

# BEE KEEPING APPRAISAL MANUAL



PALO PINTO APPRAISAL  
DISTRICT

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# **BEE KEEPING**

## **DEGREE OF INTENSITY**

Per Texas Tax Code Sec 23.51 (2)...Beekeeping is an agricultural use and shall qualify for agricultural use productivity valuation if used for pollination or for the production of human food other tangible products having a commercial value, provided that the land used is not less than five (5) acres or more than twenty (20) acres.

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

The degree of intensity standard for Palo Pinto County is set at a minimum of six (6) colonies and five (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 (6) or more colonies of bees or nuclei of bees are kept. A colony is the hive and its equipment and appurtenances including bees, combs, honey, pollen and brood.

For each additional 2.5 acres one (1) additional hive is required. If additional acreage is less than 2.5 acres, no additional hive is required. For example, if a property owner has 14.6 acres of land used for beekeeping nine (9) 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 owner initially qualifies for agricultural appraisal they must show proof of history for agricultural use / beekeeping for any of the five (5) preceding seven (7) 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.

## **Productivity for Beekeeping**

Bees may qualify on tract of land from 5 to 20 acres. Bees can be used to establish history with supporting documentation. Hives must be maintained and kept alive. Twelve (12) hives would be required on 20 acres. Flowering plants must be planted to support hives if the hives are in areas where there is limited vegetation that requires pollination. Appraisal district will grant agricultural use on the total acreage, not use on the area where the hives sit.

## **FILING DEADLINE**

The deadline for applications is “before May 1<sup>st</sup>,” meaning the application form must be postmarked or filed no later than midnight April 30<sup>th</sup>. For good cause and only on the property owner’s request, the chief appraiser may extend the filing deadline for not more than 60 days.

## **LATE APPLICATIONS**

The property owner may file a late application up until the appraisal review board approves the appraisal records for that year. This usually occurs around July 20<sup>th</sup>. However, there is a penalty for late application. An application filed after April 30<sup>th</sup> is subject to a penalty equal to 10% of the difference between the tax if imposed at market value and the tax imposed at the agricultural productivity value. The chief appraiser must note the penalty in the appraisal records and send the property owner written notice explaining the reasons for the penalty.

## **ACTION ON APPLICATIONS**

The chief appraiser or her designee must review each application and decide to approve it and grant agricultural appraisal, disapprove it and ask for more information, or deny the application. The chief appraiser must determine the validity of all timely filed applications before she turns the appraisal records over to the appraisal review board. The chief appraiser usually gives the appraisal records to the appraisal review board by May 15<sup>th</sup>. The chief appraiser must also review all late applications before the appraisal review board approves the appraisal records. If she denies an application, she must notify the applicant in writing within five days. The applicant then has 30 days to file a protest with the ARB.

## **ADDITIONAL INFORMATION**

If the initial application does not contain all the information needed to determine whether or not a property qualifies, the chief appraiser may request additional information. The applicant must provide additional information within 30 days after the date of the request or his application will be denied.

## **ON SITE INSPECTION**

All tracts of land associated with an application are inspected via a field visit to the property to determine if the information provided on the application is accurate. Upon inspection of the property, the appraiser will look for signs of agricultural use and make notes of what is seen or not seen. Pictures of the property and evidence of agricultural appraisal may also be taken at this time. A determination is then made either to grant or deny the agricultural special valuation and the application. If the application is denied, the applicant is notified by certified mail with a reason for the denial. If the application is approved, it will be dated and initialed by the appraiser. After the agricultural use is entered into the property, the agricultural use application is scanned in to the account.

## **DENIAL OF APPLICATION**

If the application is denied, the chief appraiser shall deliver written notice to the applicant within 5 days after the date he makes the determination. The notice shall include a brief explanation of the procedures for protesting his action and a full explanation of the reasons for denial of the application. All denials are mailed out by certified mail within 5 days of determination of denial.

