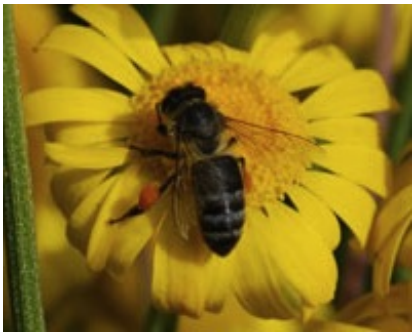
Best Management Practices for Beekeeping – Maine State Beekeepers Association

This document is intended as a reference and standard for honeybee management in Maine, with particular emphasis on urban/suburban locations.

Introduction



Honeybees not only produce honey but also play a vital role in the balance of nature, especially in pollination of agricultural crops, horticultural crops, and home gardens. Pollination is important for the viability of many farming enterprises, market gardens, orchards, and seed industries. Some important Maine food crops, including apples, raspberries, blueberries, and squashes, either depend on or benefit greatly from honeybee pollination. It has been estimated that work by honeybees contributes about $100 to $150 million annually to the Maine economy. In 1975 the honeybee was officially designated as Maine's state insect in recognition of its importance to the Maine economy.

Beekeeping is becoming increasingly popular in nonrural areas. Maine currently has approximately 800 beekeepers, who manage 10,000 hives. Beekeeping provides honey for home consumption, enjoyment in watching these highly social creatures, and the opportunity to join an amateur bee- keeping group. However, honeybees possess a sting and therefore require proper and responsible management so they do not create a problem for neighbors.

This document is intended as a reference and standard for honeybee management in Maine, with particular emphasis on urban/suburban locations.

It may serve as

- A basis for local governments to create uniform codes
- A resource for information to reinforce community confidence in the safety of beekeeping activities
- A standard reference should complaints or conflicts about beekeeping activities arise
- A compendium of best management practices that all Maine beekeepers should follow.

It is intended that these Best Management Practices form a prescription for harmonious cooperation between beekeepers, neighbors, and other landowners. The guidelines for bee colony man- agement in these Best Management Practices also constitute a standard for beekeepers operating in Maine to follow, and should be recognized and used as such by apiarists, decision-making author- ities, and the general public. Finally, in the case of ordinances enacted by local authorities, the Best Management Practices provide a consistent approach for clarifying and resolving issues. Beekeepers and local authorities who need more information should consult the Maine State Beekeepers Association or the Maine Department of Agriculture. (See below for contact information.)

Requirement to Register

It is a requirement under the Title 7 MSRA, section 2701 to become a registered beekeeper with the Maine Department of Agriculture if one or more hives are kept. Registration is valid for a twelve-month period expiring in mid-June.

Renewal forms are sent annually to previously registered beekeepers for return to the Maine Department of Agriculture, Division of Plant Industry along with the appropriate annual fee specified in the fee schedule. Beekeepers who change addresses are requested to notify the Department.

Swarms and Bee Enquiries

The list of beekeepers who collect swarms is updated annually. Swarm inquiries from the public may be directed to the Maine Department of Agriculture, to County Extension Offices, or to the Maine State Beekeepers Association. Other general beekeeping questions may be directed to the Maine Department of Agriculture or the Maine State Beekeepers Association. (See page 5 for all contact information.)

Definitions

Apiarist and beekeeper
A person keeping bees

Apiary
A place where honeybee hives are kept

Apiculture and Beekeeping
The management of beehives

Honeycomb
Removable frames, containing wax cells which house honey, pollen, and/or brood (eggs, larvae, pupae)

Honey flow
The gathering of nectar from flora by honeybees

Honey extraction
The removal of honey from combs

Beehive
Removable framed housing for a honey- bee colony

Bee sting
Injury sustained and inflicted by a worker honeybee

Brand
Identification for marking frames and hives

Flight path
The distinct route taken by many bees leaving from or returning to their hive

Foraging bees
Bees seeking water or food. Bees naturally forage flowers for nectar and pollen. In abnormal circumstances, when natural sources of food and water are scarce, bees may forage supplies of animal feed, water, or protein.

Hive
A honeybee hive, being a nucleus colony or a standard size colony

Package bees
A number of adult bees, with or without a queen, contained in a ventilated ship- ping cage transported via USPS or other carriers.

Pollination
The transfer of pollen by honeybees from anthers to stigmas of flowers for the pur- pose of plant fertilization

Robbing
Bees attempting to access honey stored or spilled in another hive.

Strong hive
A populous honeybee colony

Super
Box or boxes containing frames placed above the bottom, or brood, box

Swarm
Cluster or flying mass of honeybees including workers, queen, and drones

Water Supply

Taps, hoses, pools, hot tubs, streams, ponds, puddles, etc.

Hive Densities

One of the primary limitations to keeping bees is the real or perceived interaction between the bees and the people who live in or use the surrounding area. To overcome this problem, a hive density limit is proposed that minimizes potential conflict between people and honeybees, assum- ing that beekeepers follow the management practices outlined in this document. (In the recom- mendations below, “undeveloped property” means any idle land that has no structures or facilities intended for human use or occupancy. Property used exclusively for streets, highways, or com- mercial agriculture is considered undeveloped property.)

