

West Wolf Valley Tract

Forest Inventory & Appraisal

Anderson County, TN

Prepared For: Greg Snodgrass
February 6, 2019

Introduction

This forest inventory was conducted to evaluate the standing timber volume and timber value on the subject property located in Anderson County, TN. Referred to as the West Wolf Valley Tract in this report. The field work for this report was conducted in January 2019.

Property Description

The West Wolf Valley Tract is located on West Wolf Valley Road south of Clinton, TN. The property is one contiguous tract of land. The total acreage evaluated was approximately 105 acres based on the Anderson County tax map and property survey. The forested area is \pm 97 acres as determined by the sample points and mapping done during the inventory. There are \pm 8 acres of fields and other open areas. Tract acres and forested acres were also calculated using GIS software.

Property lines run mostly with old and new fencing that were located during the field work. The eastern property line is not fenced but was clearly marked with red paint. Field work does not represent a survey but is believed to be fairly accurate based on the county tax map.

Access to the tract is good. Interior access is available via a network of old logging roads. Interior roads will need to be reopened and upgraded to provide year round access.

Forest Description

The forest is located along two flat ridges and one creek drainage. The tract is mostly mixed-hardwood stands with pockets of Virginia pine. There are multiple age classes across the tract as a result of past land use which includes timber harvesting. The most recent harvest appears to have taken place approximately twenty years ago. The residual stand of timber is a mix of lower grade hardwood with scattered higher quality trees. Many of the residual oaks and poplars have Epicormic branching (lateral branch sprouts) due to the increased sunlight coming through the canopy. Over time this lateral branching will degrade the timber value for sawtimber products.

There is a large Kudzu patch on the southern side of the tract. This kudzu patch runs from the property line down to the creek near the middle of the tract. In addition, there are pockets of grape vine throughout the tract. Kudzu and grape vine can be very damaging to the future growth of trees on the tract.

Inventory Procedure

The inventory design is based on previous experience with inventories within the Appalachian and Southern Hardwood region. This inventory is intended to provide tract level information. A total of 50 sample points were placed on the initial map drawn to start the field work. After field and

other open area adjustments a total of 46 points were taken that fell within the property lines. At each sample point, a 10 BAF prism was used to determine sample trees. Each tree was measured for diameter at breast height (DBH - 4.5 feet above ground line) and merchantable heights were estimated from market experience. A clinometer was used to check merchantable heights. Species, diameter, product class, and merchantable height were recorded for each tree.

Timber Volume Procedure

On each sample point, individual trees were placed into the appropriate product class. Product classes were standard for merchandising sawtimber and pulpwood into local markets. The minimum for sawtimber was 12.0" DBH down to a 10" top diameter (See Figure 1.) The minimum for pulpwood was 6.0" DBH down to a 4" top diameter.

Timber volume was calculated in board feet (Sawtimber) and tons (Pulpwood) using "Two Dog" brand software. All diameters were rounded into 2" classes by the software. Topwood pulpwood volume was calculated separately and added to the total pulpwood volume.

Figure 1: Product Specifications

PRODUCT	MIN. DBH	TOP DOB	Height Increment	MIN. LENGTH
Hardwood Sawtimber	12.0	10 in	8 ft	1/2 LOG
Pine Sawtimber	12.0	10 in	8 ft	1/2 LOG
Hardwood Pulpwood	6.0	4 in	8 ft	1 LOG
Pine Pulpwood	6.0	4 in	8 ft	1 LOG

Inventory Results

Based on the forested acreage the total sawtimber volume (Doyle 78 Scale) is estimated to be 362,000 BF. Total pulpwood is estimated to be 2,928 Tons. Average volume per forested acre is estimated to be 3,732 BF/Acre of sawtimber, 30.2 tons of pulpwood per acre (Volume Summary.)

Hardwood species mix is varied with poplar (28.9%), chestnut oak (12.7%), red oak (10.3%), and white oak (9.5%) being the dominant sawtimber products. All other species represented were under 9% by category.

Timber Appraisal

An appraisal of the timber was conducted to determine the fair market value as of January 2019. The value expressed in this report is the "Stumpage Value". Stumpage value is the value of the

Anderson County - Parcel: 095 058.00



Date: February 6, 2019
County: Anderson
Owner: ARK HOLDINGS LLC
Address: W WOLF VALLEY RD 3315
Parcel Number: 095 058.00
Deeded Acreage: 105.55
Calculated Acreage: 0
Date of Imagery: 2015

TN Comptroller - OLG
Esri, HERE, Garmin, © OpenStreetMap contributors
TDOT
State of Tennessee, Comptroller of the Treasury, Office of Local Government
(OLG)

The property lines are compiled from information maintained by your local county Assessor's office but are not conclusive evidence of property ownership in any court of law.

timber standing in the forest. Stumpage values were estimated based on the Fourth Quarter of 2018 for timber located in Eastern Tennessee. Price information is a mix of F&W Forestry Services, Inc timber sales, James W Sewell Company Stumpage Price Survey, and personal market experience (See Value column in the Volume Summary).

Based on the volume and current timber prices, the sawtimber value is appraised to be \$78,364 and the pulpwood value is \$16,759. This converts to +/- \$906 per forested acre in total timber value.

Summary Statement

This forest inventory and report are believed to be truthful and accurate. The inventory, acreage, property location, and opinions, are my unbiased professional opinion. In addition, the fee for the timber inventory is not contingent on the information expressed in this report.

