



## Walker County Appraisal District Degree of Intensity for Beekeeping

Beekeeping is an agricultural use and shall qualify for agricultural use productivity valuation if used for pollination or for the production of human food or other tangible products having a commercial value. (Sec. 23.51(2) Tax Code)

*Acreage Requirement:* the State of Texas has set a minimum 5 acres and a maximum 20 acres to qualify beekeeping as an agricultural use.

Our degree of intensity standard is set at a minimum of six colonies and 5 acres. The minimum degree of intensity was established using Section 131.001 Texas Agriculture Code's definition of an apiary, which is a place where six or more colonies of bees or nuclei of bees are kept. A colony is the hive and its equipment and appurtenances including bees, comb, honey, pollen, and brood.

For each additional 2.5 acres one additional hive is required. If additional acreage is less than 2.5 acres no additional hive is required. For example, if property owner has 14.6 acres of land used for beekeeping nine hives would be needed to qualify.

|                            |                |
|----------------------------|----------------|
| First 5 acres              | 6 hives        |
| Additional 7.5 acres       | 3 hives        |
| <u>Remaining 2.1 acres</u> | <u>0 hives</u> |
| Total Hives required       | 9 hives        |

When property owners initially qualify for agricultural appraisal they must show proof of history for agricultural use/beekeeping for any five of the preceding seven years. One way to do this is to ask for export, import or intra-state permits, which are required by the Texas Apiary Inspection Service to transport hives.



## Walker County Appraisal District Productivity Value for Beekeeping

Under Open-Space productivity valuation, values are calculated using a modified income approach to determine the per acre value. This is done using cash lease rates that are collected each year through surveys mailed to lessees. The challenge with determining a productivity value for beekeeping using the cash lease method is usually beekeepers do not lease the land on which the hives are located. In most instances, a property owner who has hives located on his land has an open-space valuation on their property.

Using the basic Income/Rate/Value (IRV) formula for developing an income approach to value, we developed a productivity value in beekeeping.

In Texas it is estimated that a hive will produce an average of 74 pounds of honey per year. With the assistance of local beekeepers we estimated an average \$60 per hive of expenses per year. The average wholesale price for honey in 2011 was \$3.78 per pound. The following is Harris County Appraisal District's 2012 calculation and has been adopted by the Walker CAD Agricultural Advisory Board for use in Walker County due to limited data available locally.

|                                  |                                      |
|----------------------------------|--------------------------------------|
| Total Income per Hive            | 74 lbs. x \$3.78 = \$279.72          |
| Total expenses per Hive per year | \$60.00                              |
| Net Operating Income (NOI)       | \$279.72 - \$ 60.00 = \$219.72       |
| Productivity Value per Hive      | \$219.72 / .10 cap rate = \$2,197.20 |

HCAD's degree of intensity is 6 hives on the first 5 acres with 1 hive for every 2.5 acres up to 20 acres. This would give you a range of 6-12 hives minimum requirement. The productivity value is applied on a per-acre basis; therefore, the following formula was used.

HCAD's minimum requirement on 20 acres is 12 hives. Therefore, the average hives per acres is  
 $12/20 = .60$  hives.

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|-----------------------------|---|
| Productivity Value per Acre | \$2,197.20 x .6 (minimum hives) = \$,318.32,<br>or \$1,318.00 per acre. |
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