

Northeastern Kansas Beekeepers' Association

Best Management Practices for Urban, Suburban, & Small Scale Beekeeping

Support your local beekeeper! Purchase locally crafted bee products. There are beekeepers offering bees, bee supplies, honey, pollen, propolis, and beeswax. Check your local Farmer's market for many of our members.

CONSULT AND FOLLOW LOCAL REGULATIONS REGARDING BEEKEEPING GENERAL BEST PRACTICES

Education

1. Beekeepers need to have a solid understanding of honeybee biology and basic beekeeping methods.
2. New beekeepers should take a basic beekeeping course and read at least three different beekeeping guides.
3. Become a member of a beekeeping association that holds regular meetings.
4. Subscribe to a beekeeping magazine.

Colony Temperament and Behavior

Every effort should be made to maintain a docile and non-aggressive colony.

1. Monitor the behavior of the bees
2. Determine if defensive behavior is due hive management procedures, to predators (i.e. Skunks, wasps, mice) or a dearth in nectar supply
3. Replace the queen if defensive behavior is not otherwise explained
4. Re-queen only with queens from a reliable source (local when possible)
5. Maintain re-queening records and purchase information
6. Monitor re-queened hive for continued defensiveness

Considerate Hive Management

1. Know your hive and plan to work bees when conditions are favorable.
2. Extended hive manipulations, particularly when removing honey,

- should be carefully planned to accommodate neighbors' activities.
3. Be prepared to work slowly, gently and efficiently.
 4. Have all tools and adequate closable comb storage containers immediately available.
 5. Calming bees by using smoke before and during hive manipulations helps to disrupt scent communication among bees when alarm chemicals are released by a sting or inadvertent crush of a bee.

Hive Type and Placement

1. All honey bee colonies should be kept in moveable frame hives, which should be kept in sound and usable condition.
2. Correct placement of hives is an important consideration for responsible beekeeping. Ensure that your hive is in a location that can be accessed regularly, safely, and easily in a quiet area and not directly against a neighboring property.
3. Hives should be kept as far away as possible from roads, sidewalks, and rights-of-way.
4. Flight paths into the hive (generally ten feet in front of the hive entrance) should remain within the owner's lot, although barriers (e.g., fencing and tall shrubs) can sometimes be used to redirect the bees' flight pattern.
5. Mapping hive locations using the statewide www.Driftwatch.com mapping system may alert insecticide spray applicators of apiary locations.

Provision of Water

1. Beekeepers should establish water sources near the apiary to encourage bees to forage for moisture near the hive as bees use large amounts of water to control temperature and humidity within the hive, and prefer a sunny place with surface moisture, such as gravel or a sponge set in a dog water bowl or the edge of a birdbath, where they will not drown.
2. Water should be kept fresh and clean so as not to become a breeding ground for mosquitoes.
3. It is particularly important in an urban environment to provide a source of fresh and consistent water for the honeybees, to prevent them from seeking water from sources such as air conditioners, hot

tubs or other locations where the honeybee could be perceived as a nuisance.

Recordkeeping

1. Good recordkeeping should be a priority for all beekeepers.
2. Beekeeping logs can be found online, but any format of dated notes on individual hive activity will increase awareness of hive health and successful management.
3. A colony management log should include a catalog of the equipment used, planned actions, a record of inspections and findings therein, a history of actions (e.g., adding / removing honey supers), and any relevant observations regarding the hive.
4. Developing record keeping processes will organize planned hive inspections. Understanding reasons for entering a hive, what to look for, what to expect and what to do if certain conditions exist promote an efficient and educated way of observing hive activity.
5. This written record of colony observation and manipulation will help determine the next steps to a management plan and give a solid foundation when consulting with others regarding particular beekeeping experiences.

Disease Control

1. There are a number of honeybee diseases and pests for which beekeepers should be concerned.
2. It is critical that beekeepers be educated to recognize and respond to disease as some, like American Foulbrood, are extremely contagious.
3. It is incumbent on beekeepers to manage all diseases and pests to ensure colony health and honey quality.

