

City of Eau Claire's Best Practices for Urban Beekeepers

1. Introduction

Interested in beekeeping? According to the USDA, honeybees (*Apis mellifera*) are responsible for one of every three mouthfuls of food we eat. Bees not only pollinate our fruits, vegetables, and flowers, but also the food fed to farm animals across the country. Their economic impact numbers in the billions of dollars because honeybees are essential to sustaining plant, animal and human life.



With bee populations dwindling for several decades, beekeepers have looked to urban environments to slow colony losses. Honeybees kept in residential

areas have shown advantages to their rural counterparts in terms of over-winter successes and honey produced. Urban beekeeping has proven to be safe and productive but requires some extra consideration to avoid nuisance or disruption to neighbors.

2. Education

All beekeepers should have a solid understanding of honeybee biology and basic beekeeping methods. See recommended literature and additional resources in Sections 11 and 12 of this document. Beekeepers should stay informed of recommended changes in beekeeping practices, including the treatment of parasites and illness, threats to honeybee health, and government regulations. One way to do so is to become a member of a beekeeping association that holds regular meetings, such as the [Chippewa Valley Beekeepers Association](#), or the [Dunn County Beekeepers Association](#).

3. Permit & Inspections Required

Within the city of Eau Claire, residents wishing to keep honeybees must obtain a permit. Contact the Eau Claire City-County Health Department's [Environmental Health Division](#) at 715-839-4718 for applicable codes, permits, fees and other pertinent information. Their location is at the Eau Claire County Courthouse, 720 2nd Avenue, Eau Claire, WI 54703. Carefully review all beekeeping provisions found in the [City Ordinance](#), Title 6, Chapter 6.14 before making application.

New permits are granted subject to the successful completion of an Environmental Health Division pre-inspection. Permit renewals may only be granted subject to the successful completion of at least one annual inspection by an authorized agent such as by the Chippewa Valley Beekeepers Association or the State Apiary Inspector.





4. Best Practices Overview

Best beekeeping practices include maintaining bee colonies in moveable-frame hives that are kept in sound and usable condition; providing a constant and adequate water source; locating hives so that the movement of bees does not become a public nuisance. Beekeepers shall be able to respond immediately to control bee swarms and to remediate nuisance conditions that include, but not be limited to, aggressive or objectionable bee behaviors, hive placement or bee movement that interferes with pedestrian traffic or persons residing on or adjacent to the hive premises; and overcrowded, deceased or abandoned hives.

5. Hives

Conditions and exemptions for keeping and maintaining hives, as well as standards of practice, are found in City Ordinance, Sections 6.14.040 and 6.14.050.

5.1. Hive Management

Beekeepers should take into account that weather conditions influence bee behavior and plan to work with bees when conditions are favorable. Beekeepers should try to make sure that neighbors are not outdoors working or relaxing nearby when they open hives and should perform hive manipulations as quickly as possible with minimal 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. Consider using a manipulation cloth (to cover the top of the open hive) in extreme heat or to otherwise minimize hive disruption.



5.2. Hive Placement

Correct placement of hives is a very important consideration for responsible beekeeping in urban and suburban settings. Renters are especially encouraged to seriously consider the long-term potential of their situations and must obtain owner permission in order to keep bees. Ensure that your hive is in a location that can be accessed regularly, safely, and easily.

Hives should be kept as far away as possible from roads, public sidewalks, and rights of way. Flight paths into the hive (generally ten feet in front of the hive entrance) should remain within the owner's lot, although flyway barriers (e.g., fencing and tall shrubs) can sometimes be used to redirect the bees' flight pattern.

5.3. Hive Densities in an Urban Setting

Beekeepers are advised to closely observe their apiary locations to determine the carrying capacity of the area—both the immediate area and roughly three miles in all directions— and to limit the number of hives



accordingly. Signs of over-saturation in an area include slow colony growth, poor honey production, and excessively defensive behavior. Check with the Environmental Health Division on existing hives in your area.

5.4. Provision of Water

Beekeepers must provide a constant and adequate water source. Bees use large amounts of water to control temperature and humidity within the hive. They prefer a sunny place with surface moisture—such as gravel, a sponge set in a dog water bowl or the edge of a birdbath—where they will not drown. The water should be kept fresh and clean so as not to become a breeding ground for mosquitoes. Beekeepers should establish such water sources near the apiary to encourage bees to forage for moisture near the hive. In hot weather, honeybees use large amounts of water to control temperature and humidity within the hive. It is particularly important in an urban environment to provide a source of fresh and constant water for the honeybees, to prevent them from seeking water from sources such as air conditioners or other such locations where the honeybee would be perceived as a nuisance.

6. Colony Temperament

Although generally docile, honeybees (*Apis mellifera*) can and may sting. Responsible management is therefore necessary to avoid creating problems for neighbors, particularly in an urban setting. A colony's temperament is determined by its queen's characteristics, its health, environmental factors (e.g., weather), and proximate activities. Every effort should be made to maintain a docile and non-defensive colony.

