

# Benefitting from Blunders

How Beginning Beekeepers Can Become Better Beekeepers  
By Learning from their Mistakes

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# The Beekeeping Learning Curve is REALLY Steep!

- When we start, most of us have no idea how difficult it is to successfully keep bees.
- We need knowledge, experience, and a bit of luck.
- When we are new, we make many, many mistakes.
- It may be years before we feel competent to care for our bees.



Every Mistake is an  
Opportunity **IF AND ONLY IF**  
You Figure out What Went  
Wrong and Don't Do it  
Again!

# What Did I Do Wrong?

- ALWAYS diagnose a dead-out.
- If you are unsure,
  - Take photos and samples. You may need them later.
  - Be sure to record EVERYTHING about the colony (strength, food stores, queen status, health). Keeping good records all year long helps in diagnosis.
  - Ask an experienced beekeeper (or two or three or four!)
  - Send out a sample for testing, e.g. Beltsville USDA Lab.
  - Do some research.





Photo: PerfectBee.com

# Let's Take a Look at Some of the Most Common Beginning Mistakes

# Inspection Errors

Mechanics and Frequency of Inspections

# Not Lighting and Using your Smoker Correctly



Not  
Enough  
Smoke

Too Much Smoke



# Lighting the Smoker



# Leaving Hives Open too Long



- You do not need to look at every frame in your hive to do a thorough inspection!
- Pull only enough frames to evaluate:
  - Queen Status
  - Strength
  - Food Stores
  - Health
- Then get out of there!
- Ten minutes is plenty of time unless there is a major problem.

# Moving Too Slowly

- Many people think they should move very slowly while inspecting their bees so the bees will be less disturbed. This simply is not true.
- Your movements should be smooth and deliberate, not jerky, but they should not be slow.
- The longer the hive is open, the more unhappy and defensive the bees will become. Moving like you're honey at 15% moisture getting poured at 50° in March will not make your bees happy!
- You may see them scratching their little heads with their little antennae, rolling their compound eyes, and muttering under their honey-scented breath, "GET ON WITH IT, ALREADY!" just before they decide you are enough of a pain in their butts to sting.

# Not Inspecting Often Enough



- Watching your bees come and go is not an inspection!
- New beekeepers should inspect about once a week. The inspection should only take about ten minutes.
  - This helps the beekeeper to become comfortable handling and examining the bees.
  - Evaluate food stores, queen status, health and strength. Record your observations.
- More experienced beekeepers can inspect once every other week.

# Space Management Errors

Not Giving Your Bees What They Need

# Bee Space Violations



Photo: SC Beekeeper



Photo: Gooserock Farm

# Respect the Bee Space

- The concept of “bee space” is the foundation of modern beekeeping.
- Always start with ten frames of foundation, pushed together. When it is *fully* drawn, you may remove one frame and evenly space the remaining nine. This allows for easier removal of frames, easier uncapping of honey frames, and less likelihood of rolling a queen.
- Space frames evenly both in the brood nest and in honey supers.
- Use inner covers when feeding with a hive top feeder, quail waterers, or in-hive pails *during a nectar flow*, e.g. for a nuc or package on foundation in spring. You can eliminate inner covers while feeding in dearth and cold weather.



# Not Providing Enough Room for Colony Growth and Nectar Storage



Photo courtesy of Dr. Dewey Caron

- Swarm Management is two-fold:
  - Room for expansion of the brood nest
  - Room for surplus nectar storage
- Many beekeepers reverse brood boxes in spring for brood nest expansion and add honey supers as needed, BUT, a large colony may need:
  - Multiple reversals OR extra boxes of drawn comb in the brood nest as well as
  - Multiple empty honey supers early in the nectar flow.

# Leaving too Many Boxes on in Winter



- Extract all surplus honey early.
- Make sure there is adequate honey for winter *in the brood nest*. Move frames if needed.
- It is not good to leave the bees multiple honey supers in winter. The smaller the volume inside the hive, the less heat is lost.
- Keep the winter hive at two deeps or three mediums unless the colony is huge and really needs another box.

# Queen Management Errors

Something Wrong with Mom?

This queen is not going to suddenly get better!



# Drone Layers do not Miraculously Acquire More Sperm

- If you find your queen is laying drone brood in worker-size comb, you need to take action NOW.
- Do NOT close up the hive and come back to “see how she’s doing” later.
- She will not get any better. Honest.
- Find her. Kill her. Replace her. (Or have the bees do it.)
- Do it now.



# Thinking They're Queenless When You Can't Find Eggs

- No eggs.
- No Larvae.
- Nectar plugging the brood nest.
- Oh, no! They must be queenless, right?



