"We have only one person to blame, and that's each other."

— Barry Beck

There's an old joke that the ***Horse Veterinary Manual*** looks something like this:

	Malady	*Cure*
1.	Broken leg	Shoot it
2.	Intestinal torsion	Shoot it
3.	Colic	Shoot it
4.	Bad attitude	Shoot it

As beekeepers, we can laugh at how people could apply a one-size-fits-all approach to problem-solving. But are we ever guilty of that? Isn't one of the most-cited bits of advice to remedy problems in the bee yard to requeen the colony? Don't get me wrong – requeening is genuinely the solution to a variety of problems, just as shooting a horse may be the right approach in certain situations. But are there times when we pull the trigger a bit too quickly?

To be fair, we also often give the queen credit for all good things that come from the hive. Have you ever said, "I wish I had ten queens just like that one! Her colony makes honey like crazy!" It balances out when we blame her for all bad things, for example when we say, "That good-for-nothing queen! I didn't get any honey off of that hive this year. I'm going to try some new genetics next year."

But here is the thing: a lot of what the queen gets blamed for, or gets credit for, isn't likely her fault. Retired Apiary Inspector Will Hicks used to say, "A good location makes up for a lot of bad beekeeping." The same is true for good/bad queens. It often is the case that the queen just is who she is; it is the circumstances that make all of the difference. With that in mind, here are just a few of many things for which the queen gets her head pinched that may not be her fault.

Marie Antoinette may have deserved to have her head separated from her body. But does your queen merit the same fate? Or has she been falsely accused? Photo: Wikipedia.

Lack of acceptance by packages

It makes perfect sense that inferior queens wouldn't be accepted by packages, whereas high-quality ones would be. But that's not the complete story. Working with Dr Tarpy's bee lab at NCSU, NCSBA Master Craftsman Beekeeper Eric Talley found that the presence of open brood makes a big difference as to whether a package queen is accepted or quickly superseded by the workers, regardless of her personal attributes.[1] Brood pheromones in the colony greatly increase the acceptance rate. That's a bummer for a perfectly good, new queen: she can't produce brood any faster than nature dictates, and being given Early Retirement isn't fair. But at least knowing this provides a way for a beekeeper to enhance

[1] David R. Tarpy, Eric Talley & Bradley N. Metz (2021) Influence of brood pheromone on honey bee colony establishment and queen replacement, Journal of Apicultural Research, 60:2, 220-228, DOI: 10.1080/00218839.2020.1867336

acceptance of new queens, if he/she has brood available to share with new packages.

Multiple eggs in cells

Anyone who has read Beekeeping 101 knows that multiple eggs in cells is a sign of laying workers. So not only is the queen not up to par, she isn't even there. Let's run to the bee store to get another one!

Not so fast. A couple of questions need to be answered first. The most important one may be, does the queen have room to lay? If there aren't empty cells to lay in, those eggs have to go somewhere. In those cases, I've seen multiple eggs in cells as well as eggs dumped in cells that contained pollen. The queen is doing a bang-up job – it's the beekeeper who needs to step up their game a bit.

Another reason for multiple eggs in cells could be that the queen is brand new and doesn't really understand this whole egg-laying thing yet. She'll work it out pretty quickly, if the beekeeper doesn't kill her first. Being in the early stages of the egg-laying learning curve can also be the reason for scattered drone brood amongst worker brood. We certainly don't want to see that for an experienced queen, but one that is just learning the ropes needs to be given some slack.

Not much brood

Not having much brood is clearly the queen's fault, right? Maybe, maybe not. Again, several questions must be answered before we can assign blame.

The first thing to remember is that the queen only lays the eggs – she doesn't raise the brood. Are there plenty of young nurse bees in the hive? I've had colonies that were limping along in early spring quickly explode once I gave them some nurse bees from another hive to take on the burden of brood-rearing. Similarly, bee packages don't have all that many bees (contrary to what a first-time beekeeper may think); expecting a queen to immediately yield a colony overflowing with brood is like Pharoah demanding that the Israelites make bricks without straw.[2]

Following that same brick-making analogy, does the hive have pollen? Adult honey bees can survive quite well with nothing but sugar/honey to eat, but the colony cannot grow without protein in the form of pollen. No pollen means no brood. Not only do worker bees feed pollen to larvae, nurse bees must eat it themselves in order to have protein for their glands to produce brood jelly. In Piedmont North Carolina, we are blessed with abundant pollen pretty much year-round… but that doesn't mean the colony always has plenty. Has cool weather prevented the bees from foraging? Has there been so much brood-rearing that the pollen is consumed as fast as it is collected, leaving no surplus? Has there been an uncharacteristic pollen dearth?

When pollen is scarce, the worker bees cannibalize the brood starting with the eggs and youngest larvae. If you don't see larvae but have a laying queen and perhaps capped brood, take inventory of your pollen stores. If you see "some", you should be okay – there is enough for current consumption plus a little to spare. But if you see none, your bees have outstripped the available resources and production of new bees is suffering.

