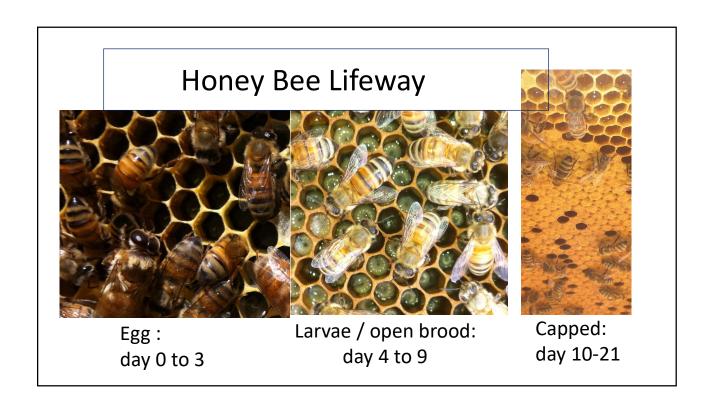
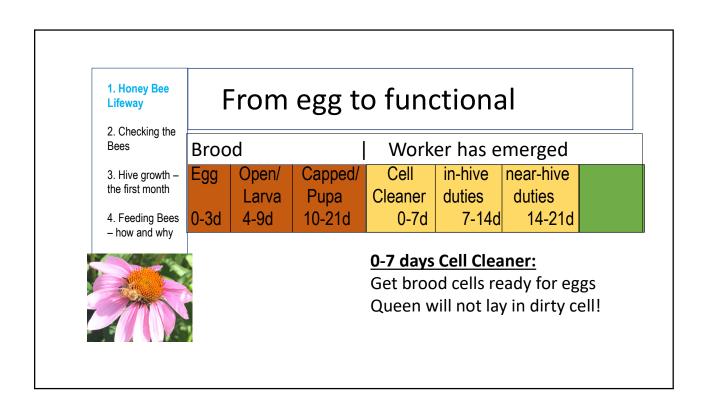
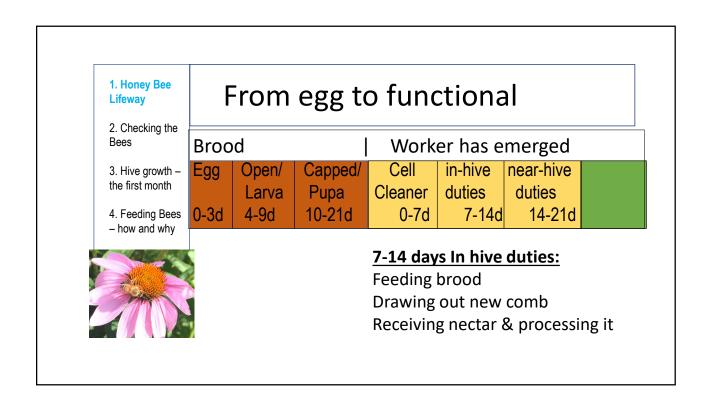
Welcome from Trish the Beekeeper!

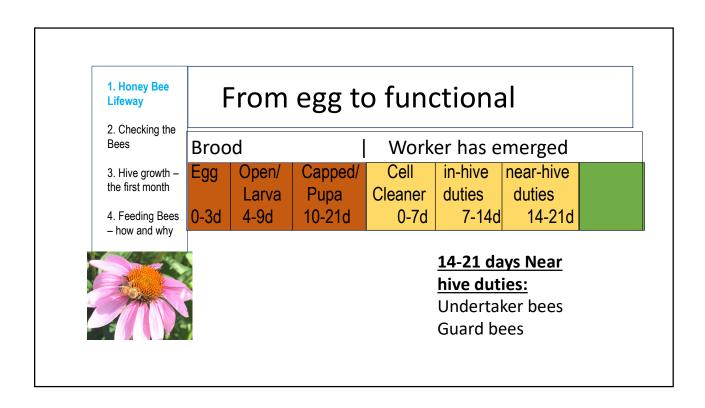
- Started in 2015 with a swarm
- Expanded over time to have ~20 hives
- Use 12.75" tall frames, single brood box
- Around 80% survival
- Honey vendor at Geauga Farmers Market
- 4th year teaching bee classes
- Chickabuzz.com

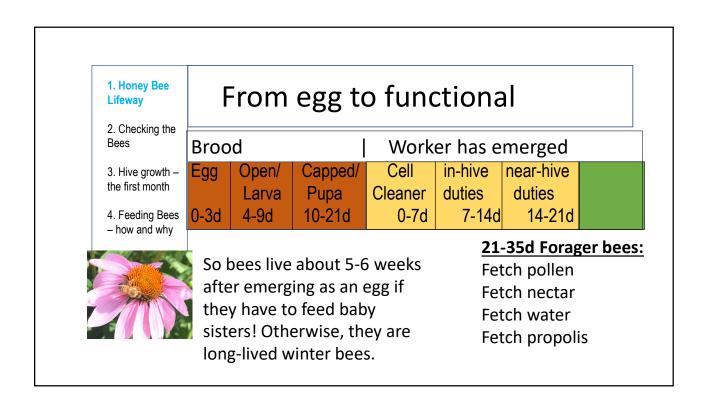












- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees– how and why



Hive Inspections - Prep

When inspecting a hive, most important step to prepare is to know WHY you're inspecting.