Swarming

1. Swarming is natural honeybee behavior, but it should be prevented or minimized particularly in urban settings.
2. Congestion in the hive is one manageable factor that affects swarming behavior. To avoid this condition, beekeepers should consider:
3. Appropriately timed addition of extra boxes for brood rearing

4. Brood chamber manipulation and/or colony division
5. These, and other swarm management practices, are explained in detail in most good beekeeping textbooks.
6. When a swarm occurs, efforts should be made to collect the swarm. Local bee clubs may have a swarm hotline where eager beekeepers make themselves available to capture swarms.
7. Inform your local animal control departments of these hotline numbers to minimize possible negative impact of beekeeping on local residents and code enforcement officers.
8. Swarms captured from areas of interstate transportation or heavily populated areas or other locations where the origin of the bees may be questionable should be monitored frequently for abnormal defensiveness.

Robbing Behavior

When nectar is scarce, honeybees may rob from other hives and hives tend to become more defensive. Under such conditions:

1. Beekeepers should work hives for only short periods of time and only if really necessary. Exposing honey can encourage robbing.
2. Therefore, NEKBA does not recommend the use of hive-front Boardman feeders except for water in the summer months.
3. Should feeding be necessary, use internal feeders. There should be no open feeding at any time.
4. All honey and syrup spills should be cleaned up immediately.
5. As bees are attracted to the scent of honey, areas used for honey extraction should be beehive roofed to prevent robbing situations, thus a completely enclosed beehive tight area should be set up for this procedure.
6. Never attempt to harvest honey outdoors.
7. Concurrently, beekeepers should ensure that no bee comb or other hive materials that might encourage robbing be left upon the grounds of the apiary.
8. Upon their removal from the hive, all hive materials should promptly be sequestered.
9. If intended for subsequent use, place all hive products within a building or other bee-proof enclosure. If intended for disposal, place in a sealed container within the disposal container.

Hive Densities in an Urban Setting

Beekeepers are advised to closely observe their apiary locations to determine the carrying capacity (the number of hives that can be successfully maintained year after year) of the area - both the immediate area and roughly 2 miles in all directions and to limit the number of hives accordingly.

Signs of over-saturation in an area include

1. slow colony growth,
2. poor honey production,
3. and excessively defensive behavior.

While it may be difficult to negotiate how hive numbers are managed in the area, it is in the best interest of all involved beekeepers to address this situation.

Wildlife Management & Wind

Your beehive and its honey stores may draw a wide variety of opportunists. As a beekeeper you will notice the impact of

- mites,
- wax moths,
- and ants.

Follow available recommendations to manage these pests.

As problematic, and much more noticeable to your neighbors, are the larger hive predators –

- mice,
- raccoons, and
- perhaps skunks.

Winter mouse guards successfully keep mice out of hives.

Skunks and raccoons are easily managed by raising the hive off the ground on a cinderblock or wooden base. As these animals explore the hive entrance, soft underbellies are exposed to guard bee stings.

Placing a heavy object on the hive lid reduces the likelihood that strong winds will lift the hive cover and expose honey stores.

Africanized Honeybee

The Africanized honeybee (“AHB”) was introduced to Brazil in 1956 and inadvertently released from confinement colonies. While maintaining its genetic identity, this race of bee expanded its range in South and Central America and arrived in the United States around 1990.

Since that time, AHB have colonized: Texas, New Mexico, Arizona, California, Nevada and Utah, Oklahoma, Louisiana, Arkansas, Alabama and Florida.

Due to defensive behaviors and difficulties managing AHB using European honeybee beekeeping methods, the AHB population has disrupted agriculture, beekeeping, tourism, recreation, and public life in general as it has spread.

It is not yet known whether AHB will be able to establish in cooler climates. That said, colder states rely upon warmer states as a source of package colonies and queens, and commercial beekeepers routinely transport colonies to over-winter in southern states.

Management to Avoid AHB Introduction and Establishment

The queen management techniques laid out in the General Best Practices - Colony Temperament and Behavior section of this manual are relevant to the discussion of AHB avoidance practices.

- Re-queen only with queens of known heritage
- Maintain re-queening records and purchase documentation
- Monitor bee behavior. Determine if the behavior is due to predators (i.e. skunks, wasps, mice) or a dearth
- Replace the queen if the hive becomes difficult to manage due to other behavioral issues

NEKBA “Best Practices” offers a guideline for responsible hobby beekeeping northeastern Kansas. We welcome you to the art and adventure of beekeeping and encourage you to follow the guidelines within this document. Thank you.