

Barnstable County Beekeepers Association

Being a Good Neighbor

Best Management Practices for Beekeeping

January 2010

ACKNOWLEDGMENTS

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INTRODUCTION

Beekeeping has become increasingly popular. The BCBA has currently over 220 members. The number of beekeepers who are not members of BCBA is not known since there is no mandatory registration of beehives in Massachusetts.

These Best Management Practices (BMP) are an attempt to outline guidelines for responsible management to avoid creating problems for neighbors.

This document is intended as a reference and standard for honeybee management in the County of Barnstable (Cape Cod).

It may serve as:

- A resource for information to enhance community confidence in the safety of Bee-keeping activities
- A standard reference for avoiding potential complaints or conflicts about beekeeping activities
- A compendium of best management practices that all BCBA members are encouraged to follow.

Most beekeepers are hobbyists. We have bees for many reasons, i.e. we like to use or sell honey, we want our vegetable plants and fruit trees pollinated, or we simply like insects. Whatever the reason, we are and want to be good neighbors. Like most hobbyists, we learn mostly from people who are already keeping bees. BCBA was formed to facilitate the exchange of experience and to stay informed of recommended changes in beekeeping practices, including the use of pesticides and treatments, integrated pest management, new threats to honeybee health, and government regulations. BCBA organizes each year a beginners’ course (Beekeeping School) and holds regular monthly meetings.

Considerate Hive Management

Before setting up your hives it is a good idea to inform your neighbors where you intend to place the hives. Respond to and discuss their concerns. An informed neighbor is more likely to be an understanding neighbor. Beekeepers should take into account that weather conditions influence bee behavior and plan to work bees when conditions are favorable. Beekeepers should make sure that neighbors are not working or relaxing outdoors when they open hives and should perform hive manipulations as quickly as possible with minimum disturbance to the bees. Extended hive manipulations, particularly when removing honey, should be carefully planned to accommodate neighbors' activities. Smoke should be used when working bees. Hive entrances should be smoked before mowing or trimming in the hive area. Clippings and exhaust should be directed away from hive entrances.

Hive Placement

Correct placement of hives is a very important consideration for responsible beekeeping in urban and suburban settings. Wherever possible, it is recommended that hive openings face toward the southeast. It is best to place the hive in a sunny area, not on the top of a hill, nor at the bottom of a hollow. Hives must be placed in a quiet area of the lot and not directly against a neighboring property unless a solid fence or dense plant barrier of six feet or higher forms the property boundary. Hives should be kept as far away as possible from roads, sidewalks and rights of way. Flight paths into the hive should remain within the owner's lot. Barriers, including solid fencing, hedges and shrubs more than six feet high may be used to redirect the bees' flight pattern. Beekeepers are encouraged to post signs at byways near the apiary to alert neighbors and passersby to the presence of hives in the area.

Hive Densities

Beekeepers are advised to closely observe their apiary locations to determine the carrying capacity of the area and to limit the number of hives accordingly. Signs of over-saturation include slow colony growth, poor honey production and excessively defensive behavior. The following hive density guidelines are recommended where hives are within 200 feet of the property boundary:

# of Hives	Lot Size
2	Up to ¼ acre
4	Between ¼ and ½ acre
6	Between ½ and 1 acre
8	1 to 3 acres

No limits are set for the density of apiaries situated more than 200 feet from the property boundary. However, hive health will require regular monitoring for saturation.

Colony Temperament and Behavior

While generally docile, honeybees can sting. A colony's temperament is determined by its queen's characteristics. Its behavior is affected by temperament, health and environmental factors such as weather and proximate activities. Every effort should be made to maintain a docile and non-defensive colony. Guidance on selecting queens, maintaining hive health, and mitigating environmental consequences follows. BCBA is engaged in an effort to develop methods for its members to raise native queens which are capable to withstand our severe winters and which result in gentle behavior.

