



**Forest Inventory and Appraisal
For
Monarch Revocable Trusts**

May 22, 2023

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 the timber on their farm for an upcoming auction.

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, its average volume per tree, and the estimated fair market value at time of inventory.

Methodology of Inventory & Analysis: The property was inventoried by systematic cruising using a 15 factor prism. In this systematic cruise, preset GPS cruise points were established with an intended sampling intensity of one plot per 3.15 acres. All sawtimber trees 13" diameter at breast height and larger were eligible to be measured at each sample point. Volume estimates were determined using the Doyle Rule, Form Class 78 and 80 for sawtimber and the cedar log rule. Some of the ash trees present have been killed by the emerald ash borer. We only measured and counted ash trees if they had green leaves. We found most of the ash trees contain green leaves.

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

Past History: It appears the timber has not been harvested for 30 plus years. Recent wind storms have blown down a minor amount of trees. Portions of the woodland were once grazed by livestock. In addition, we did noticed a minor amount of damage to standing timber from past forest fires.

Summary: This is a nice woodland tract. Past harvest practices have allowed the hickory and sugar maple species to occupy an unacceptable level of volume in the stand. Removing them from the stand will help promote the more desirable oaks and poplar to take their place.

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 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 Forest Inventory and Appraisal for Monarch Trust

Tract Location: The tract is located at 1642 Monarch Skillman Road in Breckenridge County, Kentucky.

Accessibility: The tract has good access from the Monarch Skillman Road and farm roads and fields.

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

Estimated Wooded Acres: 248 acres on Parcel 3.
38 acres on Parcel 2.

Estimated Total Volume: 1,575,600 Board Feet, Doyle Rule
231,800 Board Feet, Doyle Rule

PARCEL 3, 248 ACRES

<u>SPECIES</u>	<u>BD/FT/VOLUME</u>	<u>AVE. VOL/TREE</u>
Hickory	319,380	156
White Oak	241,310	225
Sugar Maple	234,210	108
Misc. Red Oak	202,270	332
White Ash	159,690	219
Sycamore	95,810	238
Yellow Poplar	81,620	316
Beech	56,780	149
Redcedar	49,680	70
Black Walnut	42,580	119
Black Cherry	31,940	134
Elm	28,390	94
Sweetgum	10,650	253
Post Oak	10,650	191
Black Willow	7,100	176
Sassafras	3,550	114
Total All:	1,575,610	181

90% Confidence interval on volume +/- 6.5%. 5,900-6,800 board feet per acre.

PARCEL 2, 38 ACRES

SPECIES	BD/FT/VOLUME	AVE. VOL/TREE
White Oak	53,500	234
Hickory	53,000	152
Sycamore	25,000	139
Sugar Maple	21,400	148
Misc. Red Oak	18,000	349
Black Walnut	17,800	83
Beech	17,500	107
White Ash	14,300	345
Yellow Poplar	7,100	510
Sassafras	3,500	114
<hr/>		
Total All:	231,100	218

90% Confidence interval on volume +/- 15.5%. 5,100-7,000 board feet per acre.

ESTIMATED VALUE:

I estimate the standing value of all hardwood trees 13" diameter at breast height and larger in May 2023 on **Parcel 3** would be \$540,000.00 plus or minus 6.5%. This is what the landowner could expect to receive from a competitive timber buyer.

I estimate the standing value of all hardwood trees 13" diameter at breast height and larger in May 2023 on **Parcel 2** would be \$90,000.00 plus or minus 15.5%. This is what the landowner could expect to receive from a competitive timber buyer.