the queen*
 - *Place the inner cover alongside the hive*

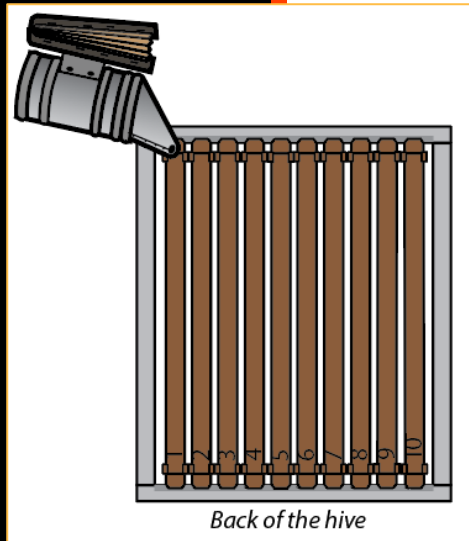


Back Side of the hive



Entering the hive

More specific details about using a hive tool are coming up in the how to use a hive tool lesson



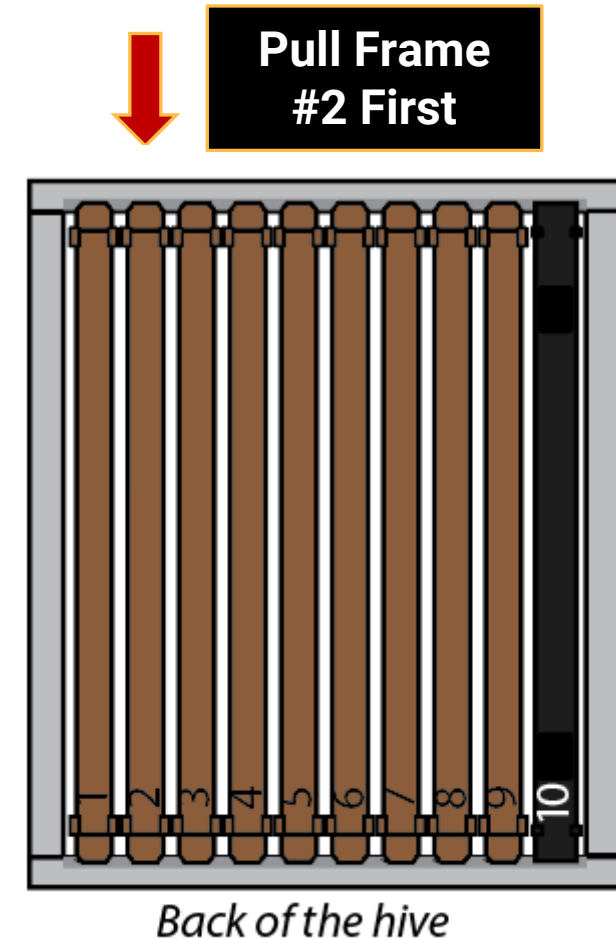
■ A basic inspection, continued

- Smoke the end bars FRAME #2 first, both ends,
- Place your hive tool between the FRAME #1 and FRAME #2, blade down, and give the tool a ¼ turn.
 - *This separates the 2nd from the 1st and makes space.*
 - *Do the same between FRAME #2 and FRAME #3*
- Place the blade end of your hive tool under **FRAME #2** and pull one end up. Grasp the top bar with your fingers
 - *If you can lift it out do so, If you cannot, use your hive tool to lift the other end so you can extract the frame.*
- As you pull the frame, hold it over the hive.
 - *If the queen or other bees fall off, they fall into the hive and not into the grass.*



Why Frame #2?

