

EAS MASTER BEEKEEPER ORAL EXAM IMPROMPTU QUESTIONS 2017

#1 From a beekeeping student:

You run into a 2nd year beekeeper who attended your advanced bee school this spring. They approach you and whip out their cell phone to show you a photo (show photo). "I found this in my hive during an inspection this morning, do you think my bees are going to swarm?"

Answers should include at least 3 along the lines of this list:

- *That is a picture of a developing queen cell.
- *The cell appears to be on the face of the comb rather than the bottom bar of the frame.
- *Did you find your original queen?
- *Did you see eggs?
- *Explain the differences between queens that colonies make: emergency/supersedure/swarm.
- *Describe colony activity leading up to swarming.
- *Encourage the student to study swarm behavior as natural colony division.
- *Kindly explain the challenges of making a colony assessment based on one photo.

Offer to help them inspect their colony or to find someone who is willing to do so (their mentor from the school?)

#2 From a local farmer:

While you are giving a presentation on honeybees at the library in town a farmer says: "I have 4 apple trees; every year my apples are small and crooked. My wife told me that I can get more apples and they will be big and round and juicy if I could get some honey bees to come pollinate. Can you tell me a few things about pollination?"

Answers should include at least 3 from this list:

- *Simple definition of "pollination"-including how and why bees transfer pollen from one part of the flower to another part or to a different flower.
- *Importance of honey bees in crop pollination (e.g. 30% of food supply of over\$ 15 billion/yr In U.S. crops pollinated).
- *Increased crop yield and better formed fruit with more pollinators available beyond native pollinators in some locales.
- *May need two apple varieties for good pollination.
- *Chemicals applied on fruit trees are potentially detrimental to bees.

*For apples, usually 2 colonies per acre (more or less) will do the job.

#3 From a new beekeeper:

“I think one of my honey bee colonies has “foulbrood”, but I heard that I can’t get any antibiotics for it without a prescription from a veterinarian. I don’t know any vets who treat honey bees. What is this about and what should I do? “

Answer should include at least 3 from the following:

- *As of January 2017 the FDA is preventing the purchase of veterinary antibiotics without a prescription in order to prevent antibiotic overuse.
- *If you suspect any colony has foulbrood you should report this to your State Apiary Inspector, State Entomologist, State Dept. of Agriculture or contact the Apiary Inspectors of America to locate a specialist in your area.
- *It is important to determine which of your colonies have foulbrood and if it is American Foulbrood (AFB), or European Foulbrood (EFB). You or your inspector can test with a toothpick (ropiness test) or with a commercial antibody test kit.
- *If a hive tests positive for AFB they must be destroyed to prevent infection, in most states.
- *If a hive is diagnosed with EFB it can be treated if it is not too late.

Answer should include at least 1 from these additional:

- *If you need to find a ‘bee vet’ consult your own pet vet, visit beevet.com, ask your local University Extension office, consult your state Veterinary board, or inquire at your local Bee club.
- *Because veterinarian visits can be expensive, it may be more cost effective to destroy the bees and burn the hive if only one colony is affected. If you have numerous affected hives, consider medicating to prevent further spread.
- *If you have a very mild case of EFB, a method referred to as a “shook swarm” has been used in some areas to eliminate the comb and hive equipment as a possible source of reinfection: cage the queen, place in new equipment with new foundation, shake existing bees into the new hive body, feed for 2-3 weeks.