





BEE Educated - A Layman's Guide to Bees in Walla Walla County by Nina Baston, CCEO

To enforce the County Codes as they relate to Bees in Walla Walla County, I had to do some research. I spoke with many famers, bee experts, the WA State Department of Ag, and others. What I found was that what I believed to be a minor issue in the Walla Walla Valley is actually a major issue spurred by the workings of three incredible, relatively small, species of insects. In most of the County, the rules are quite simple. You may have honey bees, if you have enough blossoming bee forage to support them *on your own property*. Their forage or food supply consists of nectar and pollen from blooming plants within flight range. The number of colonies of bees is limited to one colony for each 2,000 square feet of open space.

However, in our County we have a relatively unique situation that affects our bees. First we will start with climate. In the Touchet and Lowden area there is less precipitation than other areas of the County. That area contains the right kind of soil (with just the right amount of salt, the adequate drainage and sun/shade combinations) to successfully grow alfalfa. About 25% of the total amount of alfalfa seed produced in the United States per year is right here in Walla Walla County. Bees are another important part of that alfalfa seed production.

Three kinds of bees work the alfalfa fields in the Touchet/Lowden area known as the "Honey Bee Control Area".

Alkali bees, (photo above left) which are slightly smaller than honey bees, pollinate many crops but are native to dry regions of the Western U.S. When it comes to alfalfa, alkali bees are great pollinators and increase the yield of fields. Alkali bees can forage for miles and pollinate about 95 percent of the blossoms they visit. Because of their use of alkali bees, farmers' alfalfa seed yields here are often 50 percent higher than those of other production areas. To raise alkali bees, farmers either maintain natural bee beds in the alkaline soil or create artificial beds. To do that, they install a subsurface irrigation system, using PVC pipe with holes punched in it. Water seeps out and migrates to the surface. The soil must be moist, but not too wet. Alkalis produce only one generation per year and fly relatively low to the ground.

Leafcutter bees (photo above center) are used in addition to the alkali bees. These bees are considerably smaller than the alkali bee or the honey bee. They can fly only 300 to 500 feet from their housing. Leafcutter bees are cavity dwelling bees that lay their eggs in existing holes. Leafcutters are solitary bees, meaning that they don't produce colonies as do social insects (honeybees). They thrive when provided with predrilled "bee boards" that they use for nest construction. At the end of the season, the nest cells with developing bees are collected and carefully stored, to be released the subsequent season when alfalfa blooms.

Honeybees (photo above right) are social and cooperative insects. A honeybee can fly for up to six miles, and as fast as 15 miles per hour. Honey Bees live in a nest, called a "hive." A single domestic hive can have up to 20,000 - 80,000 bees, mostly workers. They are larger, smarter, and more aggressive than alkali and leafcutter bees. Honeybees generally attack only to defend their colony, but will also attack if they are seriously disturbed outside the nest. They become aggressive as a last resort and die when they do sting. They are very effective pollinators across many crops. Vegetables such as peas, beans, as well as fruit and some nut trees, including apples, pears, raspberries, strawberries, blueberries, and almonds need honeybees for a good yield, among many other food crops.

So what is the reason for a honey Bee Control area? Bees eat two things: pollen – protein food, and nectar – carbohydrate food. When their food source is depleted in an area they can fly up to six miles away to get food if necessary. The alkali and leaf cutters need these to survive also and cannot go nearly as far to get it. Honey bees do not particularly like alfalfa pollen and colonies don't thrive when it is the sole source of their protein. Honey bees are bothered by is the tripping mechanism of the alfalfa flower. (Continued on next Page)

When the bee reaches down into the center of the flower to sip the nectar, the flower releases its pollen with an explosive spring that delivers a good whack to the honey bee. To avoid the direct hit, honey bees learn how to "steal" the nectar from the side of the flower. While this works for the bee, it fails to pollinate the flower. Therefore, in an area with so much invested in alfalfa, the honey bees are not as good at pollinating and can end up doing more harm than good to an alfalfa crop. Also, too many honey bees can affect the alkali and leafcutters ability to produce.

