

Proposed Modifications to the DRAFT Madison Beekeeping Ordinance

Dane County Beekeeper's Association

December 13, 2011

DCBA Ordinance Workgroup Meeting 11/15/2011

Present: Jacob Franzen, Ann Garden, Michael Gourlie, Paul Oliphant and Claire Strader

Modified based on discussion and feedback submitted from DCBA members both in email responses to workgroup drafts and submitted in person during the Dec. 6, 2011 meeting. The 19 DCBA members present voted unanimously to approve the city draft ordinance with the following changes highlighted below.

- i. Hives may be located on lots with residential use
- ii. No more than ~~two (2)~~ **six (6)** hives may be located on a lot.
- iii. No hive shall exceed ~~ten (10)~~ **seventeen (17)** cubic feet in volume.
- iv. No hive shall be located closer than ~~fifteen (15)~~ **three (3)** feet from any property line.
- v. No hive shall be located closer than ~~forty (40)~~ **ten (10)** feet from a public sidewalk or a principal building on an abutting lot.
- vi. A constant supply of water shall be provided for all hives.
- vii. ~~On all lots where hives are located within twenty-five feet of a property line, a flyway barrier shall be located parallel to the property line and shall be at least six (6) feet in height and extend at least ten (10) feet in each such parallel direction from the hive.~~ **A flyway barrier shall shield any segment of a property line that is located within twenty-five (25) feet of a beehive. The flyway barrier shall be at least six (6) feet in height and** ~~The barrier shall~~ consist of a wall, fence, dense vegetation, or a combination thereof. **It shall be positioned to transect both legs of a triangle extending from an apex at the beehive to each endpoint of the property line segment that is required to be shielded.**
- viii. The owner, operator, or tenant obtains a license under Sec. 9.53, MGO.
- ix. The applicant for the license notifies all residents of the property and the owner or operator of the property if the applicant is not the owner or operator. Notification is not required for renewal of a license."

The rationale for proposed changes follows.

- ii. No more than six (6) hives may be located on a lot.
 - It is common for one-third ($\frac{1}{3}$) to one-half ($\frac{1}{2}$) of all hives to be weak and low producing due to early swarming, weak or absent queen bees, or low hive population. In addition, it is DCBA's experience that approximately fifty (50) percent of hives succumb to Wisconsin winters for a multitude of reasons, including Colony Collapse Disorder (CCD) and weather. Up to six (6) colonies would allow for natural colony loss, yet maintain two (2) to three (3) healthy hives, along with two (2) or three (3) very small, weak ones.

- An even number is preferable for a hive limit. Currently accepted best practice for Northern beekeeping is to manage hive pairs. In the first year, a colony is managed primarily for good health with the objective being the survival of its first winter. The second year the colony is managed for production of hive products. With a pair of hives, one colony can be building while the other is producing (see *Beekeeping in Northern Climates* by Marla Spivak, Distinguished McKnight Professor of Apiculture and Social Insects, Department of Entomology, University of Minnesota).
 - Many beekeepers produce their own queen bees. This practice requires several freestanding mini-hives called ‘nucs.’ Raising queen bees allows beekeepers to propagate bees that show certain strong genetic traits, such as high honey production and the ability to adapt to Wisconsin’s climate.
- iii. No hive shall exceed seventeen (17) cubic feet in volume.
- A strong hive can be as large as three deep brood boxes (which are where bees reproduce and are therefore non-honey producing boxes) and eight (8) medium “supers” (honey producing boxes) above the brood boxes. The total cubic volume of such a hive with standard 10-frame boxes is roughly 16.5 cubic feet (1.89 cubic feet per brood box and 1.32 cubic feet per medium super box). Other normal hive configurations used by beekeepers will fit within these size limitations.
 - Strong, and thus large, hives are desirable to promote hive health and increase the chance of surviving winter.
 - Strong hives must have adequate space to allow the beekeeper to utilize normal bee behavior to reduce the risks of both swarming and absconding.
- iv. No hive shall be located within three (3) feet of a property line.
- vii A flyway barrier shall shield any segment of a property line that is located within twenty-five (25) feet of a beehive.
- Normal bee behavior entering and exiting a hive is to fly five (5) to six (6) feet out and then upwards in order to clear all obstacles in the direction the bees are heading. They remain aloft above all obstacles until they reach their destination. The proposed six-foot flyway barrier will assure that bee takeoff and landing paths are sufficiently above head level such that they would not serve as a nuisance or safety risk to anyone across the flyway barrier.
 - A minimal distance from the property line is necessary to assure room for a flyway barrier and maintenance of this barrier while allowing sufficient room to work on the hive.

- A beehive built close to a property line where a flyway barrier is required will not thrive unless the entrance of the hive is pointed away from the property line flyway barrier. This is because the bees need a normal flight trajectory, both coming and going. In other words, allowing beehives to be close to the property line actually allows more possibilities for hive placement that direct the bees flight pattern over the beekeeper's own yard.
- The process for locating a flyway barrier is determined by first creating a circle from the beehive's center with a radius of twenty-five (25) feet. Any property line intersecting that circle will create two points on that circle from which a triangle can be constructed using the beehive's center as the third point. The flyway barrier must transect both radial legs of the triangle (see Figure A).

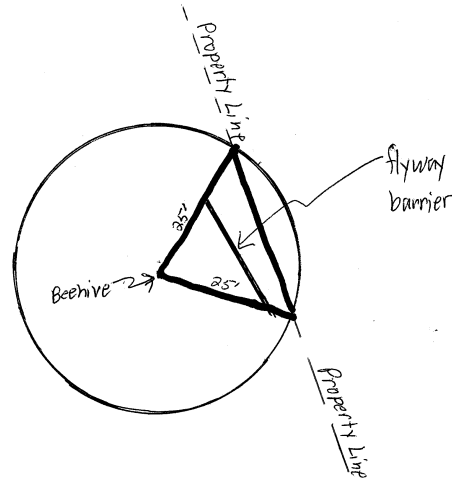


Figure A (Example)

- v. No hive shall be located closer than ten (10) feet from a public sidewalk or a principal building on an abutting lot.
- Ten (10) feet allows sufficient distance for bees to achieve normal landing and takeoff trajectory in order to avoid obstacles, including travelers and principal buildings.
 - This distance will also allow for routine hive maintenance while keeping the bees sufficiently far away from passersby so as not to alarm them, not only when bees are flying normally, but also when they are taking their regular orientation flights.
 - Additionally, beehives located within ten (10) feet of public walkways and principal buildings will be within twenty-five (25) feet of a property line and will therefore require the flyway barriers as specified in Section vii. above.

Note: Locating a beehive ten (10) feet from a principal building on an abutting lot could only happen if the principal building is located closer than seven (7) feet from the common property line due to the three (3) foot minimum distance the hive must be onto the beekeeper's property from the common property line. The normal outcome for principal buildings on an abutting lot would be a hive that is located well over ten (10) feet from the principal building and even then is more likely than not to be a situation requiring a flyway barrier as specified in Section vii. above.