### **Productivity Value for Beekeeping**

Bees may qualify on tract of land from 5 to 20 acres. Bees can be used to establish history with supporting documentation. Hives must be maintained and kept alive. Twelve (12) hives would be required on 20 acres. Flowering plants must be planted to support hives if the hives are in areas where there is limited vegetation that requires pollination. Appraisal district will grant agricultural use on the total acreage, not use on the area where the hives sit.

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. The challenge with determining a productivity value for beekeeping using the cash lease method is that 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 a 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 for beekeeping.

In Texas it is estimated that an established hive will produce an average of 74 pounds of honey per year. PPAD estimates an average of \$60.00 per hive per year for expenses. The average wholesale price for honey is \$3.78 per pound. The following is Palo Pinto Appraisal District's calculation.

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 per hive	\$219.72 / .10 cat rate = \$2,187.20

PPAD's degree of intensity is 6 hives on the first 5 acres with 1 hive for every additional 2.5 acres up to 20 acres. This would give you a range of 6-12 hives as minimum requirement.

The productivity value is applied on a per-acre basis. Therefore, the following formula is used:

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

$$\$2,187.20 \times .60 = \$1,318.32 \text{ or } \$1,318.00 \text{ per acre.}$$

Beekeeping or Apiary - Max of 20 Acres	5 Acres	5-12 Acres min of 6 Hives 13-20 Acres min of ½ Hive per Acre
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### **Definitions of Common Terms Used in Agricultural Land Appraisal**

**Qualified Open-Space Land** – Land that is currently devoted principally to agricultural use to the degree of intensity generally accepted in the area and that has been devoted principally to agricultural use or to production of timber or forest products for five of the preceding seven years or land that is used principally as an ecological laboratory by a public or private college or university. Qualified open-space land includes all appurtenances to the land. For the purposes of this subdivision, appurtenances to the land means private roads, dams, reservoirs, water wells, canals, ditches, terraces, and other reshaping of the soil, fences, and riparian water rights.

**Agricultural Use** – includes but is not limited to the following activities: cultivating the soil, producing crops for human food, animal feed, or planting seed or for the production of fibers; floriculture, viticulture, and horticulture; raising or keeping livestock; raising or keeping exotic animals for the production of human food or of fiber, leather, pelts, or other tangible products having a commercial value; and planting cover crops or leaving land idle for the purpose of participation in a governmental program or normal crop or livestock rotation procedure. The term also includes the use of land for wildlife management.

**Change of Use** – a physical change, the owner must have stopped using the land for agriculture.

**Net to Land** – the average annual net income derived from the use of open-space land that would have been earned from the land during the five-year period preceding the year before the appraisal by an owner using ordinary prudence in the management of the land and the farm crops or livestock produced or supported on the land and, in addition, any income received from hunting or recreational leases.

**Income Capitalization** – the process of dividing net to land by the capitalization rate to determine the appraised value.

**Capitalization Rate** – rate used to determine agricultural valuation. It is 10%, or the interest rate specified by the Farm Credit Bank of Texas or its successor on December 31<sup>st</sup> of the preceding year plus 2.5 percentage points, whichever is greater.

**Livestock** – a domestic animal that derives its primary nourishment from vegetation, supplemented as necessary with commercial feed. Livestock includes meat or dairy cattle, horses, goats, swine, poultry, and sheep. Wild animals are not livestock.

Exotic Animal – a species of game not indigenous to this state, including axis deer, antelope, or other cloven-hoofed ruminant mammals, or exotic fowl as defined by Section 142.001, Agricultural Code.

Animal Unit – a standard for comparing different types of livestock that equals 1,000 pounds of live weight.

Wildlife Management – actively using land at the time the wildlife-management use began, was appraised as qualified open-space land, and was used in at least three of the following ways to propagate a sustaining breeding, migrating, or wintering population of indigenous wild animals for human use, including food, medicine, or recreation:

- Habitat control,
- Erosion control,
- Predator control,
- Providing supplemental supplies of water,
- Providing supplemental supplies of food,
- Providing shelter, and
- Making of census counts to determine population.

