Gordon Farms Property

Bailey Postum Tract
Timber Appraisal Report

5/29/2024

Landowner	**Appraised by**
Gordon Farms Inc. c/o Karen Berg 2350 Winchester Road Albany, Georgia 31721 kgberg@msn.com 229-343-3800 Livingston County	Wild Indigo Forestry LLC Katie Wilding, Forester PO Box 1131 Nortonville, KY 42442 wildindigoforestry@gmail.com 270-339-7450

Client's Objective: Gordon Farms Inc. c/o Karen Berg wants to determine a volume and dollar value estimate for the timber on the property near Crouch Road in Livingston County, Kentucky.

Methodology of Inventory and Analysis: The property was inventoried by systematic cruising using a 10-factor prism. Volume estimates were determined using the Doyle Rule, Form Class 78.

Potential Products: Grade lumber, crossties, pallets, and crating.

Stand Condition: Timber harvesting last occurred in the fall of 2021 with a sustainable harvest. The ice storm in 2009 damaged the stand moderately. Most of the property is in an ideal state for long-term wildlife habitat management with multiple-use objectives.

Value: Marketed properly, I estimate the value of the timber for the landowner to be **$110,000 +/- $11,000**. Financial analyses are based on current fair market conditions and comparisons of sales of similar timber with a 50/50 share with a logger. Timber values are based on an average of these products for each species in the region of the property.

Summary: 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 an estimate and in no way can be guaranteed. This report does not render a title opinion, nor does it consider any liens, encumbrances, or other restrictions.

If you have any questions about this report or my services, please feel free to contact me.