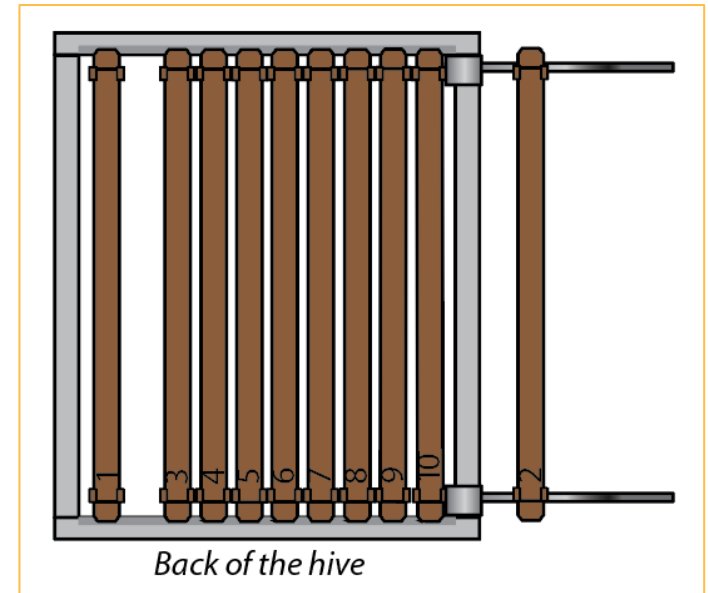
- ❑ Actually, the strategy is – *don't start with the outside frame...*
 - The outside frames, frame 1 and 10, have one side that faces the wooden box.
 - If you pull these frames, you risk 'rolling' bees on the comb against the wooden box inside and crushing them
 - Pulling frame #2 means there are FRAMES to either side
 - If the frame you are pulling comes into contact with another, it results in bees pushing on bees and rarely causes bees to be crushed or injured



Hang it on the Hanger

□ Use a Frame hanger

- *Inspections mean pulling frames...*
 - You can put a frame back each time, but we like the open gap for creating space. Use of a frame hanger aids in this tactic
- *We are big proponents of frame hangers*
 - Setting frames down in the grass is a common practice for many beekeepers.
 - This sometimes results in accidents: kick over the frame, step on frame....
 - Take a moment to set a frame hanger and hang your frames instead
 - Keep the frame spaced away from the hive box so the bees do not move to the box exterior.



