

Beyond Lighting the Smoker

Helping NEW Beekeepers
Become
TRUE Beekeepers

ECBS Bee School





Short Course Core Curriculum

- **Class Day 1**
 - Biology
 - Equipment
 - Pests and Diseases
 - Getting Started (Nucs, packages, feeding)
- **Class Day 2**
 - Seasonal Management
 - Harvesting the Honey Crop
 - Bee Plants
 - Queens & Queen Issues

Core Curriculum: Day 3



Not Every Student Will Become a Beekeeper

- Many have a romanticized idea of beekeeping and are unprepared for the reality. Keeping bees is:
 - Expensive
 - Difficult (think: bees vs. chickens)
 - Hard, hot, sticky, sometimes
 - dangerous and often painful
 - work!



Students' Perception of Beekeepers

What They Think We Do



What We Actually Do





Accept that perhaps 50% of your students will be keeping bees in 2 years, and maybe only 25% will still keep bees in 5 years.

Your job is to give that 25% a good foundation and the basics to be successful.

What can you do to bring that crop of beekeepers to harvest?



Tell Them the Truth

- Don't lie and say keeping bees is easy. They'll feel like idiots when they discover it isn't.
- Tell them keeping bees is challenging BUT it's the most compelling and rewarding thing they'll ever do outside of raising kids.

Emphasize the Importance of Biology

- All beekeeping management ultimately is based on honey bee biology.



Example 1

- New Beekeeper: “My bees swarmed two weeks ago. There’s no eggs! I need a new queen!”
- You: “How many days does it take for a new queen to emerge and mate? When do young swarm queens emerge following a swarm?”

Example 2

- New Beekeeper: “I think I have laying workers. There are many eggs in one cell and only capped brood. I’m not seeing as many bees in the hive as when I looked before I went on vacation.”
- You: “Bees must be **BROODLESS** two weeks before laying workers develop. Your bees probably swarmed and you have a very newly mated queen.”

More Examples

- Reversing the positions of a strong and a weak hive. Why does this work?
- Reversing brood supers in spring to prevent swarming. (Bees work UP)
- Why is it that barrel feeding bees does not stimulate robbing?

Relating management to biology makes what we do *comprehensible* - something that can be *figured out*.



Don't "Dumb it Down"

- Oversimplifying won't make your students less overwhelmed. It will make them less prepared.
- They will forget much of what you teach them, but if they have at least heard it once, it may ring a bell later when they need it.

Encourage Record-Keeping

- Recording observations over time is enormously valuable.
- Count the number of frames covered in bees and record that number at every inspection.



Counting Frames of Bees



Encourage Students to Inspect their Bees Weekly



- The bees don't need this.
- The students do!
- Brief (5-10 minute) inspections help new beekeepers gain a level of comfort working bees and learn to read their signals.

Teaching your Students to Be Good Observers

- The bees are talking. Are you listening?
- It's not just about putting on a veil and lighting a smoker.
- It's about being a good diagnostician.



We All Show a Slide Like This:



But How About This?



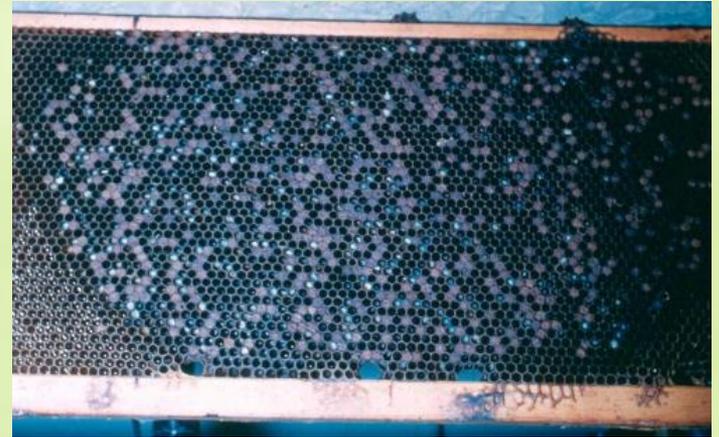
Or This?



Reading the Frames



And More Reading the Frames



Field Day



Field Day: Getting Students Into Bees



- Schedule for a perfect April day
- Enlist several experienced beekeepers who must be VERY comfortable working bees. NO gloves. NO haz-mat suits.

Field Day

- Pick an apiary or apiaries with enough hives that each student can inspect a fresh one. If needed, split the class up into smaller groups of about half a dozen and send each group with an experienced team leader to a different yard.
- Opening a hive on their own makes a huge difference in your students' confidence level. Without this, some students will go the entire season just watching the bees fly in and out of the entrance and never inspect the brood nest.

Field Day

- Team leader demonstrates lighting smoker and sterilizing hive tool.
- Team leader does a hive inspection, talking about the mechanics – use of smoker, outer cover upside down, inner cover propped against adjacent hive, which frame to pull first, etc., etc.
- Team leader emphasizes that everyone does it a bit differently.

Field Day

- Leader's inspection includes identification of:
 - EGGS (critical skill – no one leaves without having seen eggs!)
 - Larvae, pupae, capped brood, milk brood, drone brood, drones, workers, queen, pollen, nectar, capped honey, queen cups, queen cells (if present)
- Leader then hands the hive tool and smoker to the first student, who opens and inspects his/her own hive.

First Colony Inspection





Thank you!