Swarming

While swarming is natural honeybee behavior, it is one that should be prevented or minimized, especially in urban and suburban settings. Two primary causes of swarming are congestion and poor ventilation in the hive. To avoid these conditions, beekeepers should consider:

- • brood chamber manipulation
- • colony division
- • addition of supers for brood rearing and honey storage
- • replacement of old or failing queens

These and other swarm management practices are explained in detail in most good beekeeping textbooks.

When a swarm occurs, efforts should be made to collect the swarm. Swarms captured from locations where the origin of the bees may be questionable should be monitored frequently for abnormal defensiveness.

The names of people willing and capable of collecting swarms can be obtained from BCBA and the Agricultural Extension in Barnstable.

Provision of Water

Water sources should be considered in determining hive placement. Bees prefer a sunny place with surface moisture – wet sand or gravel or the edge of a birdbath. For example: Beekeepers should establish such water sources near the apiary to encourage bees to forage for moisture near the hive and to discourage visits to neighbors' swimming pools and hot tubs. Remember that in hot weather, honeybees use large amounts of water to control temperature and humidity within the hive.

Robbing Behavior

When nectar is scarce, honeybees may rob from other hives. When they do, they tend to appear more defensive. Under such conditions, beekeepers should work hives for only short periods of time and only if really necessary. Exposing honey can encourage robbing. Reducing the width of the entrance will protect weak hives from becoming victims of robbing. All honey and syrup spills should be cleaned up immediately. Buildings and trailers used for honey extraction should be bee-proofed.

Disease Control

There are a number of honeybee diseases and pests for beekeepers to be concerned with. Some, like American Foulbrood, are extremely contagious. Beekeepers should be extremely cautious about mixing hive equipment and purchasing used equipment. If there is any doubt about the condition of used equipment, beekeepers should contact BCBA to have used equipment inspected before incorporating it into the apiary. Contact information for BCBA is provided on the Web site www.barnstablebeekeepers.org.

It is incumbent on beekeepers to manage all disease and pests, including parasitic mites, to ensure colony health and honey quality. Massachusetts does have a limited inspection program comprising a State Apiarist, Al Carl, who is also the State Plant Inspector. This position takes up the majority of his time. He will respond to inquiries from beekeepers as time allows. There is also one county apiarist in Worcester County.

Africanized Honeybee

The Africanized honeybee (AHB) was introduced to Brazil in 1957 and accidentally escaped 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.

The AHB has gotten widespread attention by the press and the general public.

The current distribution in the U.S. can be seen at <http://ars.usda.gov/AHBmap>.

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 known, but unlikely, whether ABH will be able to establish itself in cooler climates. However, northern states rely on southern states, particularly Georgia and Florida, as a source of package colonies and queens, and commercial beekeepers routinely transport colonies to over-winter in southern states.

If and when there is information that AHB are becoming established in or near Massachusetts, BCBA will develop or adopt a suitable action plan.

SUGGESTED READING

Books

Beekeeping for Dummies by Howland Blackiston
Hive Management by Richard Bonney
The Backyard Beekeeper by Kim Flottum
Natural Beekeeping by Ross Conrad
The Queen and I by Edward A. Weiss
Robbing the Bees by Holley Bishop
Beekeeping by Richard E. Bonney
The Hive and the Honey Bee edited by Joe Graham
The Beekeeper's Handbook by Diana Sammataro and Alphonse Avitabile
Honey Bee Biology and Beekeeping by Dewey M. Caron
Biology of the Honey Bee by Mark Winston
The Wisdom of the Hive, Tom Seeley
The Best of Bee Talk by Richard Taylor
Form and Function in the Honey Bee by Leslie Goodman
What do You Know? by Clarence Collison

Magazines

American Bee Journal
Bee Culture

Web Sites

Barnstable County Beekeepers Association: www.barnstablebeekeeper.org
MA Beekeepers website – www.Massbee.org
Julie Lipkin's Blog: <http://blogs.capecodonline.com/cape-cod-beekeeping>
Bee Culture's Find A Club www.beeculture.com/content/whoswho
Dana Stahlman's site: www.gobeekeeping.com
Beekeeping Forum www.beesource.com
Bee-list beekeeping forum www.honeybeeworld.com/bee-1