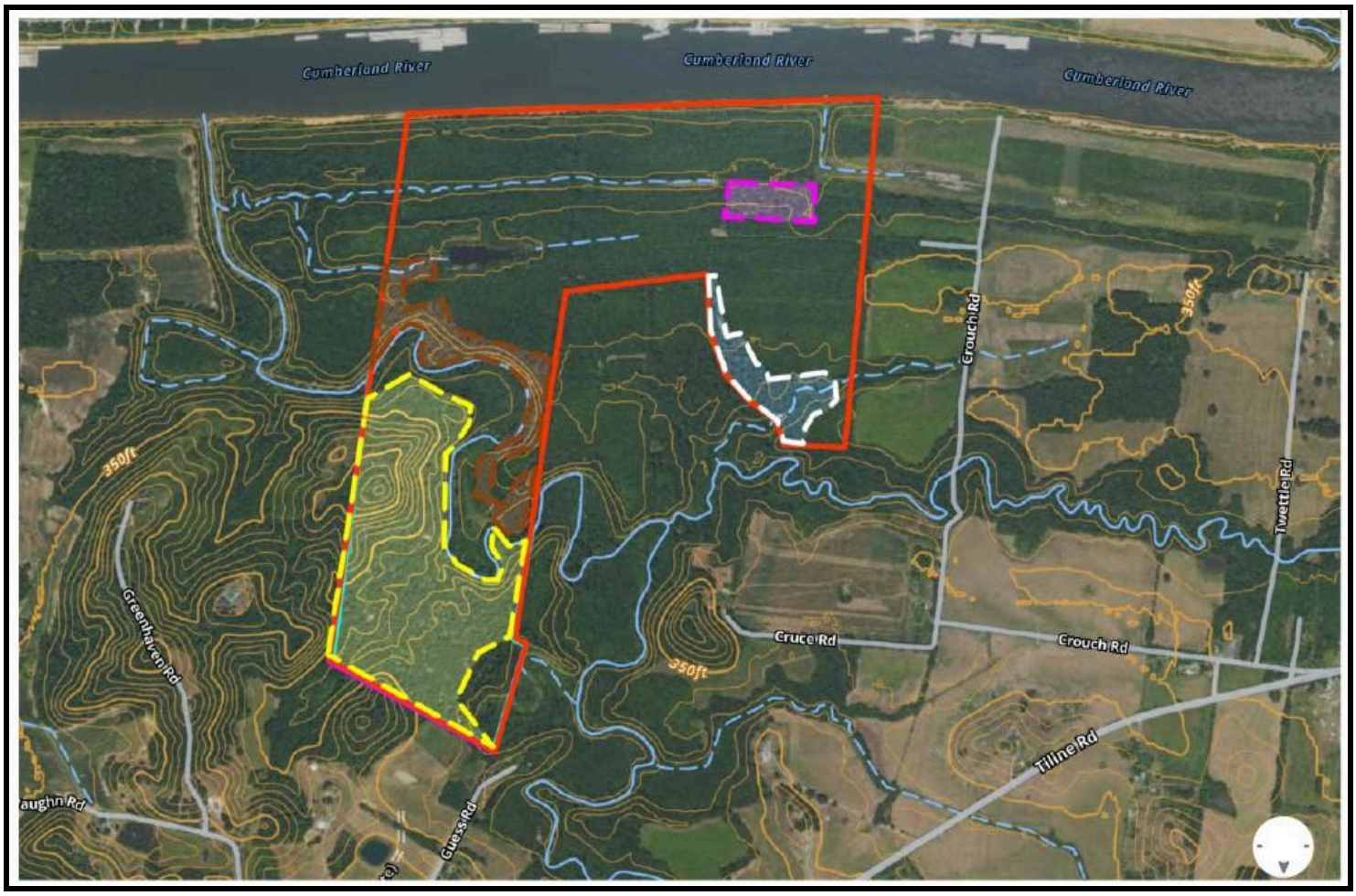
Respectfully submitted,

Kathleen Wilding

Kathleen (Katie) Wilding

Wild Indigo FORESTRY

ACF SINCE 1948 Association of Consulting Foresters EDUCATED, EXPERIENCED, ETHICAL PROFESSIONALS



Marketable Timber: 89 acres

AREA A (purple) = Bottomland - large oak area: 5 acres

AREA B (white) = Upland - south of tree planting: 9 acres

AREA C (brown) = Upland - north of Sugar Creek:16 acres

AREA D (yellow) = Upland - south of Sugar Creek: 59 acres

Other areas: 186 acres

- Oak plantations
- Sugar Creek and floodplains
- Wetland pond area
- Food plot field on Sugar Creek

TRACT LOCATION: The tract is located in Livingston County, Kentucky, northwest of Tiline, west of Crouch Road.

ACCESSIBILITY: Woodlands are accessible via gravel and dirt roads.

TOPOGRAPHY: Topography is bottomlands and rolling uplands.

ESTIMATED FORESTED ACRES: 89 Acres

TOTAL VOLUME: 333,500 Board feet (Doyle Rule, form class 78).

Estimated Timber Value Cost Basis: If marketed properly* I estimate that the standing value of all saw timber and pulpwood would be **$110,000 +/- $11,000**. This assessment is based on similar timber sales in this area with 1st QTR 2024 stumpage market prices.

*Proper marketing includes sending marked timber summaries to timber buyers, advertising widely, showing timber to interested buyers, and soliciting competitive bids.

AREA A: Large Oak Area (est. 5 acres)

Species	# Trees	Volume* (bd. ft.)	AVG. Vol / Tree (bd. ft.)	% Volume of total area	Avg. DBH (inches)
Red Oak**	33	8600	260	63%	22
Cherry	9	1600	180	12%	19
Hickory	9	1300	150	9%	19
Sweetgum	11	1200	110	9%	17
Silver Maple	12	900	75	7%	16
TOTAL	**74**	**13,600**	**155**	**100%**	**19**

*Volume estimate is in board feet, Doyle rule, Form Class 78

**Red Oak species include Cherrybark Oak, Sumard Oak, and Southern Red Oak

More Information:

- Stocking = understocked at 22% - seed trees left behind after harvest
- The area has become a savannah successional age
- Healthy understory for wildlife with plenty of brush and browse and hard mast oak and hickory species are coming in as tree regeneration
- The area needs to be currently left alone to grow and allow the seed trees to create more hard mast regeneration in the understory and let the regeneration get taller

AREA B: South of Tree Planting (est. 9 acres)