Your Comb

It will likely look like this

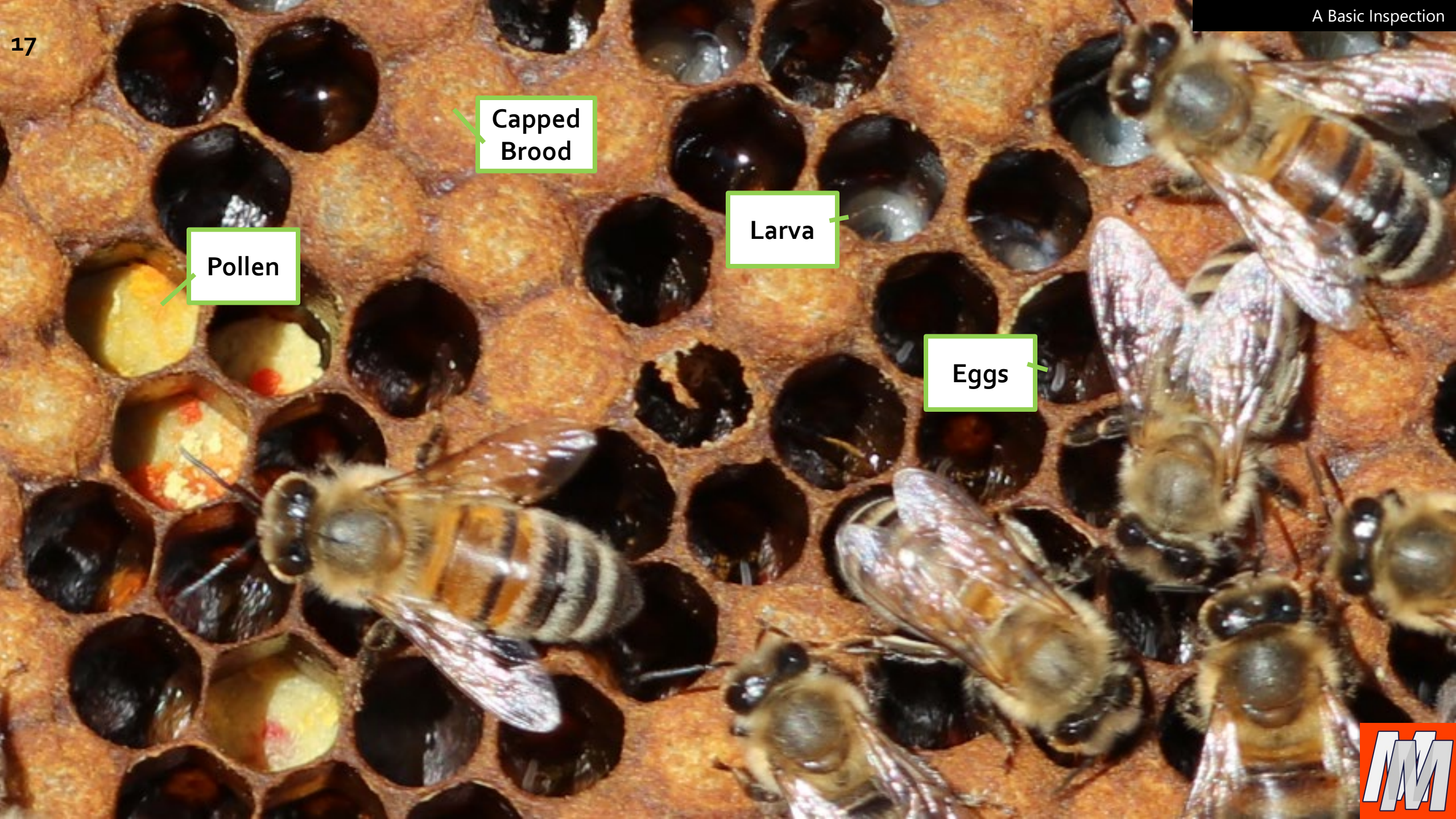


Inspecting the first frame

A basic inspection, *continued*

- Do a quick scan for evidence of new bees being created. On this frame you may see eggs or larva...
- *Eggs look like small pearl translucent shapes in the bottom of the cell.*
- *Initially eggs are standing on end when laid by the queen. They lay down, curling into a C shaped grub.*
- *The grubs, know individually as larva, and collectively as larvae, are mass provisioned with food placed with them in the bottom of the cell.*