Aggression

When I first became a beekeeper, I started with two very ill-tempered colonies. I replaced the queens and their temperament quickly improved. So, I do recommend requeening "hot" colonies – there is no good reason to keep mean bees – but many times the aggression isn't really the queen's fault and requeening won't solve the problem.

Some reasons that colonies may be unacceptably defensive are described in Reducing Stings. A couple of big ones are placement of colonies and beekeeper technique.

Colonies don't mind being placed close together. In Eastern Europe, it is common to

[2] *Exodus*, chapter 5.

see Bee Houses, shed-like buildings where one wall consists of stacks and rows of different colonies whose entrances are inches apart. However, when one colony gets excited and emits alarm pheromone, that scent drifts to all of the immediately surrounding colonies. When the beekeeper moves from the first colony to the second, that second one is already on alert even before the beekeeper removes the cover. Spacing colonies by even a few feet – mine are about eight to ten feet apart – can make a big difference in temperament.

Likewise, I'm convinced that colonies placed in sun are more mellow-tempered than colonies in shade, all else equal.

Beekeeper technique can be a huge factor here too. I once accompanied a beekeeper for an inspection of a hive that he warned was ill-tempered. I watched in horror as he removed bees from the inner cover by literally banging it repeatedly on the top of the open hive. He was dressed up like the Pillsbury Doughboy, ready for any assault the bees may muster, but I was not. I continued my visit from a safe distance.

Perhaps the best remedy for poor technique is to visit other beekeepers' bee yards. What steps do people who have "sweet bees" follow as they inspect their hives? Invite them over to look at your bees… do your Flying Devils act like little lambs for someone else? Maybe, just maybe, the problem isn't the queen… it's you.

Check the calendar

The very best queens, the ones I love to have in my bee yard, don't make brood 24/7, 12 months a year. Instead, they respond to environmental signals. When spring hints that it is somewhere on the horizon, she throttles up egg-laying like crazy. When June turns into July and flowers dry up, she significantly backs off of brood-rearing. There is no reason for more mouths to feed if those mouths will be unemployed.

Yet I see beekeepers who wail about seeing little brood in summer and even winter. Why would any regular hobbyist want lots of brood in December? Almost none of us are going to pollinate almonds in February. At my house, my main nectar flow starts sometime in April (varying from April 1st to April 30th, depending on weather). I don't need, or want, hives busting out with bees until the tulip poplar gives them something to collect. Thrifty queens that regulate brood-rearing based on nectar flow are, for most of us, highly desirable… why would anyone kill her for it?

Changing of the guard

Perhaps the number one reason for premature replacement of a perfectly good queen is swarming. "I Need to Buy a Queen… Or Do I?" discusses this situation. The short version is that the colony swarms and the remaining bees raise a new virgin queen. But before she can mate and begin producing wonderful new bees just like her mom did, the beekeeper attempts to replace her with a mass-produced interloper from Georgia. Often the reason the beekeeper does so is that she/he doesn't understand Bee Math, swarm biology or queen development timelines. Failing to find a queen or any brood, the natural conclusion is the colony is doomed. However, in most cases, the opposite is true: the colony is just days away from having a well-fed, well-mated queen who will be immediately accepted by the workers, all at a cost of zero to the beekeeper. But the impatient beekeeper pulls the trigger too soon.

Winter loss

I learned a while back that it doesn't pay to attempt to overwinter weak colonies. (See "Controlling Winter Losses"). But is a colony weak in fall because the queen was a loser? Maybe, but more often at my place I can trace the poor fall condition to something that wasn't really under her control. For example, the colony may have swarmed in summer and not only were conditions not conducive to adequately building back up, there wasn't much time to do so.

Another common setback is that Varroa mites were not kept at consistently low numbers so the population suffered. Perhaps the colony was treated retrospectively after a

problem was discovered and so it wasn't completely lost, but it wasn't able to thrive either. That isn't the queen's fault. See "Effective Varroa Management Must Begin with Monitoring" for a reality-based approach to keeping colonies alive and healthy.

Stop, look and listen

I'm not advocating for keeping "welfare hives" – bees that don't pull their own weight and are taking the place of those who may do better. However, it is poor management to fire a key employee who is trying to do well but is being prevented from doing so, often by that same management. The next time colony performance is not up to snuff and the queen is being proposed for the chopping block, step back and ask whether she is actually to blame. She may be an innocent victim of circumstances that, when corrected, will allow her to shine. Or not. But she deserves a fair chance!

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Note: All previous articles are archived at https://baileybeesupply.com/educational_resources/

There is a queen somewhere in this picture, although she isn't a classic beauty. She gets credit for all that is good about the colony and blame for all that is bad. Is that fair? Often a little detective work will prove her guilt or innocence.