6.1. Swarming

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

- ❖ Appropriately timed addition of supers for brood rearing and honey storage
- ❖ Use of screened bottom board
- ❖ Brood chamber manipulation and/or colony division
- ❖ Replacement of old or failing queens

When a swarm occurs, efforts should be made to collect the swarm. 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. If in doubt, you may contact the Chippewa Valley Beekeepers Association for a qualified beekeeper to assist.

6.2. 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. All honey, wax, and syrup spills should be cleaned up immediately. Areas used for honey extraction should be bee-proofed to prevent robbing situations.

7. Queens

Queens should only be obtained from the most reliable sources. Local sources, where available, are preferred to reduce the chances of introducing Africanized honeybees and to ensure that the queen is well suited to the climate.



Beekeepers should ensure that their queens are young and vigorous layers. A queen of less than two years old is recommended. Nevertheless, each beekeeper must evaluate their queens on a regular basis for performance and hive gentleness. Desirable characteristics for a queen include:

- ❖ Gentle disposition
- ❖ Brood viability
- ❖ Low swarming instinct
- ❖ Colony build up
- ❖ Disease and pest resistance
- ❖ Pollen hoarding

Only queens of European origin should be used. It is recommended that Italian or Minnesota Hygienic queens be used in Eau Claire, although other European races of *Apis mellifera* include Buckfast, Carniolan, Caucasian, Cordovan, Russian, and Starline. Any colony exhibiting unusually defensive behavior or an excessive swarming tendency should be requeened as soon as possible.

8. Disease Control

There are a number of honeybee diseases and pests for beekeepers to be concerned with. It is critical that beekeepers be educated to recognize and respond to disease. Some diseases, like American Foulbrood, are extremely contagious. Beekeepers should be extremely cautious about mixing hive equipment and purchasing used equipment for this reason. It is incumbent on beekeepers to manage all disease and pests, including parasitic mites, to ensure colony health and honey quality. Beekeepers should also report outbreaks of bee disease and pests to the Environmental Health Division of the City-County Health Department.

9. Record Keeping

Good record keeping should be a priority for all beekeepers. A written record of colony manipulation and observation should be maintained for each hive. Your colony management log should include a catalog of the equipment used, a record of inspections and findings therein, and a history of actions (e.g., adding / removing honey supers), and any relevant observations regarding the hive.

10. Africanized Honeybee (AHB)

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 several southern states. 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.

10.1. Avoid AHB Introduction & Establishment

The AHB avoidance practices are intended for maintenance of European stock and include:

- ❖ Bi-annual requeening with certified European stock purchased from reliable sources (local when possible)
- ❖ Requeening only with marked queens
- ❖ Maintaining requeening records and purchase documentation
- ❖ Monitoring the behavior of the bees and replacing the queen immediately if the hive becomes difficult to manage



Any beekeeper who witnesses unusually defensive behavior or an AHB should take the following steps:

1. Contact the City-County Health Department's Environmental Health Division at 715-839-4718
2. Contact the State Apiarist Inspector at 608-224-4572
3. Requeen immediately with certified European stock
4. Monitor requeened hive for continued defensiveness

11. Recommended Literature

- ❖ Bee Culture - The Magazine Of American Beekeeping
- ❖ The Beekeeper's Handbook by Alphonse Avitabile & Diana Sammataro (2006)
- ❖ Beekeeping for Dummies by Howland Blackiston (2009)
- ❖ First Lessons in Beekeeping by Keith S. Delaplane (2007)
- ❖ Natural Beekeeping: Organic Approaches to Modern Apiculture by Ross Conrad (2007)
- ❖ The ABC & XYZ of Bee Culture: An Encyclopedia Pertaining to the Scientific and Practical Culture of Honey Bees
- ❖ The Backyard Beekeeper: An Absolute Beginner's Guide by Kim Flottum (2010)
- ❖ Beekeeping: A Practical Guide by Richard E. Bonney (1993)
- ❖ The Hive and the Honey Bee by L.L. Langstroth (1853)
- ❖ Biology of the Honey Bee by Mark L. Winston (1991)
- ❖ Honey Plants of North America by John H. Lovell (1926)



12. Additional Resources

- ❖ WI State Beekeeper's Association www.wihoney.com
- ❖ Chippewa Valley Beekeepers Association www.chippewavalleybeekeepers.com
- ❖ Dunn County Beekeepers Association www.dunncountybeekeepers.org
- ❖ Wisconsin Department of Agriculture, Trade and Consumer Protection www.datcp.state.wi.gov/farms/bees_and_honey/index.aspx
- ❖ University of Minnesota – Bee Lab www.beelab.umn.edu
- ❖ University of Wisconsin Department of Entomology www.entomology.wisc.edu
- ❖ Certified Naturally Grown's Apiary Standards - Handbook for Natural Beekeeping www.naturallygrown.org/documents/Handbook.pdf

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Disclaimer

This document is and will always be a work in progress, intended for regular update and revision. It offers guidelines for responsible hobby beekeeping. Likewise, this document is not intended to provide legal advice. It does not address practices related to selling honey or any other farm product; moving colonies, bees, or beekeeping equipment; or liability/insurance issues.