Capped Brood

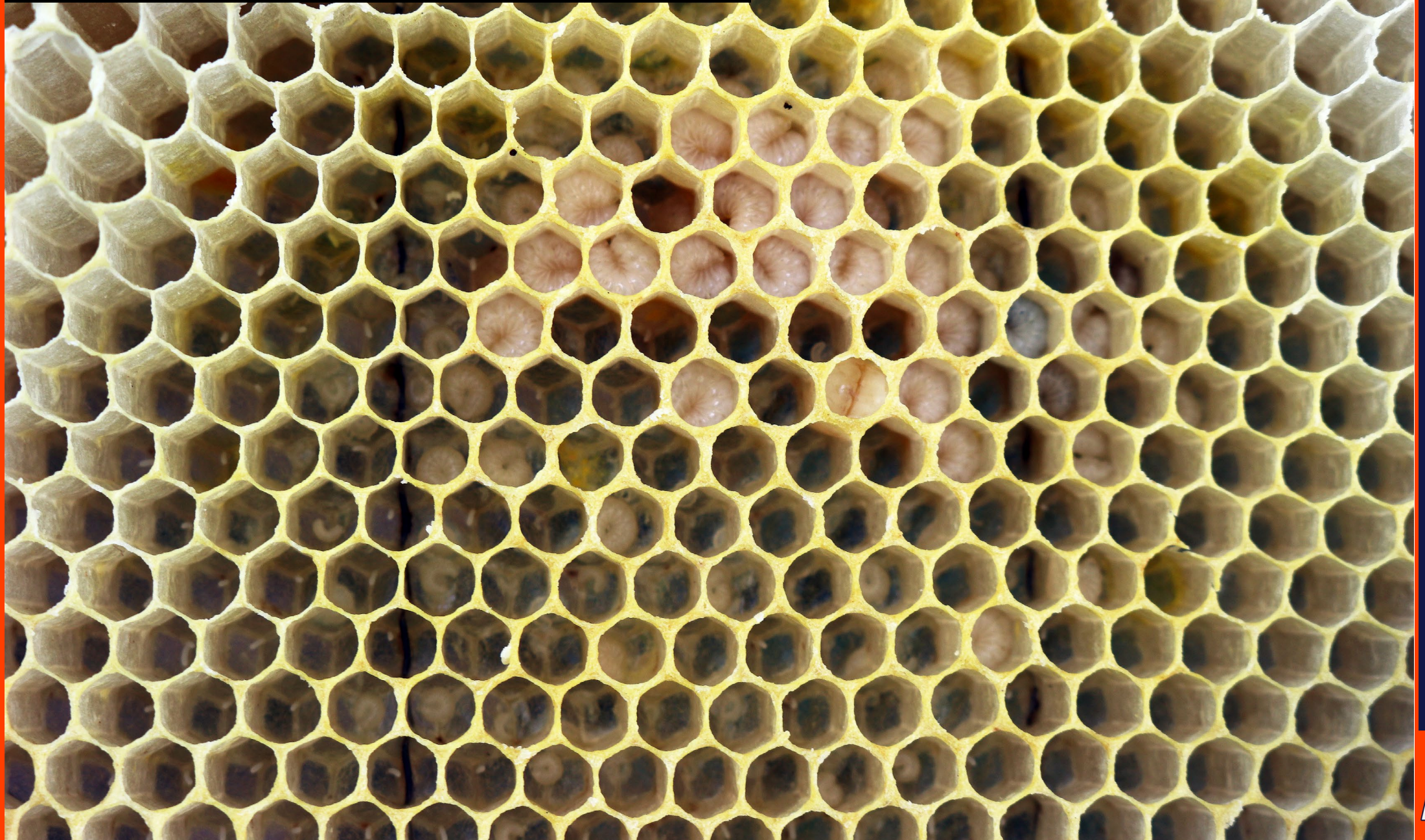
Larva

Pollen

Eggs



A More Typical Example



Things you don't have to see...

- **If you have brood, you do not need to find the queen.**
 - You have one, and she might be hard to find.



Inspecting the first frame

A basic inspection, *continued*

❑ Evidence of Brood?

What do you know > Queen!

- *Be done. Put the frame back in the hive and close it up.*
- *That's what we are after in your first inspection.*
 - If you notice that they are building out cells, great, write it down to whatever extent you see for your notes.
 - If it is foundation, and/or some drawn cells but not much more, keep going.

❑ Watch for the Queen!

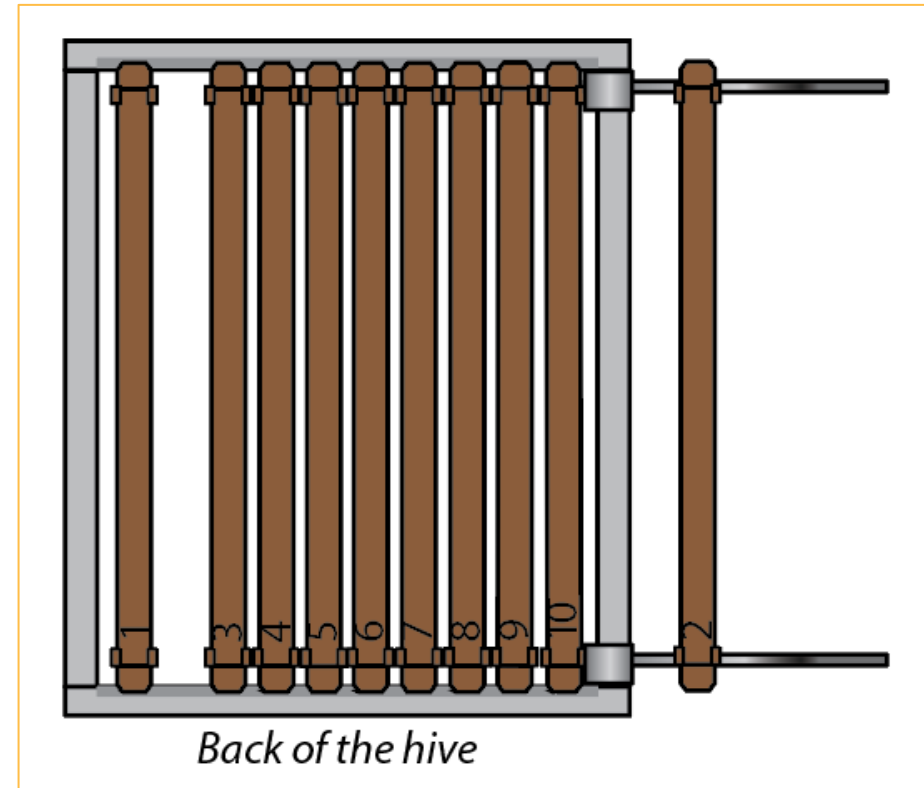
- *Do a quick scan for the queen on each frame you pull.*
- ***If you see her, gently put the frame back in the hive.***
- *If you do not spot the queen, and there is no brood on the 2nd frame, take it out and set it aside and keep going.*
- *With your hive tool, pull #3 into the slot where #2 was.*
- *Keep going deeper into the hive until you find eggs or larva.*