Wildlife Management Plan – gives information on the property’s history and current use, establishes landowner goals for the property and provides a set of activities designed to integrate wildlife and habitat improvement

P7-1 Irrigated Cropland – Cultivated and planted for annual crops that are watered on a regular basis.

P6-1 Orchards – Land having trees planted for the specific purpose of producing fruit and or nut crops.

P5-6 Ag Land in Incorporated City – Any 1-d-1 approved land inside city limits.

P5 Dry Cropland – Land planted in row or broadcast crops that are grown for sale or used for feed for livestock.

P4 Improved Pasture – Perennial grasses (Bluestem, Kline, Bermuda, etc) that are baled and or grazed for livestock.

P3 Native Rangeland – Partially cleared of brush and trees with native grasses used for grazing of livestock.

P2 Native Pasture – Land has extensive canopy, slope and rock making the potential livestock carrying capacity of the land restricted.

*P1 Wasteland* – Land of extremely poor quality. This land is severely restricted in its ability to support livestock due to erosion, severe rock, and or mountainous terrain. This land must be an integral part of one or more of the land types listed above to support livestock.

*Orchards / Vineyards* – This operation is in the business of cultivation and growing of trees or grapevines that produce crops of nuts or fruits. A regular schedule of pruning and spraying and cultivation or close mowed turf grass as brush and weed control must be evident. This operation like truck farming can yield good harvests off small acreage, thus a minimum size requirement would be five (5) acres.

*Hay Crop* – This operation involves the cultivation (fertilizing) of planted or maintained grasses such as hybrid Sorghum grasses or coastal Bermuda. These grasses are then cut, baled and marketed or used for personal livestock feed. Weed and brush control are usually evident. Ten (10) acres is a minimum size requirement for this type of operation. Proof of sales of hay crop, proof of ownership of livestock and baling receipts may be required.

*Truck Farming* – This operation is in the business of cultivation the soil for planting vegetables. This type of operation depends on a good source of water, thus some type of irrigation equipment should be evident. This type of operation typically requires a minimum of five (5) acres.

*Irrigated Cropland* – This operation involves the cultivation of the soil for rice production, with the intent to harvest for sale. The tract must be prepared for controlled flood irrigation with a series of levees, and a large reliable source of water. During the dry seasons, rice straw may be cut and baled for livestock feed. Irrigated cropland that is not being farmed and is in the Federal Program to receive subsidies is still considered irrigated cropland. 3-year crop rotation is the most typical being 1 year in rice production and 2 years in pasture.

*Grazing Operation* – Grazing operations may fall into one or more of the following subcategories: 1) Improved pastures – are composed of grasses that are not native to the area such as coastal Bermuda, K R Bluestem, Alicia, Bahia, Jiggs, Tifton etc. High intensity management practices such as fertilization, weed control, shredding, rotated grazing or harvesting grass for hay are common. Stocking rates for intensely managed improved pastures may be as great as one grown head per acre. 2) Native pasture – are composed of grasses that are native to the area. A low level of management is common. Native pastures that are intensely managed are considered to be equivalent to improved pasture. Stocking rates will vary greatly.

*Beef Cow/Calf* – This operation is in the business of raising beef for sale to either processors or to other operators as breeding stock. These operators include the purebred operations, also the commercial breeder who sells calves to the local stock markets. Typical requirements include a minimum herd size of five grown head of breeding age animals. One cow/calf pair or a mature individual is considered to be equivalent to one animal unit.

Feeder/Stocker Calf – This operation is in the business of raising beef for processors. This operation involves acquiring calves at a certain weight from cow/calf operators and raising the calves until they gain weight (feed lot or slaughter weight). Although both heifer and steer calves can be found in these types of operations, steer calves are the most prevalent. Typical requirements include a minimum herd size of ten head. Two calves are equal to one animal unit.