- Is the queen OK?
 - If there is evidence she is not laying well, or of queen cells, you can consider after the inspection what your next steps are. But first you must know to look for evidence of queen success.
- Is comb building going OK?
 - If there is evidence they are not drawing comb as they should be, you can figure out what to do after the inspection. But only with good records will you know there is a lack of progress from last week!

- 1. Honey Bee Lifeway
- 2. Checking the Bees
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- 4. Feeding Bees– how and why



Hive Inspections - Prep

- 1. How to Open a Hive
 - Get Inspection Sheet out!

Inspection Sheet

- Date:
- Mission (queen, building, stores, mites):
- Entrance:
- Frames Covered:
- Hive Configuration:
- 1st Frame with brood:
- Outer Frames:



Worker Bees: eggs 0-3d, open brood 4-9d, capped brood 10-21d, foraging at 42d Queen: QC open 0-8d, QC capped 9-16d, flying 20-23d, laying 23-28d

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees

 how and why



Hive Inspections - Prep

1. How to Open a Hive

- Get Inspection Sheet out!
- Know mission: helps to know what to bring
- Growing Hive Primary Missions:
 - Is the Queen laying now? have notes from last week, have plan if she is not laying well.
 - Are the bees building comb? have the next box ready if that is a potential next stage.

2. Checking the Bees

- 3. Hive growth the first month
- 4. Feeding Bees– how and why



Queen Check Details

- Never trust a new queen (less than 2 months in your hive), most common time to fail is in that window, or in old age (next year for you).
- Check frames for eggs on every visit, every 7-10 days, until Aug.
- Also note 1st frame you encounter with brood capped – eg frame 1, 2 or 3... and which box!
- Do not check every frame stop when signs of eggs/larvae!

1. Honey Bee Lifeway

2. Checking the Bees

- 3. Hive growth the first month
- 4. Feeding Bees– how and why



Queen Check Details

Tips for looking for evidence the queen is OK:

- 1. Queen lays eggs in a frame in a spiral, starting in the middle.
 - 1. Eggs could be in frame center, with capped brood at outside edges if queen was there 2 weeks ago... and is returned.
 - 2. Eggs could be on outer sides of frame, with larvae in the center she started on the frame 5 days ago and is just now on the edges.
- 2. Often on new comb, often next to milky larvae (easier to see), never on frames with nectar in middle of frame.
- 3. Eggs/larvae might only be on 2 frames in the entire hive, usually next to each other, with the rest being nectar/honey or capped brood..
- Leafur Expect frame with eggs to be closer to center.
- To spot eggs, hold frame with sun shining from behind you, and "jitter" frame a little. Remember that direct sun will kill eggs after several minutes, so check briefly.

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees– how and why



Comb Building Check Details

- Bees need help to understand they have more frames left to build out with comb!
- Document state of comb progress (Empty or 0 if none,
 1/2) with frame 1, 2, 3, until get to frame with eggs and stop inspecting, to compare progress with next visit.
- Helper #1: move undrawn frame from outside edges of box (ie frames 1 or 2, or 9 or 10) to center of box with each visit – even if adding second box.
- Helper #2: add new box when box below shows 8/10 frames with bees on top when first expose top of box.

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees



Comb Building Check Details

Must trim comb that is going to prevent frames being pushed neatly together, or that grows into space above or below frames. Can shake bees off frames into hive to clear them off...



Before You Open Anything

Is it a good day to inspect?

If foragers are flying, yes.

If storm coming in next few hours, no. Hot is OK.

- Date:
- Mission (queen, building, stores, mites):
- Entrance: (note activity here)
- Frames Covered:
- Outer Frames:
- 1st Frame with brood:
- Oueen?
- Hive Configuration:

Worker Bees: eggs 0-3d, open brood 4-9d, capped brood 10-21d, foraging at 42d Queen: QC open 0-8d, QC capped 9-16d, flying 20-23d, laying 23-28d

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees

 how and why



Hive Inspections - General

How to Open a Hive

Lift lid, and watch. Smoker used if was loud crack due to propolis sticking or beekeeper misstep.

Lift inner cover ¼" slowly but steadily (and quietly).

Use smoker? If was loud or crushed any bees, yes. Lean inner cover alongside side of hive

INNER COVER NOT BLOCKING ENTRANCE

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees– how and why



Hive Inspections - General

- 1. Inspecting the hive
 - And now, take some notes.
 - Frames covered with bees

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees

 how and why



Hive Inspections - General

- 1. How to INSPECT a Hive:
 - Move slowly, without banging or scratching
 - After lift inner cover off, note the number of frames covered with bees as peer down from above.



2. Checking the Bees

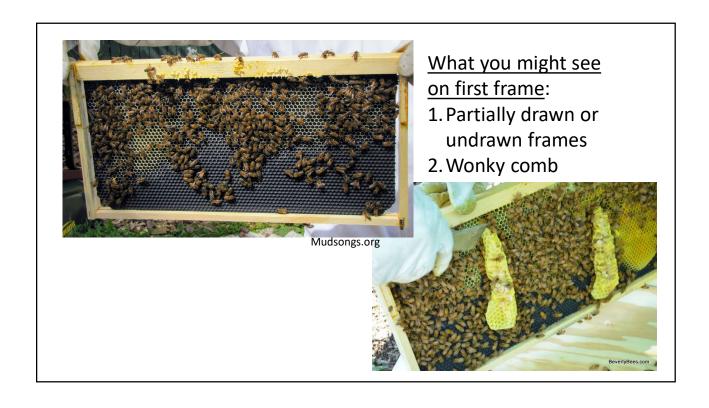
- 3. Hive growth the first month
- 4. Feeding Bees– how and why



Hive Inspections - General

- 2. How to INSPECT a Hive:
 - If first frame is not drawn, is easy to pull. Only first frame is removed and set to side of hive, rest stay in.
 - If first frame is stuck, loosen from its neighbors at each point of contact that is glued together, using a few puffs of smoke with each separation.
 - · Note contents of first frame.
 - Now can get to the rest of the frame by shuffling each apart!









