

## Forest Inventory and Appraisal For

Caveman II LLC Farm July 29, 2021

By:

Kraig Moore ACF
Consulting Forester/Broker
Land And Timber Realty LLC
1609 Harmony Way
Bowling Green, KY 42103
270-792-4018
Kraig@kentuckylandandtimber.com

## **Background Information**

**Client's Objective:** The client wants to determine a volume and dollar estimate for an upcoming auction of the Caveman II LLC farm.

**The Report:** The report gives background information about the methodology of the inventory, past history of tract, and potential products. The report also contains a summary of each species, their average volume per tree for trees 16" diameter and larger, and trees 13-15". Lastly, I provide my estimate of the fair market value at time of inventory.

Methodology of Inventory & Analysis: The property was inventoried by systematic forest inventory using a 10 factor prism. In this systematic cruise, preset GPS inventory points were established in the office to avoid bias. This inventory was designed for an intended sampling intensity of one plot per 3.1 acres. All hardwood sawtimber trees 13" diameter at breast height and larger were measured at each sample point. Redcedar was measured down to 10" diameter. Volume estimates were determined using the Doyle Rule, Form Class 78 for sawtimber and the Cedar 2/3 log rule.

**Potential Products:** Grade lumber, veneer (white oak and walnut), crossties, mat logs and crating material.

**Past History:** Twenty one years ago, during ownership by the Fisher family, I conducted a selective harvest of the timber on this farm. We found that some of the tracts have been harvested again, such as tracts 9-12. We did find some damage to standing timber from past forest fires. However, most of the fire damaged trees were removed with the previous sale.

**Summary:** This is a nice small sawtimber stand that has a bright future. While marketable, allowing the timber to grow another 10 years would be a wise financial decision that will pay off in the future. Tracts 9-12 appear to have the least amount of timber due to more recent harvest. Tract 5 has the best timber, and portions of tract 15-16 have nice woodland sections. Any tract with the presence of sinkholes has and will grow good quality timber. I have broken the volumes down to 16"+ diameter and 13-15" diameter trees. This will be most helpful to timber buyers in determining their value of the timber.

The volume estimates contained in this appraisal were obtained using sound forestry principles. However, even though I have great confidence in the estimates, they are only a sample of the total tree population and in no way can be guaranteed. The value estimate is the average value over all the tracts. Some tracts will have less value, and some more value. In order to determine the timber value of each tract, a separate inventory would have to be conducted.

The stated volumes are based on sample points placed across the property and expanded using published volume equations. These equations were used to estimate the entire volume on the property. The volumes, market values, and other information can vary from tract to tract. This could include tree form differences from published equations, changes in timber markets, logger utilization of trees, or other reasons.

Respectfully,

Kraig Moore, Forester/Broker

## **Summary of Inventory and Appraisal for Caveman II LLC**

**Tract Location**: The tract is located on the south side of Fisher Ridge Road, 1.5 miles west of I-65 in Hart County, Kentucky.

Accessibility: The tract has good access from Fisher Ridge Road, farm roads and fields.

**Topography**: Topography is gently to moderately sloping and offers good logging conditions.

Estimated Wooded Acres: 409 marketable hardwood acres

Estimated Total Volume: 1,538,000 Board Feet, Doyle Rule, Form Class 78

## **SUMMARY OF TIMBER FOR CAVEMAN II LLC**

SPECIES	BD/FT/VOLUME	AVE. VOL/TREE
Yellow Poplar	441,000	260
Misc. Red Oak	280,000	173
Hickory	166,000	164
White Oak	105,000	138
Black Walnut	62,000	127
Post Oak	33,000	86
Hard Maple	17,000	105
Black Cherry	14,000	191
Chestnut Oak	12,000	120
Chinkapin Oak	12,000	120
Virginia Pine	11,000	150
Ash	6,000	160
Soft Maple	5,000	100
Blackgum	4,000	100
Scarlet Oak	4,000	260
Sycamore	4,000	250
Sweetgum	4,000	230
Misc. Hardwoods	10,000	120
Total 16" DBH +	1,190,000	169
Total 13-15"	348,000	55
Total All:	1,538,000	120

13-15' diameter trees include red oak (83,000'), poplar (60,000'), white oak (53,000'), hickory (44,000'), Virginia pine (23,000'), walnut (22,000'), cedar (17,000'), post oak (15,000') Cherry (13,000'), soft maple (5,000'), Blackgum (5,000'), hard maple (4,000'), chestnut oak (4,000').

**Estimated Value**: I estimate the standing value of all trees that would be 13" diameter at breast height and larger in July 2021, to be \$594,700.00 plus or minus 10%. This is what the landowner could expect to receive from a competitive timber buyer.