NUMBER OF HIVES IN RELATION TO LOT SIZE	
Lot /Acreage	**Number of Colonies**
up to 1/4 acre (1/4 acre = 10,890 sq. ft., roughly 50 ft. x 215 ft.)	2 colonies
more than 1/4 acre, less than 1/2 acre (1/2 acre = 21,780 sq. ft., roughly 100 ft. x 218 ft.)	4 colonies
more than 1/2 acre, less than 1 acre (1 acre = 43,560 sq. ft., roughly 150 ft. x 290 ft.)	6 colonies
1 acre or more	8 colonies

Regardless of lot size: If all hives are situated at least 200 feet in any direction from all property lines of the lot on which the apiary is situated, **no limit on the number of hives**.

Regardless of lot size: As long as all adjoining property that falls within a 200-foot radius of any hive is undeveloped property, **no limit on the number of hives**.

Hive placement

Correct placement of hives is a most important consideration for responsible beekeeping in urban/suburban situations. Hives must be in a quiet area of the lot, not placed directly against a neighboring property unless a solid fence or impenetrable vegetative barrier not less than six feet high forms the property boundary. Keep hives as far away as possible from roads, sidewalks, and rights of way.
Hive entrances should face in such a direction that bees fly across your property. If this is impos- sible, use barriers (hedges, shrubs, or fencing six to twelve feet high) to redirect the bees’ flight pattern.

Swarming

Swarming is a natural instinct of honeybees that occurs chiefly from spring to early summer. Swarms should be collected to prevent their becoming a nuisance. Honeybee colonies can and should be managed to prevent or minimize swarming. For example, brood chamber manipula- tion, colony division, adding supers for brood rearing and honey storage, and replacing old or failing queens can all reduce the swarming impulse. These and other management practices to control swarming are explained in detail in good beekeeping textbooks. Beekeepers who learn of a swarm should take reasonable measures to see that the swarm is retrieved.

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Provision of water

Beekeepers should provide water for their bees before locating them in their yard. Bees prefer a sunny

place with surface moisture, for example wet sand or gravel or the edge of a birdbath. If you establish such water sources, your bees will become habituated to them and will be less likely to visit swimming pools or hot tubs. Remember that in very hot weather, bees use a large amount of water to maintain temperature and humidity within the hive.

Queens

In any instance that a colony exhibits unusual defensive characteristics (stinging or attempting to sting without provocation) or exhibits a frequent tendency to swarm, it is the beekeeper's duty to requeen from European stock.

Queen Bee

Robbing Behavior

When nectar is scarce, honeybees may rob honey from other hives. Under such conditions, bee- keepers should work hives for only a very short time, if at all. Exposing honey (especially sticky honeycombs) outdoors often encourages robbing. All spilled honey should be cleaned up immediately. To prevent robbing, buildings and trailers used for honey extraction must be made beeproof, as far as is practicable.

Disease control

There are a number of honeybee diseases and pests, of which American Foulbrood (AFB) is the most serious. Beekeepers should be extremely cautious about mixing hive equipment or purchas- ing hives from sources that are not certain to be AFB-free. (Contact the Maine Department of Agriculture to have used beekeeping equipment inspected.) Finally, it is incumbent on beekeepers to manage parasitic mites and other pests responsibly for both colony health and honey quality.

Transportation of hives

Beekeepers must take appropriate care when transporting hives of honeybees. All loads of hives and supers of honey must be secured in accordance with Maine Department of Transportation regulations. Bees being transported should have entrance screens or be secured under netting.

Recommendations for Considerate Hive Management

Beekeepers should take into account that weather conditions influence bee behavior and plan to work bees when conditions are favorable. They should make sure that neighbors are not working or relaxing outdoors when they open hives and should try to perform hive manipulations as quickly as possible, with minimum disturbance to the bees. Extended hive manipulations, particularly removing honey, should be carefully planned to accommodate neighbors' activities. Beekeepers should use smoke when working bees and should smoke hive entrances before mowing or trimming in the hive area. Clippings and exhaust should be directed away from
hive entrances.

Additional Information

MAINE STATE BEEKEEPERS ASSOCIATION
http://mainebeekeepers.org/

MAINE DEPARTMENT OF AGRICULTURE
Division of Plant Industry
28 State House Station Augusta, ME 04333-0028
(207) 287-3891 Anthony M. Jadczak, State Apiarist anthony.m.jadczak@maine.gov

COOPERATIVE EXTENSION OFFICES

For information on all county extension offices: University of Maine Cooperative Extension 5741 Libby Hall Orono, ME 04469-5741 (207) 581-3188 1-800-287-0274 (in Maine)
http://extension.umaine.edu/

Acknowledgements

The Maine State Beekeepers Association gratefully acknowledges our debt to the Code of Practice for Urban Beekeeping in Queensland (http://www2.dpi.qld.gov.au/bees/16815.html), published by the Department of Primary Industries and Fisheries, Queensland, Australia (www.dpi.qld.gov.au), and to the Model Beekeeping Ordinance for Louisiana Local and Municipal Governments, published by the Louisiana State University Agricultural Center.

Information is provided in this document as general advice on sound beekeeping practices. Beekeepers, local authorities, and others should seek professional advice on specific issues and situations.

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