What you might see on first frame:

- 3. Frame with honey!
- 4. Frame with honey and small bit of capped brood (for established hive)







What you might see with first frame:

5. Frame with pollen (disregard the section that is cut off, you won't need to do that!



What you generally WON'T see on outer <u>frame</u>:

6. Frame with fresh eggs

2. Checking the Bees

- 3. Hive growth the first month
- 4. Feeding Bees– how and why



Hive Inspections - General

2. How to INSPECT a Hive

Trish's Acronymns for Frame Contents:

- MT, ½
- H, P, Nec
- e, lv, cwb

MT – empty comb, DRAWN ½ - half drawn H - honey P - pollen Nec - nectar e – eggs (0-3) Lv – larvae (4-9) CWB – capped

worker brood (10-21)

1. Honey Bee Lifeway

2. Checking the Bees

- 3. Hive growth the first month
- 4. Feeding Bees

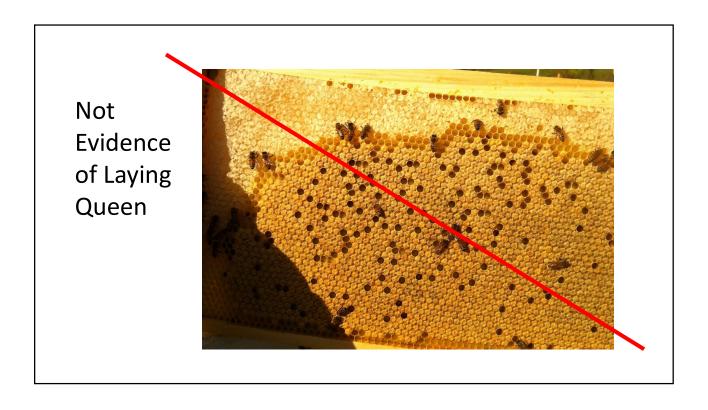
 how and why

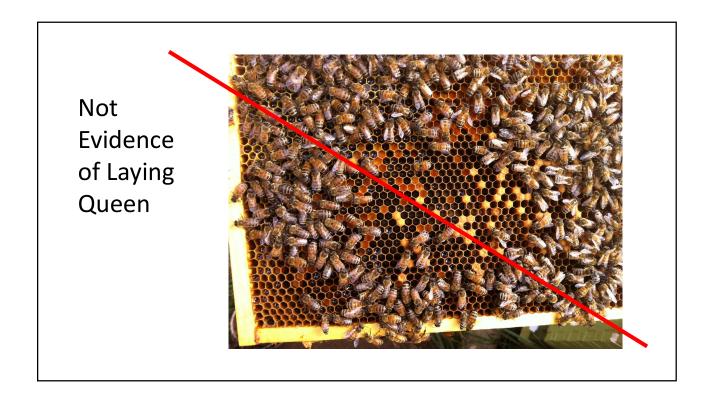


Eggs OR young larvae = Queen!

What is NOT evidence the queen is OK?

- Capped brood
- Number of frames covered
- Entrance activity







Strong
Possibility
of eggs
visible:
New Comb
(on right)



- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees how and why



Your New Hive

Installation Day!

Package 3 lbs bees

Queen

<u>Nuc</u>

Bees on 5 frames

Laying queen

3 frames brood

2 frames stores

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees

 how and why



Your New Hive

Installation Day!

Bee Ready!

- Hive location and stand is ready
- Frames in hive (10 if package, 5 if nuc)
- Sugar syrup made, and dispenser made
- Everything but the bees
- COLD WEATHER EXCEPTION: hive and frames at room temp inside...

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees how and why



Installation Day: Package of Bees

1. Can actually arrive in the mail...

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees

 how and why



Your New Hive

Installation Day: Package of Bees

1. Or you drive it home – murdochs.com



- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees how and why



Installation Day: Package of Bees

- 1. Picking up in your car
- 2. ASAP, before start driving home... spritz with water.
- 3. Is it safe to install? YES!

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees

 how and why

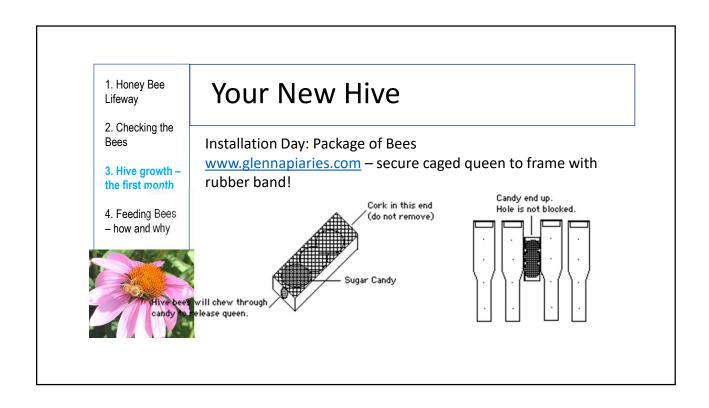


Your New Hive

Installation Day: Package of Bees

https://www.honeybeesuite.com/install
-package-bees-cold-weather/

- 1. Feeding: baggie or quart jar
- 2. Temporarily pull 5 frames out of hive
- Pull feeding can out and pull out queen – replace feeding can for time being.



- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees

 how and why



Installation Day: Package of Bees

https://www.honeybeesuite.com/install-package-bees-cold-weather/

- 1. Feeding: baggie or quart jar
- 2. Temporarily pull 5 frames out
- 3. Get caged queen on frame, in hive.
- 4. Shake bees into space
- 5. Replace frames, inner cover, feeder, lid...

- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees– how and why



Your New Hive

Day 1 Config of Package Install:

Baggie or Quart Jar



Entrance Reducer
No draft through screened
bottom board

1. Honey Bee Lifeway

2. Checking the Bees

3. Hive growth – the first month

4. Feeding Bees

– how and why



Your Growing Hive

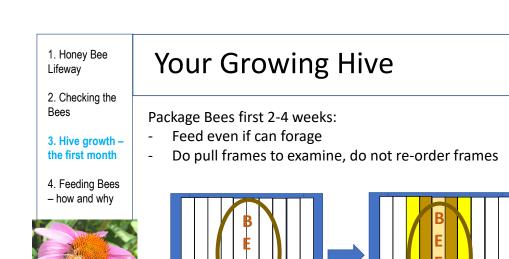
Package Bees: Feed even if can forage.

1st visit: 4-7 days to pull queen cage

next visits: 7-10 days later, check progress

- 2 more? 4 more?







- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees– how and why



Installation Day: Nuc

1. Picking up in your car



https://riveroakshouston.com/a-bee-in-his-bonnet/

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees– how and why



Your New Hive

Installation Day: Nuc – and it's below 30! Or Raining!

1. Store Nuc in 40-70 degree space, dark, min vibrations...can wait a few days...

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees– how and why



Installation Day: Nuc

- 1. Set up deep with 2 frames on left, and other 3 set outside hive against wall.
- 2. Set nuc next to hive before open it.
- 3. Open nuc, loosen outer frame, slowly pull out. Place against frame #2 in hive.
- 4. Repeat with nuc frames 2 and 3...THEN, place undrawn frame in Hive position 5. Place the other 2 nuc frames next, then the 2 new frames.
- 5. After all frames out of nuc, shake into hive, then set aside 10 or more feet away (you'll come back for straggler bees)
- 6. Set the 2 remaining new frames into hive, cozy frames together, place inner cover, feeding, lid...

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees– how and why



Your New Hive

Day 1 Config of Nuc Install:

Baggie or Quart Jar



Entrance Reducer No draft through screened bottom board



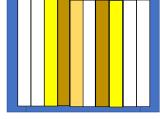
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees - how and why



Your Growing Hive

Package, 2-4 weeks later reaches same point as Nuc install Day! Do first Package Hive manipulation at this point in its growth.

Nuc Install OR 1st Package Hive Manipulation:



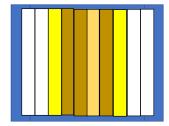
1. Honey Bee Lifeway

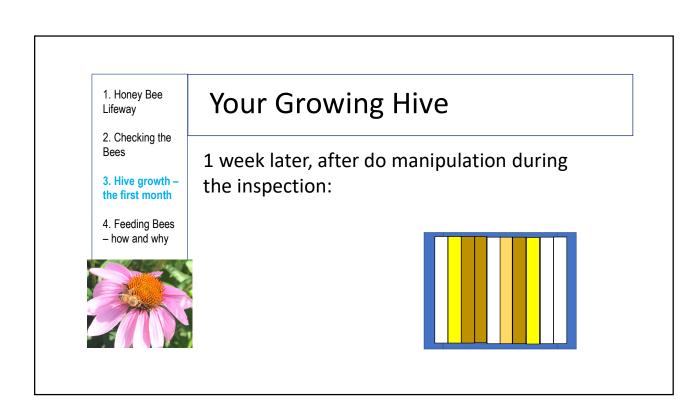
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees - how and why

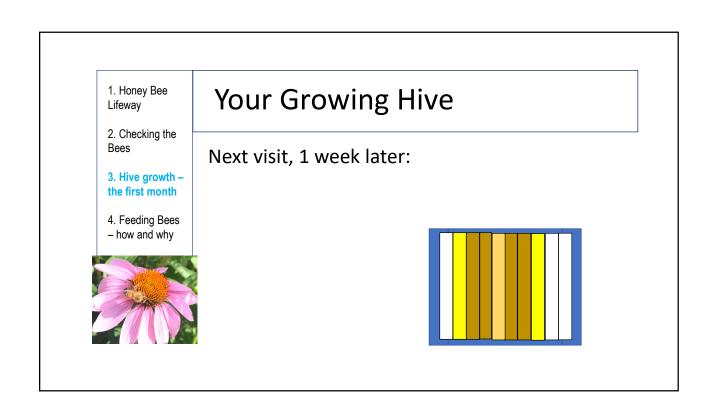


Your Growing Hive

1 week later:





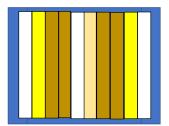


- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees how and why



Your Growing Hive

Next visit, 1 week later, after manipulation during hive inspection:



- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees

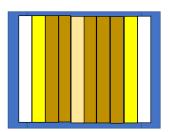
 how and why

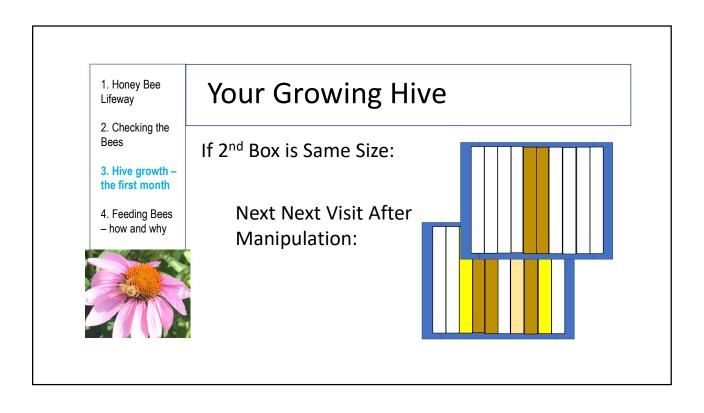


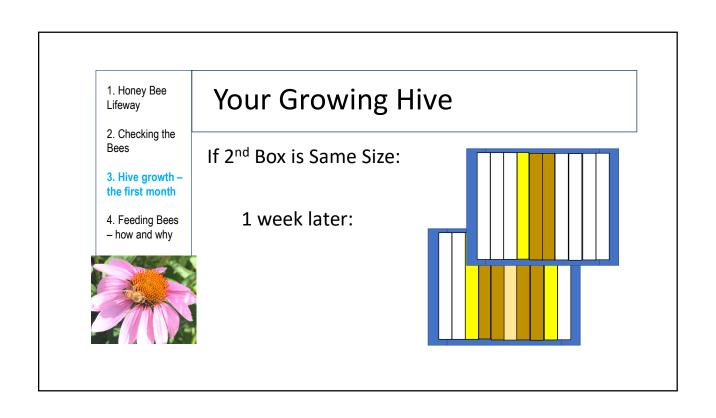
Your Growing Hive

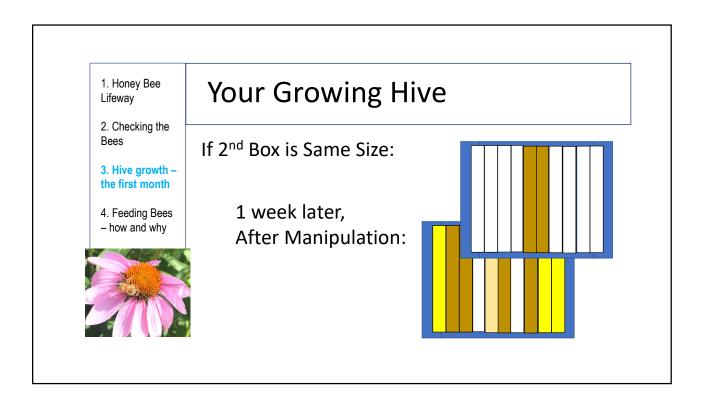
Next Next visit, 1 week later: Will be needing new box!

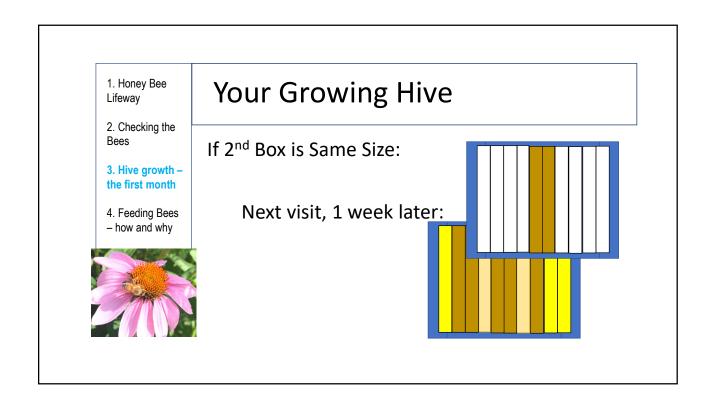
- Is 3 weeks after installed nuc
- Is 6 or so weeks after
 Installed package