In Walla Walla County, during the period from June 1st until September 1st in the honeybee control area, there are limits on the honeybees you can have. This is the region and the time period most affected by the dry climate that encourages the growth of alfalfa and therefore the use of alkali bees and leafcutters. According to County Code 17.26.020 Table for minimum standards for animals "The number of colonies of bees shall be limited to one colony for each 2,000 square feet of open space" It goes on to say that "During the period from June 1st until September 1st of each year the following regulations will be in effect" in the Honey Bee Control Area. "A. Not more than one honey bee colony per acre of property cropped in commercial alfalfa for seed and/or commercial clover for seed that is blossoming is permitted. B. Not more than ¼ honey bee colony per acre of property with blossoming bee forage of other types is permitted. C. Not more than 50 colonies are permitted in an apiary. D. Apiaries must be setback from property lines a distance of four feet per colony. E. Apiaries must be separated a distance of 400 feet and must be located within 400 feet of blossoms intended as forage."

Here are some examples. A ten acre property that is all blossoming forage inside the Honey bee Control Area in July, only 2.5 colonies of honey bees are allowed. (*The photo on the bottom right shows 5 colonies. In our area it is more common to see a pallet with four colonies each.*) Now, imagine there is a home, a horse pasture, and only 2 acres blossoming forage. The number goes down to ½ a colony very quickly. If the owner still maintained 2.5 colonies of bees then there is not enough to feed the honey bees. They will not be able to survive on what you provide on your property and will begin to help themselves to the neighboring alfalfa.

On 200 acres that was nothing but blossoming forage, the owner would be allowed to have 50 colonies. This is the maximum allowed in one apiary (group of colonies). Making sure that the apiary met setback and separation distances. Now if the owner had a 400 acre property, they could have 50 colonies in each of two apiaries but again they need to meet the standards for blossoming forage, setback from property lines and separation distances between apiaries.

You may be asking what does this have to do with me? First of all the bees are just one of the many things that make Walla Walla County a unique and wonderful place to live. These bees have a job to do and bring quite a bit of local revenue by way of pollination. They are big economic business for this Valley. The bees on your property can impact your neighbors financially. There have already been ten code cases this year that have stemmed from bee complaints. Finally, many of you have been approached by individuals or companies that offer to pay you to house their bees on your property. They are not your bees, you do not care for and/or maintain them and it is easy to think of them as not being your responsibility. However, as a property owner in Walla Walla County you are the one responsible for any violations of code on your property and those infractions could be up to \$250 a day. Please call our office (509-524-2616) and we will help you to figure out the allowable amount of bees you can have in a given zone or on a given property before placing bees on your property. Let's figure it out together before bee season becomes violation season.



Alkali Bee Bed



Leafcutter Bee Hive



**Honey Bee Colonies** 

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Thank you for your interest. Should you have any questions, or to submit ideas or suggestions that may make a good newsletter article, do not hesitate to contact Nina Baston @ 509-524-2616 or <a href="mailto:nbaston@co.walla-walla.wa.us">nbaston@co.walla-walla.wa.us</a>. This publication will be issued 4 times a year. In the mean time you can stay up to date at our website at http://www.co.walla-walla.wa.us/departments/comdev/index.shtml

## 17.08.262 - Honey bees.

"Honey bees" means honey producing insects of the species apias mellifera, and includes the adults, eggs, larvae, pupae or other immature stages thereof, together with such materials as are deposited into hives by their adults, except honey and beeswax in rendered form. (Ord. 269 (part), 2002)

## 17.08.151 - Colony or Colonies.

"Colony" or "colonies" of bees refers to any natural group of bees having a queen. (Ord. 269 (part), 2002)

#### 17.08.256 - Hive.

"Hive" means any receptacle or container made or prepared for the use of bees, or box, or similar container taken possession of by bees. (Ord. 269 (part), 2002)

## 17.08.051 -Apiary.

"Apiary" includes bees, hives and appliances wherever they are kept, located or found. (Ord. 269 (part), 2002)