Sheep/Goats – This operation is in the business of providing two by-products, wool/mohair and meat. Commercial operations would not require any particular type of breed and is usually in the business of meat production only. Purebred operations are normally primarily in the business of producing wool/mohair, meat or animals for sale to other producers as breeding stock. Typical requirements include a minimum herd size of twenty-five head.

Horse Farm – This operation is directed to breeding operations. The by-products are colts and fillies. This operation involves having brood mares and either stud (stallion) on location or A/I service. This operation will involve facilities for the care, breeding, and raising of brood stock and their offspring together with intensive training of colts or fillies if operation involves any number of breeds and is not limited to thoroughbred and quarter horse breeds. Typical pastures are of the improved variety such as coastal and alfalfa.

Recreational Horses – Land that is used to graze recreational horses that are not used in a breeding operation or used for ranch work can qualify.

Miniature Horses/Shetland Horses – Refer to the above section on horse breeding operations. Typical requirements are four miniature horses or two Shetland horses. Two miniature horses equal one animal unit; one Shetland horse is equal to one animal unit.

Exotics – This operation involves the raising of deer breeds that are not native to Texas for supplying meat and/or leather for the specialty markets. Production and sale of breeding stock can also qualify, but proof of sales may be required. The pastures that are involved in this type of operation require a seven to eight foot perimeter fence. This fence is made up of wire mesh and may have barbed wire at the top. In order to qualify, the operator should be able to provide the district a harvesting schedule. Typical requirements include fifteen grown deer minimum.

Dairy Cow/Calf – This operation is the business of producing milk/cheese products. This operation involves dairy type breeds such as Holstein and Jersey. Typical operation involves a bull on location or A/I service to several head of breeding age cows. Calf production is necessary for the continual production of milk, and thus also is a secondary crop for the dairy producer. Calves are weaned very early from mother cows and fed out to sell to processors as veal or to local stock markets to supply the stocker calf operators. Heifer calves are returned to the herd as milk producers. Dairy herds are confined to improved pastures and in great numbers that requires a great amount of supplemental feeding. Dairies have also involved some cultivating of grain crops or fodder to support this supplemental food need. Typical requirements include a minimum of twenty-five head. One cow/calf or one mature individual is equal to one animal unit. Feedlot –

These operations that take calves and feed them for finishing purposes before slaughter. Only the part used for this operation would qualify.

Apiary or Beekeeping – This operation involves the placing of hives in order for the honeybee to produce honeycomb. This honeycomb is processed into pure honey food product for human consumption. The hives are placed in groups in an open pasture.

Floriculture – This operation is in the business of cultivating plants or nursery stock in pots on top of the ground. This stock is then sold wholesale to nurseries. Intensive conditions exist on small acreages; there are no minimum acreage requirements for these tracts.

Domesticated Fowl – This operation involves the raising of domesticated fowl, such as: chickens, turkeys and quail, as meat for human consumption. Chicken operations may involve also the harvesting of eggs as well. This operation involves raising the birds in large barns holding thousands of birds. The barns then with some surrounding land for access would qualify.

Exotic Birds – This operation involves the raising of exotic birds for breeders, zoo, or specialty markets. To qualify for open-space these cases must be reviewed on an individual basis by the chief appraiser.

Christmas Trees – This operation is in the business of cultivating evergreen trees to market as Christmas trees. A regular schedule of pruning and spraying and cultivation, along with mowed turf grass as brush and weed control must be evident. Some reliable source of water should be present. Intensive conditions exist on small acreages; a minimum size requirement would be three acres.

Aquaculture – This operation involves the raising and harvesting of fish, shrimp, crayfish, or other aquatic animals for human consumption. Intensive conditions exist on small ponds. Raising fish is a qualified agricultural land use when all the elements of a bulk harvest are present. Taking fish by individual line is clearly a recreational activity.