If I sit still enough,  
And allow my eyes to lose focus,  
I begin to see.

While this passage might describe most meditations, this meditation occurs at the edge of the home to 60,000 honey bees. And although I’d like to witness deep truth, what I am beginning to see now is the incoming and outgoing flights associated with this entomological airport. Ironically, you must be calm to observe this form of controlled chaos.

The dark specks begin to take form upon descent. Only when they slow, surprisingly close to the entrance, can you begin to see the individual yellow and black colors of their bodies. The outgoing bees appear, just briefly, as golden rays before they vanish into much to be learned about our place in society by observing a colony of bees.
the blue sky. Those that are coming and going must pass sentries at the entrance of the hive, a colony’s version of immigration officers.

Sitting here, you would see thousands of bees. You might even convince yourself that you have seen them all, but that is just a trick that people play upon themselves. We often see just a slice but believe we've seen the whole thing. These bees are workers, merely one of the three castes within any healthy spring colony.

The colony will also have members of relatively larger body size: a single queen and a few hundred drones. The queen is mother to them all, and is respected accordingly. The drones are brothers, and as a boy with three sisters of my own, I can empathize with their plight: Drones are tolerated only when appropriate.

And yet even with this additional information — these additional slices — the full extent of the colony is still much greater. The workers I’ve described so far are the oldest workers, as only they typically engage in activity outside the hive. The younger workers spend the early part of their adult lives taking care of the developing young and the queen. In their middle age, workers will patrol the hive, accept the forage brought back by older siblings, and experience their first orientation flight. It is only when they reach old age that they begin to seek food outside of the hive. Most people have only met old bees.

So within a hive, you have different forms of bees, and the behavior of most changes as they age. And this is just one hive. Hives also have personalities — some being friendlier than others — and preferences. Although in general they look and act similarly, there is tremendous diversity across hives. It is impossible to see just one bee and know what all bees are like.

Indeed, no one bee can represent all honey bees. It is this fact — more than the bees’ division of labor or their famous, stinging sacrifice for family — that highlights the similarities between us and them: No one person represents the extent of what it means to be human.

The other similarities, however, should not be ignored. Humans too have a division of labor. In all but the rarest of cases, our world is far too complex for one person to be sufficiently skilled to accomplish all necessary tasks. We have plumbers and electricians and educators and doctors and an almost unlimited number of other roles for people to fill.

Even the roles we fill often change in predictable ways as we age! We first develop social skills, then basic (and sometimes advanced) educational competencies, and then obtain a position. That position is also likely to change in predictable ways depending on the amount of time we hold it. When describing honey bees we call that “age-based polyethism,” for humans we call it “life.”

Guards to keep out foreigners, undertakers to remove the deceased, and police to enforce unwritten social codes. Like us, bees have those that collect food, those who prepare it, and those who distribute it. And when their home is under attack, they defend it. We may
A sturdy man, Rick Reault stands and delivers short quips of key information as thousands of honey bees circle his minimally protected body.

“You can see from this brood pattern that the queen probably hasn’t mated enough,” he says.

The student with him hangs on his every word, even if she doesn’t yet understand the genetic mechanism behind his insight. She’ll leave this lesson with information and confidence: Rick is a natural teacher.

In years past, residents of The Andovers may have driven past this teacher as he tended to his honey bees on the border between the Andover Bible Chapel and the adjacent farm. This apiary no longer exists, but Rick’s influence in the area hasn’t waned.

As president of the Massachusetts Beekeepers Association and previous president of the Middlesex County Beekeepers Association, he is the go-to person for small and large beekeepers alike.

With the growing importance of urban and suburban beekeeping, the need for experts like Rick is increasing. Rick understands this intimately and has been running workshops for new beekeepers for years.

“It’s a great hobby,” he shares. “And I’m happy to do anything I can to teach people how to properly care for these animals.”

His willingness extends far beyond the classroom: Rick removes feral colonies, speaks to local groups, and even helps a local researcher who studies bees (me!).

For more information about beekeeping, you can contact Rick through his business, New England Beekeeping (www.nebees.com).

Rick Reault: Facilitator of Beekeepers

Photo by Phil Starks

Rick Reault, president of the Massachusetts Beekeepers Association, is the go-to guy for small and large beekeepers.
Many people have pets. I’ve had pets: In the past, I’ve had dogs, cats, fish, frogs, hamsters, a snake, a tarantula, even a desert gerbil named Colleen. Adding to that list, my family has had rabbits, turtles, and a squirrel (for a short period of time). Today, I have a cat, hermit crabs, and the subject of this sidebar: honey bees.

“How can you consider honey bees a pet?” people might ask.

My answer? Not only can honey bees be pets, but they might be the most broadly beneficial pets that the world has ever seen.

Compare honey bees to other pets: They feed themselves, stay outdoors, make your (and your neighbors’) gardens healthier, require shockingly little care, and might even pay you rent in the form of honey.

There is more: Having them on your property adds a layer of activity that attracts other life, most notably birds.

In short, honey bees make your property come alive!

A growing number of people — urban and suburban beekeepers — know this already. In Massachusetts, more than 1,000 new beekeepers can be counted each year. We should all hope that this trend continues; honey bees are remarkably important to our ecosystem. And we are losing them.

Today we have half as many managed honey bee hives as we did 70 years ago, and we have seen about one third of our colonies fail each year between 2006 and 2011. (Our losses dropped slightly in 2012, to about a fifth.) Most of the latest losses are attributed to Colony Collapse Disorder (CCD), a terrible malady that seems to have multiple causes including pathogens, parasites, and additional stressors.

Given honey bee losses, it might seem odd to suggest beekeeping as a good hobby. Urban (and suburban) beekeepers, however, may not expose their bees to the same risks that are associated with CCD.

Pathogens and parasites are, without question, hard to control, but they also thrive when honey bee populations are high. It is unlikely that an urban beekeeper would have many hives in small areas.

The additional stressors that lead to CCD also are less likely to occur to urban beekeeper hives. For example, it is unlikely that urban beekeepers would stress their hives by placing them on the back of a truck to drive them up and down the coast to pollinate different crops. It is similarly unlikely that an urban beekeeper would collect so much honey from a hive that he or she needs to feed starving colonies high fructose corn syrup as a food substitute.

It’s a sad truth that our industrial beekeeping organizations employ management models that increase the probability of honey bee loss. It is also a sad truth that urban beekeeping cannot replace all the good that our industrial beekeeping organizations accomplish: Without them we risk the $15 billion worth of crops pollinated each year. But urban beekeepers can provide relatively safe space for colonies of this remarkable insect to survive, and perhaps thrive.

This is a noble goal in and of itself, but it is also true that the honey bee gives back in ways visible and invisible. At the outset of this sidebar I referred to honey bees as pets. Some people might still find it odd to consider this social insect a pet. But what is a pet? A pet is an animal that we introduce into our lives and into our care, and that we have affection for. Some – like dogs – return that affection; others – like fish – don’t display affection in a way we can interpret.

If you become a beekeeper, you’ll be able to see the affection your bees might return: honey, happier gardens, and a more biologically diverse back yard.

(For more information on beekeeping, please contact the Mass Beekeepers Association: www.massbee.org)

— Phil Starks