Going through the hive

□ Going through the hive

- *Remove the 3rd frame, observe what is on it*
 - If #3 did not have what you want, put it in slot 2, and pull it tight to frame #1
 - Then slide #4 into the gap, and inspect it.
 - Continue to pull the frames until you see what you need to meet your objective

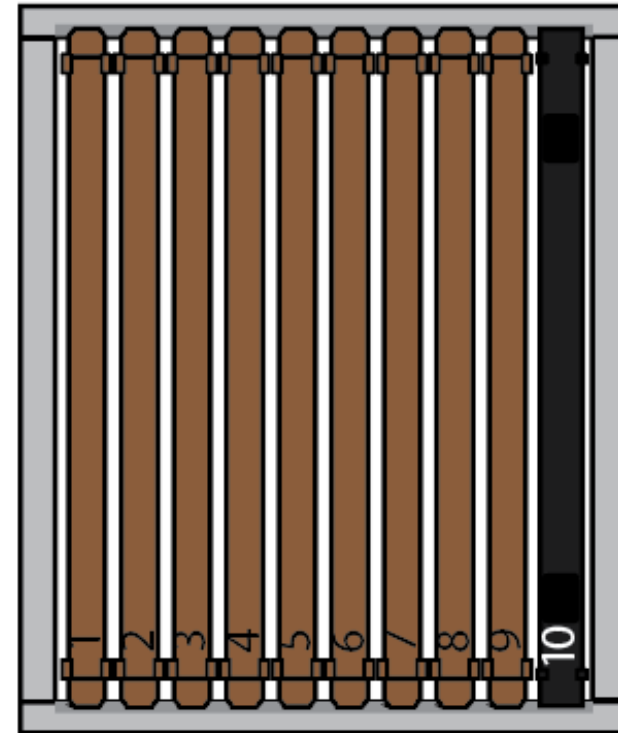


Going through the hive

□ Going through the hive

- *Putting things back in order*

- Return the frames to their original positions by sliding back to the center of the box.
- Leave the gap for frame #2 and pull it from the hanger.
- Skootch all the frames tight together, center them between the walls, and close up the box.
 - Place the inner cover and roof.



Back of the hive

This process might have sounded confusing.... Bear with us

We will reinforce this again in our next lesson with a little more detail – to make it more familiar



Roof and Inner Cover Bees

□ Bees on the Roof and Inner Cover

When you open the hive there are likely bees on the surfaces of the roof and inner cover.

- *What do you do about this?*

- You can leave them on the devices. Place the covers nearby the entrance for safe keeping
 - Lean the inner cover against the bottom board at the front of the hive (not blocking bees coming and going. Slight disadvantage to this – *more in a moment*)
- You can dislodge the bees to clear the devices
 - Use the shake or knock/wrap techniques to knock them off (preferably into the hive)



Roof and Inner Cover Bees

□ Shake or Knock/Wrap Process

● *Shake Process*

- Hold the piece up high in front of you (at eye level)
- Move the piece down in a rapid motion and execute a sudden stop
 - The force of movement overcomes the grip of the bees and they fall off.
 - Presumably you do this over the top bars so the bees fall into the hive. They land on the top bar and walk down into the hive. Sometimes they take flight, and in time fly to the entrance and walk in.

● *Wrap/Knock Process*

- Deliver a sharp blow to the piece. The rapid force also breaks the grip.
 - Think of a hammer hitting a gavel; this case your fist in the hammer.



Avoidance of Crushing Bees

□ Take your time, clear the area

- *Clear off the top edges of the boxes (use your smoker)*
- *Set the inner cover down gently*
 - A technique you can employ is to put a touch of pressure on the bees momentarily and then let them get out of the way.
 - They will move and you will be clear to put your equipment down (wood to wood)
- *Flick (scootch) the bees off with your fingers*
 - Use your fingernail, not the soft flesh, lest you get stung.
 - Just scootch behind them with a moderate flick and they will often take flight and clear the area.



Closing Comments

- **Customary Close**
 - Where we stand, where we are going...
 - *This module walked us through an initial, basic, inspection*
 - *Our next topic moves to the preparatory steps for getting started:*
 - Using a Hive Tool
 - Feeding New Colonies
 - Record Keeping
 - Equipment Prep for Future
 - Things you will See – Reading the hive



Q&A

- **What Questions did we not anticipate?**
 - If you have feedback, you can leave a constructive comment; but be nice.
 - You could also send an email to comments@managedmentoring.com
 - *Please refer to this video in the subject so we know what the reference is.*