Rick Sluss

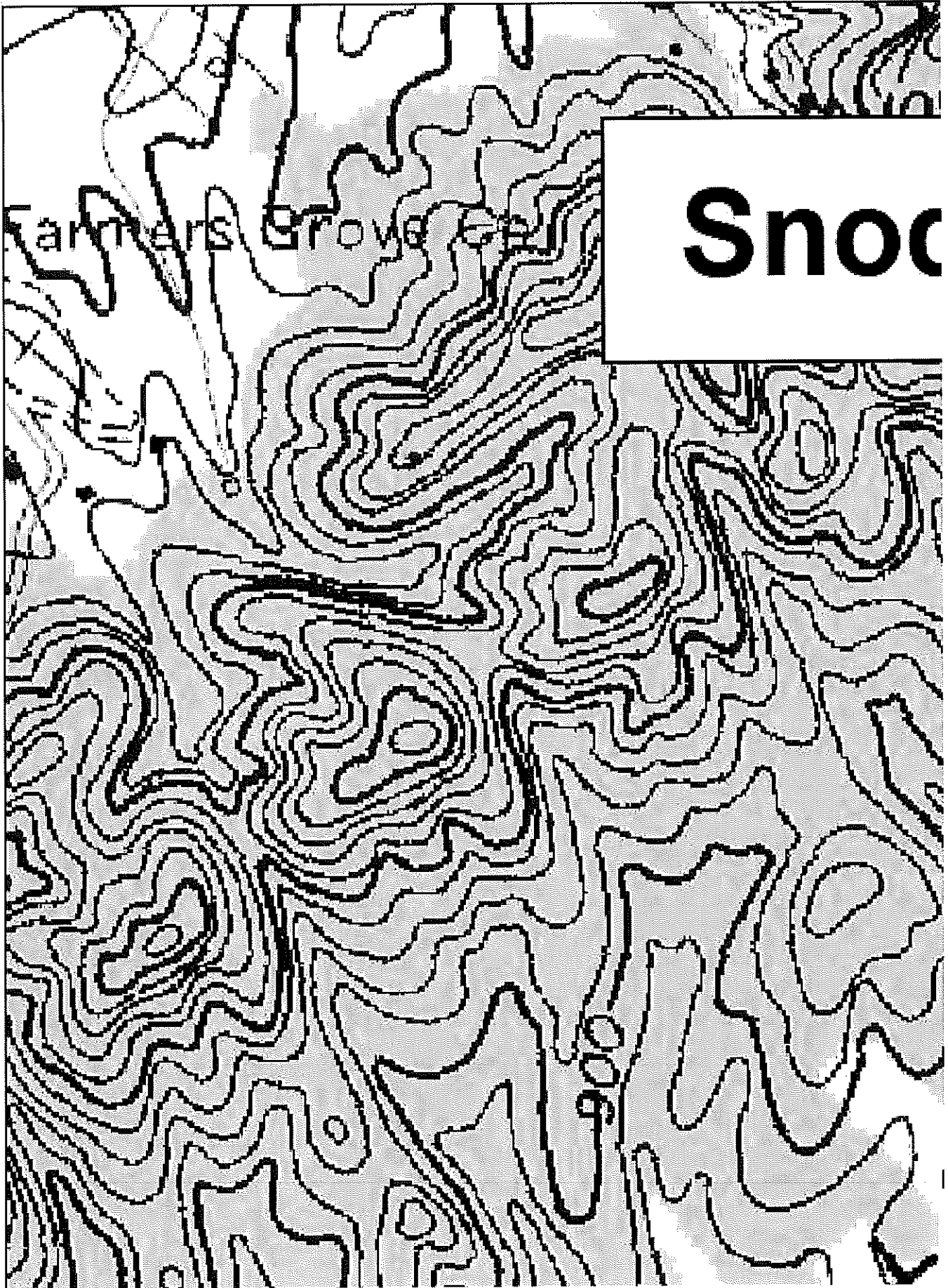
Rick Sluss
Registered Forester
2/6/19

West Wolf Valley Tract: Volume Summary, 2019 Inventory

TOTAL ACRES	105.0
FORESTED ACRES	97.0
FIELD ACRES	8.0

SAWTIMBER	MBF	% OF		VALUE
		VOLUME	\$ / MBF	
RED OAK	37.4	10.3%	\$265	\$9,911
BLACK OAK	23.3	6.4%	\$230	\$5,359
WHITE OAK	34.5	9.5%	\$355	\$12,248
CHESTNUT OAK	45.9	12.7%	\$290	\$13,311
SCARLET OAK	14.2	3.9%	\$170	\$2,414
POPLAR	104.6	28.9%	\$175	\$18,305
HICKORY	24.8	6.9%	\$155	\$3,844
HARD MAPLE	25.3	7.0%	\$250	\$6,325
RED MAPLE	15.6	4.3%	\$165	\$2,574
ASH	6.4	1.8%	\$170	\$1,088
CHERRY	0.0	0.0%	\$250	\$0
BLACK WALNUT	1.9	0.5%	\$450	\$855
BEECH	1.1	0.3%	\$100	\$110
SWEET GUM	3.4	0.9%	\$100	\$340
BLACK GUM	3.0	0.8%	\$100	\$300
MISC HW	4.5	1.2%	\$75	\$338
YELLOW PINE	9.5	2.6%	\$75	\$713
VA PINE	6.6	1.8%	\$50	\$330
TOTAL VOLUME	362.0	100%		\$78,364
MBF PER ACRE				3.732
AVG \$ / MBF			\$216.47	
ST \$ / ACRE				\$746.32

PULPWOOD	TONS		VALUE
		\$ / TON	
HWPW	2,866.0	\$5.75	\$16,480
PINE PW	62.0	\$4.50	\$279
TOTAL VOLUME	2,928.0		\$16,759
VOLUME PER ACRE			30.2
PW \$ / ACRE			\$159.60
TOTAL VALUE			\$95,122
AVG \$ / FORESTED ACRE			\$905.92



Snoc

Tarters Grove

1900