Beginning Beekeeping

- 1) Research before buying bees, recommend First Lessons in Beekeeping or Beekeeping for Dummies.
- 2) Order Bees Order bees in December and January at the latest It is always best to start with at least 2 hives so you can compare and maybe borrow brood if one is needing help.

Common Types of Bees:	<u>Italian –</u> Most common –Light bee, gentle, good spring buildup
	and overwinters well. Good honey producer
	<u>German –</u> Dark bee, cranky, doesn't build up great in the spring
	but over-winters very well. OK honey producer
	<u>Carniolan</u> – Black Bee, Gentle, great spring buildup, loves to
	swarm, good honey producer
	Russian – Gray bee, Cranky, builds up fair in spring, over-winters
	very well and ok honey producer

- 3) Equipment for Langstroth Hive
 - Bottom board solid or screened?
 - Brood box Honey Super
 - Inner Cover
 - **Telescoping Outercover**
 - Queen Excluder
 - Super
 - Feeder
 - Something for small hive beetles (beetleblaster or swifter sheets or both)
 - Use 50/50 cider vinegar and vegetable oil in beetleblaster
 - Frame Hanger
 - Some sort of tool kit
- 4) Installing Bees
 - Spray with sugar water method or
 - Remove ½ of frames and set in brood box
 - How to hang queen
 - Feed anytime you install new hive -
 - Spring 1 to 1 sugar to water Fall 2 to 1 sugar to water

Reduce entrance and it is recommended that if using screened bottom board, slide in some sort of thin board for a day or two so they cannot see ground. This helps reduce absconding.

5) What to inspect when you are inspecting – You should inspect your hive at least every 10 days to 2 weeks during the nectar flow

Cranky bees on cloudy days, hot days, dusk Bees bearding on front of hive – they are hot and this is normal Laying pattern Look for brood and eggs. See if brood is worker brood or if all drones. If all you your brood is drones, you may have lost your queen. Look for queen cells Check for enough honey to feed the brood. Look at wings of bees – If the wings are deformed, you could have a virus. Smell the hive. A foul odor could be a sign of a serious problem.

6) Swarm Control –

Add 2nd brood box if 80% of 1st brood box is drawn out

If 2nd brood box is overflowing, add super (super should be added before April 1st)

Consider removing at least 2 frames of eggs, 2 frames of honey and bees (being careful not to take queen). Put in a nuc box and take to another bee yard if possible. You don't want the worker bees going back to original hive.

- 7) Queen Cells, what to do????
 - a. They are going to swarm regardless if you find queen cells.
 - b. If they have not yet swarmed, find the queen and put her into an empty hive or nuc box with brood frames and eggs and young bees. At least 2 frames of young bees and brood and 2 of honey. Move to another location. The original hive will make a queen from the queen cells and you preserved the original queen. This will prevent swarming.
- 8) Swarms
 - a. Swarms are not aggressive and a great way to expand your apiary. It depends where the swarm is as to how you hive it. But, have a nuc box ready with brood and honey before you put the bees in and you will have a great chance of them staying as bees do not like to abandon brood.
- 9) Pests
 - a. You are going to have small hive beetles and varroa mites. It is a personal preference whether or not you want to treat your hives for varroa mites. We manage small hive beetles with beetle traps and swifter sheets. As for treating varroa mites, we personally use the powder sugar method all spring and summer along with screened bottom boards. We use mineral salt under the hives so when the mites fall from the bees after grooming the powdered sugar, the salt will kill them. We use oxalic acid vaporizer in the fall after the brood laying has slowed way down, usually in early October. You

should never treat a hive with honey supers on. You can contaminate the honey and the wax.

b. There are many other pests and diseases that can affect your bees. The list is far too long and would take up another entire class.

10) Harvest

a. You can harvest honey from your supers (and supers only) when at least 80% of the honey in the super is capped with wax. Anything less could result in honey that will go bad and spoil because of too high of a moisture content.