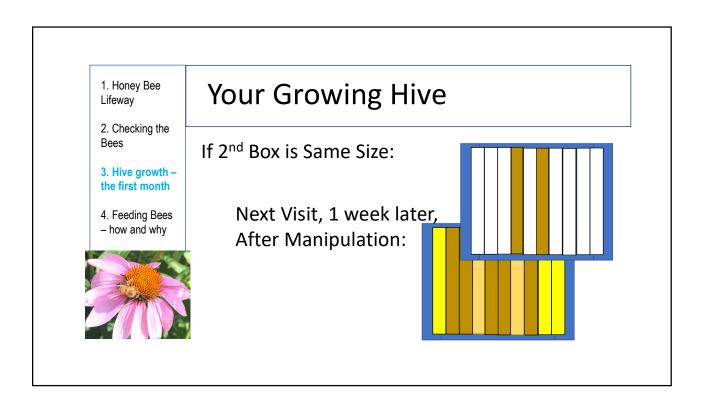


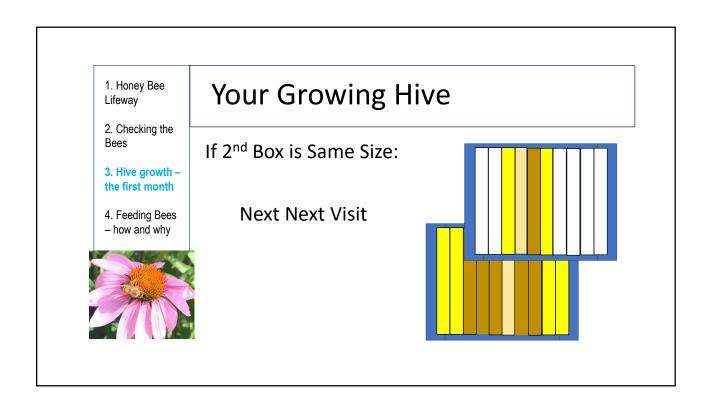


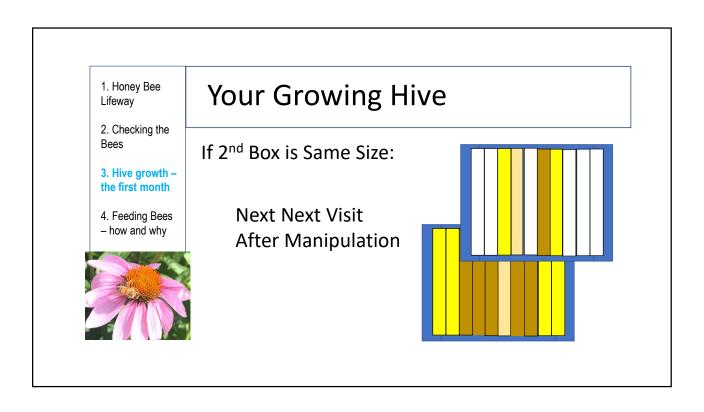


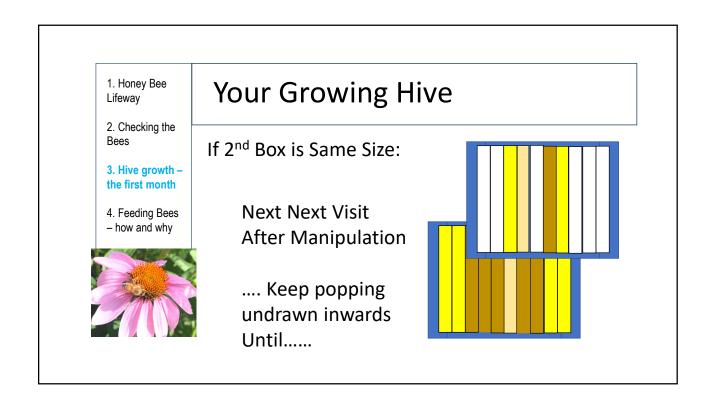


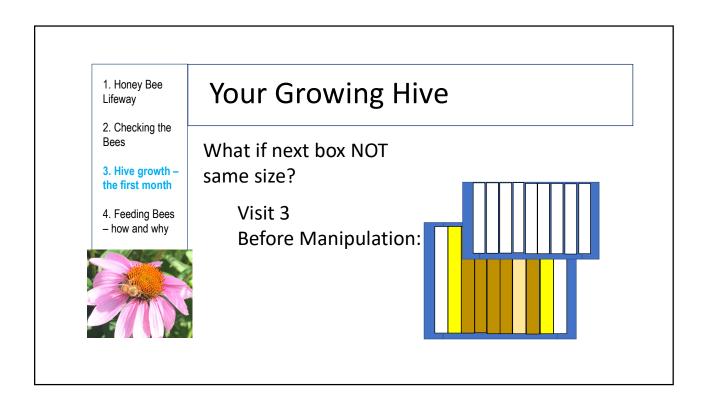


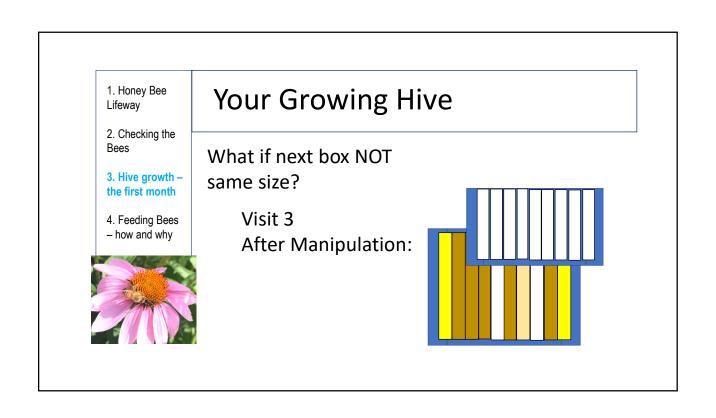


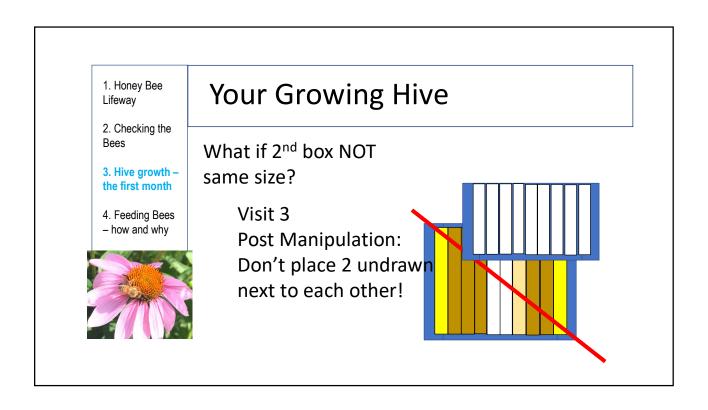


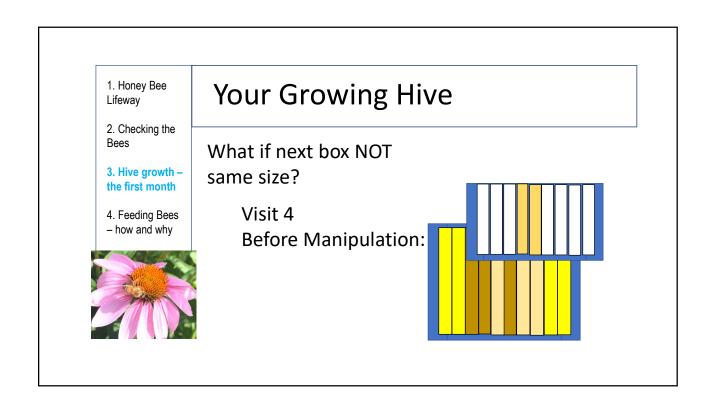