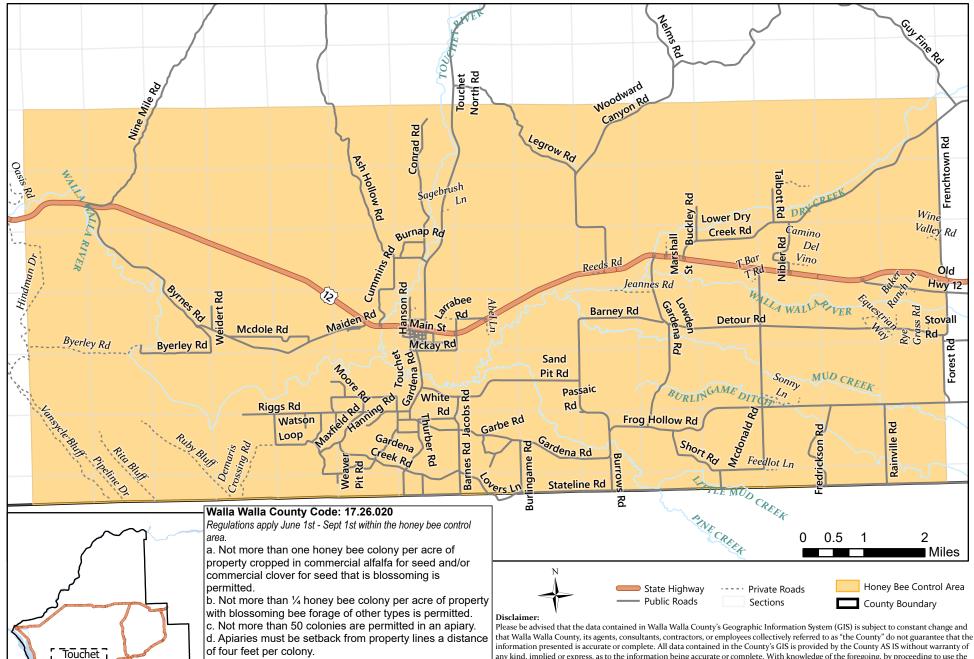
## 17.08.052 - Appliances.

"Appliances" means any implements or devices used in the manipulating of bees, or their brood, or hives, which may be used in any apiary or any extracting or packing equipment. (Ord. 269 (part), 2002)

#### 17.26.020 - Table of minimum standards for animals.

Bees	The number of colonies of bees shall be limited to one colony for each 2,000 square feet of open space-when permitted by conditional use permit.
	1. During the period from June 1st until September 1st of each year the following regulations will be in effect in the area described below in (2).
	A. Not more than one honey bee colony per acre of property cropped in commercial alfalfa for seed and/or commercial clover for seed that is blossoming is permitted.
	B. Not more than ¼ honey bee colony per acre of property with blossoming bee forage of other types is permitted.
	C. Not more than 50 colonies are permitted in an apiary.
	D. Apiaries must be setback from property lines a distance of four feet per colony.
	E. Apiaries must be separated a distance of 400 feet and must be located within 400 feet of blossoms intended as forage.
	2. Honey bee control area (June 1st to September 1st).
	Sections 1-3, 10-15, T6N, R32, EWM; Sections 13-15, 22-27, 34-36, T7N, R32, EWM; all of T6N, R33, EWM; Sections 13-36, T7N, R33, EWM; all of T6N, R34, EWM and Section 13-36 of T7N, R34, EWM, lying within Walla Walla County, Washington.

# Walla Walla County Honey Bee Control Area



e. Apiaries must be separated a distance of 400 feet and

must be located within 400 feet of blossoms intended as

forage.

Please be advised that the data contained in Walla County's Geographic Information System (GIS) is subject to constant change and that Walla County, its agents, consultants, contractors, or employees collectively referred to as "the County" do not guarantee that the information presented is accurate or complete. All data contained in the County's GIS is provided by the County AS IS without warranty of any kind, implied or express, as to the information being accurate or complete. With knowledge of the foregoing, by proceeding to use the County's GIS, each user agrees to waive, release and indemnify Walla Walla County, its agents, consultants, contractors or employees from any and all claims, actions, or causes of action for damages or injury to persons or property arising from the use or inability to use Walla Walla County's GIS data. Walla Walla County will not be responsible for any data distributed by others. The release of data to the requestor does not authorize the party to redistribute or resell or act as an agent for any data received from the County.