I am very proud, revengeful, ambitious, with more offences at my beck than I have thoughts to put them in, imagination to give them shape, or time to act them in. What should such fellows as I do crawling between earth and heaven? We are arrant knaves, all. Believe none of us. Go thy ways to a nunnery.

-- Prince Hamlet in <u>Hamlet</u> by William Shakespeare

We've all known "instant wonders", brand new beekeepers who install a package of bees and suddenly know everything there is to know about bee nutrition, pest management, swarm prevention, equipment configurations, etc., and arrogantly preach their omniscient wisdom to other newbees. (Maybe we were even such a person, in our innocent youth?) If the Wonder Child has a video-equipped cell phone, they'll upload "training videos" to You-Tube so they can spew nonsense to anyone with an internet connection. Or they'll have a blog with photos proudly detailing how they systematically wreak havoc on their poor bees.

The haystack of ignorance is very large and the needles of truth are hard to find. This is even more challenging because what we *know* to be *true* can change as experience and experimentation progress. Remember when everybody "knew" that screened bottom boards are important for varroa management? Sorry, more than fifteen years of experience and university testing have shown that isn't really the case. The idea was logical but the bees and mites didn't go along with it. The screens probably aren't harmful but they don't improve overall mite infestation levels or colony survival.

Adding to the confusion is that everybody knows that when you ask ten beekeepers a question, you get fifteen different answers. How is a new beekeeper, or an experienced one for that matter, supposed to learn?

First, it isn't clear to me how much we "know" about honey bees versus how much we think we know. That's just the way it is. So my personal goal is to not be dogmatic about too

Schedule*

January 19: Introduction to Beekeeping

January 26: Honey Bee Biology

February 2: Bees as Social Insects

February 9: Beekeeping Equipment

February 13: Saturday Morning Equipment Field Day

February 16: Getting Started

February 23: Plants for Bees in NC

March 1: Products of and from the Hive

March 8: Diseases, Pests, and Treatments

March 15: Seasonal Management/Review and Certification Exam

March 19: Saturday Morning Field Day (weather permitting)

Bee school registration is now going on around the state. A typical curriculum includes hands-on field days.

many bee-related things. Instead, I want to keep up with the evolving science as best I can and form opinions based on what that science seems to be telling us so far. And I want to temper my opinions based on common sense. For example, the propagandists say we would all starve without honey bees... but there were no *Apis mellifera* honey bees in America before some were shipped to Jamestown, Virginia in 1622. Did everybody in America starve before 1622? Or did they eat different foods which didn't need honey bee pollination, foods that we would shift to again if there were no honey bees? As Voltaire said, "Common sense is not so common."

However Voltaire also said, "Love truth, but pardon error." With that in mind, we should do what we can to learn but not lose sleep over the limitations we face.

Get Thee to a Bee School

Taking all of these caveats in stride, probably the best introductory information for a brand new beekeeper or beekeeper want-to-be can be found at one of the many bee schools around the state. The schools hosted by NCSBA county chapters can be found on the NCSBA website under Chapters > Beekeeping Schools. Most are held for eight to ten weeks, from January through March. In the Triangle, Orange, Person, Chatham and Alamance County Associations all are known for their popular and well-respected bee schools. Check your county association — there may be a bee school near

you!

In addition to the county association schools, at least one local bee supply company, Bailey Bee Supply, offers a full-blown bee school. Bailey's school has a similar curriculum and many of the same instructors as the high-quality schools in the surrounding counties. Sessions are offered several times a year, not just once in winter.

One of the benefits of the good bee schools is hands-on workshops. Typically these include an equipment-assembly workshop and an inthe-hive visit to a bee yard. There is no better way to learn than by watching someone perform a task who knows what they are doing, then getting a chance to do it yourself, all the while being able to ask questions as you go along. You can't get that with books or videos.

Now What?

It is a well-recognized problem that there are lots of learning opportunities for brand new know-nothings, but once someone understands the basics and wants to advance, formal beekeeping training is much more limited. We've been fortunate in North Carolina to have had NCSU conduct "Born and Bred" queen rearing classes in the past, but state budget cuts have limited that sort of thing. However our friends at NCSU have developed some clever alternatives to in-person advanced training that anyone can take advantage of.

Beekeeper Education and Engagement System (BEES)

BEES is an on-line system for training beekeepers at all levels. There are three ascending levels of difficulty (Beginner, Advanced and Ambassador) with topics spanning three different areas (honey bee biology, management and industry). Each course includes a series of lessons in the form of video lectures and tests. Students can take whichever courses they desire, in any order, at any time. The 2015 per-course fee was \$26 each, a small price to pay for university-quality instruction by one of the country's leading honey bee researchers. With four or five lessons

per course, that's only \$5 or so per lesson, cheaper than going to the movies. Note that NCSU's Distance Education Learning Technology Applications (DELTA) office is increasing the percourse fee by about \$10 starting January 1st, but it is still a bargain. You have 30 days to complete a course once you enroll.

The current list of courses includes:

Beginner	Basic Honey Bee Biology and
Biology	Life History
Beginner	Intro to Beekeeping and Hive
Management	Management
Beginner	Importance of Bees and
Industry	Beekeeping to Society
Advanced	Honey Bee Anatomy
Biology	
	Queens and Mating
	Foraging Biology
Advanced	Parasites, Pathogens, Pests and
Management	Problems
	Varroa Mite IPM
	Queen Rearing and Bee
	Breeding
Advanced	Africanized Bees
Industry	
	History of Beekeeping

NCSU Webinars

Another way that we can take advantage of NCSU's teaching expertise is via their beekeeping webinars. These are FREE and are given three times a year, in January, June and September. They cover a variety of timely topics. The webinars are recorded and the archives are available for anyone to access.

NCSU isn't the only source for top-notch beekeeping webinars. Ohio State University offers them on the third Wednesday of every month. Info and archives are on the OSU bee lab website.

Want More?

I believe that growth in someone's practical beekeeping knowledge will be quite limited unless they subscribe to one of the standard beekeeping journals, <u>American Bee Journal</u> or <u>Bee Culture</u>. The journals are the way to keep up with the very latest developments in

knowledge and practices.

In my opinion, the two journals are very similar; one is as about as good as the other. However – pay attention here because you are about to be rewarded for reading to the end – if you have a library card from anywhere in North Carolina, you can get the electronic edition of Bee Culture *free*! All you need to do is get on NCLive.org, select your regional library from the pull-down list and log on using your library card number. Then click on "Journals, Magazines and Newspapers" and search for "Bee Culture". The current month's issue, as well as archives back to 1998, is available. There is even an article in the December 2015 issue on NC's Chief Apiary Inspector, Don Hopkins!

Last Word

Our bees do best when we know, more or less, what we are doing. We don't have brain implants available to give us the knowledge we need, but in North Carolina we have the next best thing: lots of opportunities for learning in the form of bee schools and university on-line training. We don't need You-Tube nincompoops or first-year-beekeeping savants to tell us how they kill their bees; we can get the straight story on how to successfully keep bees from reputable, reliable sources. Give it a try and see how it works for you!

Special thanks to Dr. David Tarpy, NCSU Professor and Extension Apiculturist, for information about the BEES on-line training program.

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Bee Culture



The popular journal "Bee Culture" is available for free download via NCLive.org if you have a library card from anywhere in North Carolina.