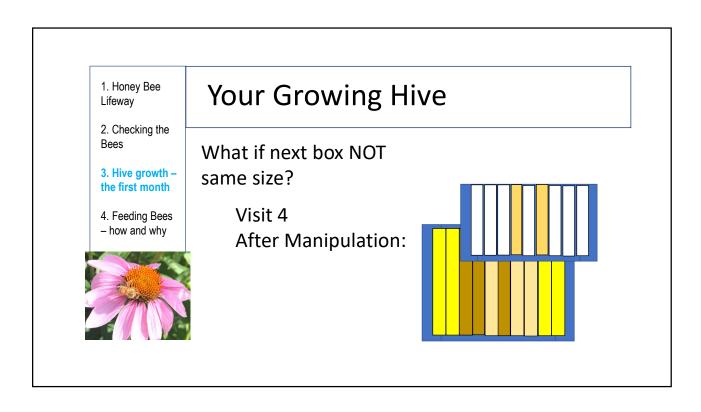


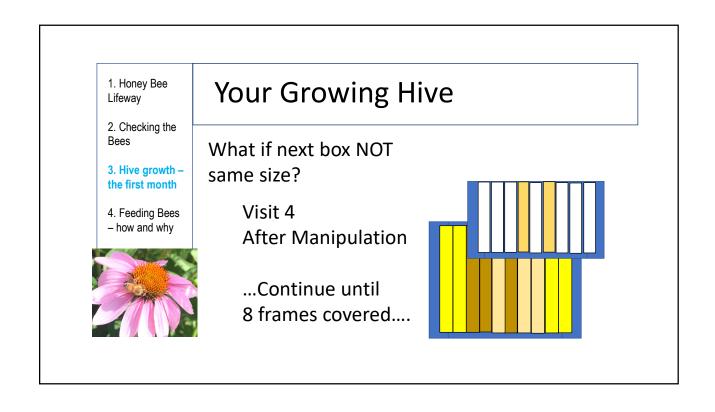


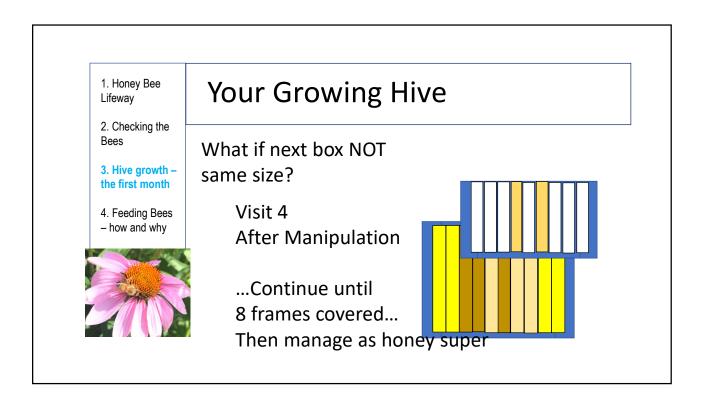






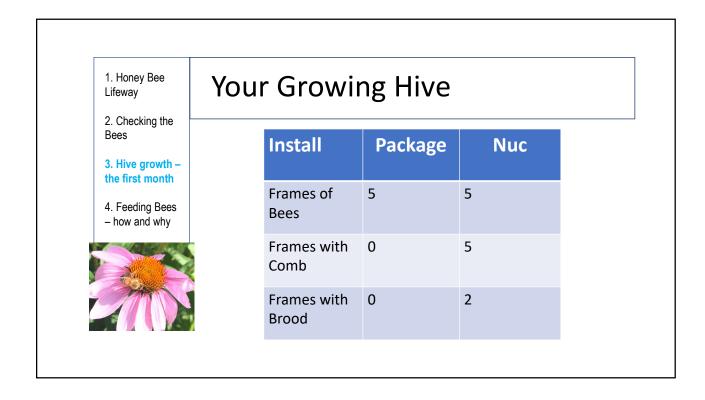












Your Growing Hive

- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees– how and why



1 st visit	Package	Nuc
Frames of Bees	5, 5	5, 6
Frames with Comb	0, 2	5, 7
Frames with Brood	0, 1	2, 3