# Maybe not!



Photo: Sunset.com

- It may be a full month before you see eggs in a colony that has swarmed.
- A colony often swarms when the first queen cells are capped.
- It is about another week before the virgin queens emerge.
- It may take as long as three weeks for the new queen to fly, mate, and begin laying.
- BE PATIENT.
- Learn the behavior cues of a truly queenless colony.

# Being too Quick to Cut Out Queen Cells: Supersedure

- Bees that are superseding their queen know more about her than you do.
- If the queen seems perfectly fine and you see supersedure cells, consider taking the old queen and a few frames of brood and food and starting a nuc with her.
- Let the bees raise a new queen.



Photo Credit: Alyson Hurst

# Being Too Quick to Cut out Queen Cells: Swarming



Photo: Golden Bee Apiaries

- Once queen cells are capped, the bees are committed to swarming. You may slow them down by destroying the cells, but you will not stop them.
- If you really want to stop them:
  - Make splits or nucs with the queen cells. (Those cells are a resource!)
  - Demaree the hive.
  - Use the Snelgrove board technique.

# Feeding Errors

Feeding Too Much, Too Little, Using the Wrong Method or Feeding at the Wrong Time

# #1 Mistake: Thinking You Can't Feed Too Much

- Feeding my bees can only be a good thing, right?
- Wrong!
- Overfeeding can lead to:
  - Swarming (The bees ran out of room; plugged the brood nest with syrup.)
  - Robbing (You fed in dearth; hive was weak, got robbed, and starved.)
  - Adulteration of your honey (You fed with honey supers on the hives.)



Photo: Auburn University Bee Lab

# Feed New Hives Only Until Foundation is Drawn out in the Brood Nest



- Stop feeding when you add honey supers, even if those supers are all foundation!



# Feed

- To draw out foundation in the brood nest
- To stimulate queens to lay lots of eggs
- To build up food stores for winter if the bees don't have enough
- What and how you feed depends on:
  - The time of year
  - Presence or absence of nectar flow
  - What you are trying to accomplish
- Always have a *purpose* for feeding your bees!

# Not Feeding Enough

- If your bees are really light in fall, you may need to feed as much as **10-12 GALLONS** of syrup to get them up to weight!
- The faster you get that syrup in the hive, the faster the bees can dry and process it, and the sooner they will be ready for winter.
- A strong colony can easily take a gallon a day. Keep it coming!



# Errors in Varroa Management

Not Controlling the Baddest of the Beehive Bad Boys  
Will Cost you your Bees!

Even if you choose to be treatment-free, know your mite levels!



# Varroa Management Blunders

- “I haven’t seen any mites.”
  - This is just like, “I haven’t seen any bears around here.”
- It’s a new package (or nuc.) I don’t need to treat them, do I?
  - Maybe yes. Maybe no. But don’t assume. TEST.
- I treated in October, just before wrapping them up for the winter. They must have frozen to death.
  - *Timing* of varroa treatments is critical, as is management of population levels year-round. Treating too late does not allow the colony to raise enough healthy, well-fed, non-parasitized bees with healthy fat bodies to bring the colony through the winter.

# Important Varroa Facts

- ***Varroa vector viruses.*** If you allow mite levels to build to very high levels, the bees can collapse from the viral load even if you kill every mite in the hive (which you will never be able to do.)
- ***Varroa damage the bees' immune system.*** Mites feed on the fat bodies, which are important to honey bees' immune function.
- ***Varroa damage brood food glands.*** This means that nurse bees are unable to produce good quality food for young larvae, an especially important function for wintering bees.
- ***Varroa decrease the bees' lifespan.*** The average reduction is 50%. The range is 20-80%, depending on the number of mites feeding. Now do you understand why varroa kills colonies in winter?

# Monitor Often. Treat When Needed.



Photo: Bee Culture

- What you use to treat and how often you treat depends on:
  - The mite load
  - The weather
  - The nectar flows
  - Whether there are honey supers on the hives or not
  - The number and proximity of managed and feral colonies in your area.
- The biggest mistake new beekeepers make is to **assume** mites are under control when they have taken no steps to make that happen.

# Be Aware of the Importance of Environmental Factors in your Management



# The Right Choices Depend on:

- The time of year
- The strength and condition of your colony
- The nectar flows, or lack thereof
- Availability and variety of pollen
- Temperature and humidity
- Rainfall
- If your bees are in an urban, suburban, or rural area

Learn to Make Decisions After  
Considering All These Factors

# Only Time Makes a New Beekeeper into an Experienced Beekeeper



- Keep your eyes open! Really *observe*.
- Try to always learn from a mistake.
- Try to not repeat the same mistake twice.
- Don't beat yourself up over mistakes. Every one is a learning opportunity.
- You will probably kill more bees than you save at first. Trust that that **WILL** eventually change!



Thank you!