11) Winterizing

In the fall after the honey flow is over, it is time to treat for mites and feed, feed, feed until your hives are heavy. You may need to start feeding as early as August. Many bees starve in August due to lack of nectar. Always make sure your bees have adequate stores of honey in the brood box after the honey flow every time you inspect.

Now is the time to put mouse guards on your hives as they look for a nice warm spot for the winter.

If you are treating for varroa mites, be sure you do so before winter so they can go into winter strong and healthy.

During the winter they hive forms a tight cluster, vibrating their wings and keeping the cluster in the 90 degree range. This warm ball causes moisture. Moisture in the hive will kill the bees. For this reason we keep our screened bottom boards open and do not wrap the hives. They can handle it.

Anytime during the winter when temperatures get over 60 degrees you can take a very quick peek into your hive. Don't take the frames out or they will break their cluster. If necessary, feed with candy boards or fondant. Protein patties are sometimes fed in early spring but they also feed small hive beetles and popular opinion is that it isn't worth it.

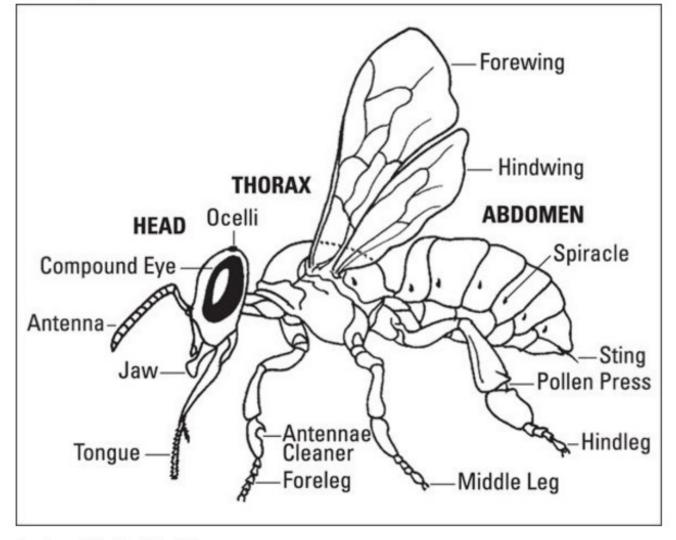
If a hive is going to starve, it usually starves during very early spring when there are a few warm days and when the queen starts laying brood and the hive gets active, eating their honey stores.

Questions????

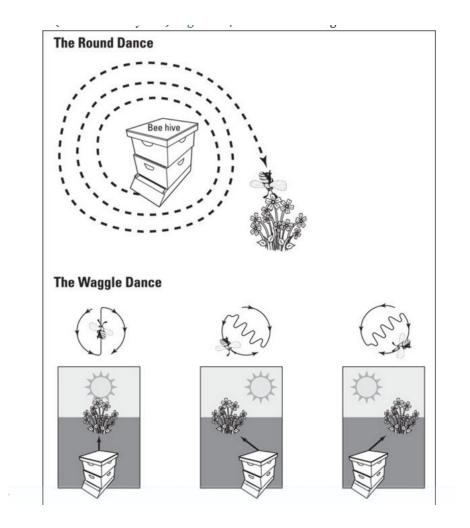
Local Suppliers of Bees

Kelley Bees (Western Kentucky)	270-242-6002
The Honey & Bee Connection	606-784-3108
Dadant	888-932-3268
Hale's Honey	606-768-3408

There are also local beekeepers that sell nucs



Courtesy of Howland Blackiston



Two common types of dances are the so-called round dance and the waggle dance.

The round dance communicates that the food source is near the hive (within 10—80 yards).

The round dance (top) and the waggle dance (bottom).

For a food source found at a greater distance from the hive, the worker bee performs the waggle dance. It involves a shivering side-to-side motion of the abdomen while the dancing bee forms a figure eight. The vigor of the waggle, the number of times it is repeated, the direction of the dance, and the sound the bee makes communicate amazingly precise information about the location of the food source. The dancing bees pause between performances to offer potential recruits a taste of the goodies they bring back to the hive. Combined

with the dancing, the samples provide additional information about where the food can be found and what type of flower it is from.