1. Honey Bee Lifeway

2. Checking the Bees

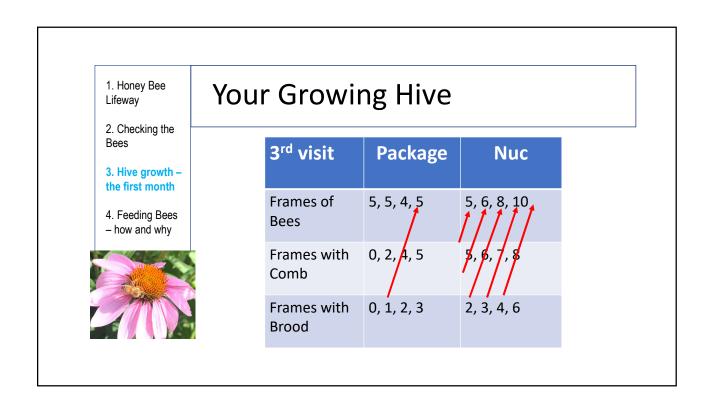
- 3. Hive growth the first month
- 4. Feeding Bees– how and why

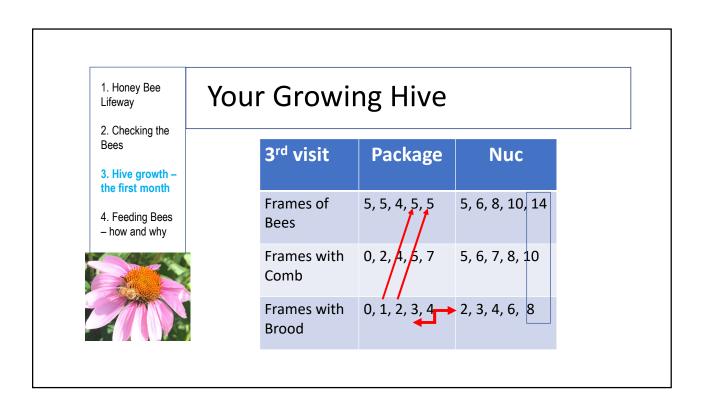


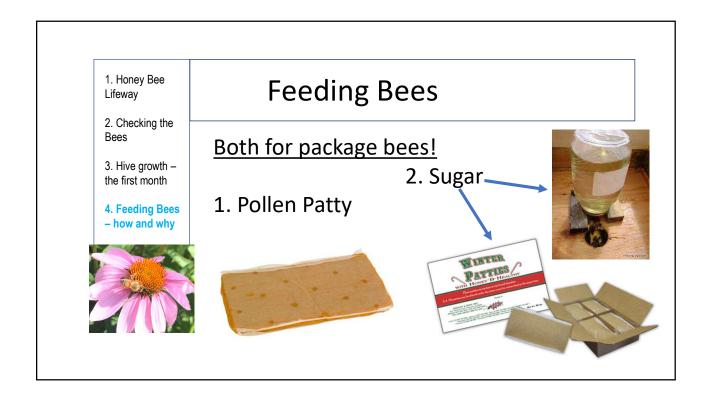
Your Growing Hive

2 nd visit	Package	Nuc
Frames of Bees	5, 5, 4	5, 6, 8
Frames with Comb	0, 2, 4	5, 6, 7
Frames with Brood	0, 1, 2	2, 3, 4

2. Checking the Bees 3. Hive growth –	Your Growing Hive			
		3 rd visit	Package	Nuc
4. Feeding Bees – how and why		Frames of Bees	5, 5, 4, 5	5, 6, 8, 10
		Frames with Comb	0, 2, 4, 5	5, 6, 7, 8
		Frames with Brood	0, 1, 2, 3	2, 3, 4, 6







- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees how and why



Feeding Bees

Why do we feed bees?

- Swarms in the wild 10% survival rate
- Deep frame with honey: 6 lbs; that is 5 lbs of sugar, 1 lb of water.
- So, 5 lbs sugar per frame: 50 lbs.
 - One gallon 2:1 per box per week.

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees

 how and why



Feeding Bees

HOW do we feed bees?

- Pollen: not necessary if foraging AND can store pollen.
- Otherwise, ½ pollen patty at a time.

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees how and why



Feeding Bees

HOW do we feed bees?

- Sugar:
 - Package Bees: ANYTHING to get carbs to them.
 - 40s-50s: baggie, or in-hive feeder.
 - 60s+: Don't let feeder run dry!

1. Honey Bee Lifeway

- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees

 how and why



Feeding Bees

HOW do we feed bees? 2:1 sugar syrup:



- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees - how and why



Feeding Bees

2:1 sugar syrup:



1. Honey Bee Lifeway

- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees - how and why



Feeding Bees

How LONG do we feed bees?

- Until all comb necessary for queen's quarters/winter quarters is drawn out.
- You will need to add honey supers for room for the bees.
 - You decide if you want to continue feeding to get those drawn out too.

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees

 how and why



Next Week: Problems....

- And solutions.
- Mites
- What if you think you have a queen problem?
 - Goal for first 3 months

- 1. Honey Bee Lifeway
- 2. Checking the Bees
- 3. Hive growth the first month
- 4. Feeding Bees how and why



Feeding Bees

One Final Note:

- Should you use 2:1 or 1:1 Sugar Syrup?
- What if someone says one thing, and someone else says another?
 - It'll happen.... For almost every beekeeping choice!
- 1. Consider how the source came to conclusion
- 2. They are YOUR bees!!