

Study

Over the course of the past 15 years, Health Department staff and the Board of Health have had requests to make various revisions to Appleton Municipal Code Chapter 3 Animals, Sec 3-52, related to restricted species in the City. During this time frame, the Health Department has had varying requests to revise the ordinance language to allow for residents to raise pot belly pigs, pigmy horses, goats, chickens, bees, and ducks. Requests to change the language to allow for raising these restricted species in residential settings have been denied by the Common Council on each occasion.

In 2011, Health Department staff recommended, and the Board of Health and Common Council voted to approve, a permitting process, administered by the Health Department, for allowing up to five Honey Bee hives within areas zoned P-I, Public Institution Districts. In 2013, the Municipal Code was again amended so that a permit holder may maintain three Honey Bee hives per acre up to a maximum of 25 hives within an area approved as an urban farm. This language was added into Sec 3-52 (b) of the Municipal Code.

As it relates to this current request, Health Department staff has reviewed dozens of municipal codes and a model ordinance from the State of Minnesota related to bee-keeping.

We also received helpful information from residents, business owners (who sell related equipment) and current bee tenders who live outside the City.

Some of what we learned in these discussions, and by the review of ordinances, relate to two particular species of bees: the Mason Bee, and the Common Honey Bee.

Mason Bees (*Osmia Lignaria*) are non-stinging, honey producing bees. One hundred forty different varieties of Mason Bees are present in North America, and there are 200 varieties worldwide. Mason Bees, also known as the blue orchard bee, are the most common bee found in Wisconsin. The Mason Bee is a great pollinator, but nonsocial unlike the Honey Bee. Mason Bees work alone. All

Mason Bees lay eggs, live about 8-10 weeks, hibernate in the winter, and the males die in the spring after inseminating the females as they are no longer needed. They move frequently to where the pollen is, and they need a source of mud to cap the tubes filled with honey and the larvae in them - no wax. Mason Bees are a food source for birds including Robins, Crows, Starlings, and Wood Peckers. Their short coming is a low amount of honey production and no wax production. They are good pollinators when they stick around, and they do not sting.

Honey Bees (*Apis mellifera*) are social insects. They do sting but only as a last resort. When they sting they die. Honey Bees produce commercial quantities of honey and wax. Honey Bees are eusocial: they live in groups and divide labor among members who specialize in certain tasks. Honey Bees are so reliant on each other that no individual bee can live long on its own.

The Queen: The only sexually developed female in the hive. The Queen's task is reproduction and hive control via pheromone production.

Drones: Male bees. They have a defined life cycle. They mate with Queen Bees from other hives for genetic diversity. Despite the lack of participation in day to day operation of a colony, drones seem important for the normal function of a colony from which they originate.

Worker Bees: They are sexually underdeveloped female bees. Workers live only 6 weeks during the foraging season (honey producing season). Their life span is affected by flight miles more than time. Worker bees that emerge in the fall live 6 months, help the colony survive the winter, and help rear new Worker bees for the spring.

Bees sometimes make headlines in the news because of the Africanization of the bees in South America and South US from strains of aggressive African bees infiltrating the native hives, displacing the docile strain with a more aggressive bee. These bees have value because they produce more honey. They are more difficult to control, and like to sting. Lucky for us they do not like cold weather. Bee-keepers in the Midwest do not handle these strains.

Recommendations

Staff members from both the Health Department and Attorney's Office have completed extensive research and identified the important components, within the various ordinances we have reviewed, to be included in the draft ordinance we crafted as requested. We did limit our language just to honeybees based on the written request by the sponsoring alderpersons.

We recognize the policy decision as to whether or not to allow Honey Bee hives within residential sections of the City will be decided by Common Council.

As staff, in addition to the drafting Apiary Requirements, which is based on minimizing neighborhood disputes and related concerns, we have also written a suggested permitting process. This process includes a permitting fee to capture staff time commitment to reviewing applications, neighborhood notifications and inspecting the hives.