Species	# Trees	Volume* (bd. ft.)	AVG. Vol / Tree (bd. ft.)	% Volume of total area	Avg. DBH (inches)
Sweetgum	66	11,600	175	31%	19
Red Oak**	38	10,700	280	29%	21
Hickory	89	7,700	90	20%	15
Sycamore	22	5,400	250	14%	21
Silver Maple	7	1,600	235	4%	22
Elm	15	900	60	2%	15
TOTAL	**237**	**37,900**	**180**	**100%**	**19**

*Volume estimate is in board feet, Doyle rule, Form Class 78

**Red Oak species include Cherrybark Oak, Shumard Oak, and Southern Red Oak

More Information:

- Stocking = understocked at 35% - seed trees left behind as well as the next generation for a future timber harvest
- The area has become a woods successional stage (the canopy has been opened and is no longer closed like a forest and is closed more than a savannah)
- Healthy understory for wildlife with plenty of brush and browse and hard mast species oak and hickory present - White Oak seed trees were found scattered in the area
- The understory has a lot of Sweetgum and Sycamore regeneration
- This area needs 10 years until the next timber harvest to be at its peak value rate and to stay on the managed 15-year rotation for the timber management schedule. This rotation schedule allows the next trees to be released for the next rotation.

AREA C: North of Sugar Creek (est. 16 acres)

Species	# Trees	Volume* (bd. ft.)	AVG. Vol / Tree (bd. ft.)	% Volume of total area	Avg. DBH (inches)
Red Oak**	165	26,300	160	40%	18
Hickory	78	10,900	140	16%	17
Sweetgum	72	6,500	90	10%	16
River Birch	65	6,400	100	10%	15
White Oak	11	3,600	330	5%	23
Cherry	25	3,500	140	5%	19
Hackberry	22	2,500	115	4%	17
Red Maple	23	2,300	100	3%	16
Sugar Maple	20	1,800	90	3%	17
Post Oak	9	1,200	135	2%	18
Silver Maple	10	1,200	115	2%	17
TOTAL	**500**	**66,200**	**140**	**100%**	**18**

*Volume estimate is in board feet, Doyle rule, Form Class 78

**Red Oak species include Cherrybark Oak, Shumard Oak, and Southern Red Oak

More Information:

- Stocking = understocked at 38% - seed trees and the next generation for a timber harvest are present
- The area has become a woods successional stage (the canopy has been opened and is no longer closed like a forest and is closed more than a savannah)
- Healthy understory for wildlife with plenty of brush and browse and hard mast species oak and hickory present - White Oak seed trees were found scattered in the area
- The area along the bank of Sugar Creek was not harvested due to erosion, allowing these trees to be a seed source. Some high-quality and valuable trees along the bank can be harvested in the future
- The understory has a lot of good regeneration.
- This area needs 10 years until the next timber harvest to be at its peak value rate and to stay on the managed 15-year rotation for the timber management schedule. This rotation schedule allows the next trees to be released for the next rotation.
- There is an old cemetery located in this area - dates back to the 1800s

AREA D: South of Sugar Creek (est. 59 acres)

Species	# Trees	Volume* (bd. ft.)	AVG. Vol / Tree (bd. ft.)	% Volume of total area	Avg. DBH (inches)
Red Oak**	568	66,500	120	31%	17
Hickory	520	58,500	110	27%	17
White Oak	275	24,700	90	11%	15
Sweetgum	177	20,100	120	9%	16
Red Maple	87	10,800	125	5%	18
Cherry	73	10,500	140	5%	18
Post Oak	86	10,000	120	5%	16
Ash	37	4,600	125	2%	18
Yellow-poplar	13	3,300	250	2%	21
Sugar Maple	22	2,100	95	1%	16
Hackberry	22	2,100	95	1%	16
Elm	20	1,700	90	1%	17
TOTAL	**1,900**	**214,900**	**135**	**100%**	**19**

*Volume estimate is in board feet, Doyle rule, Form Class 78

**Red Oak species include Cherrybark Oak, Shumard Oak, and Southern Red Oak

More Information:

- Stocking = understocked at 38% - seed trees and the next generation for a timber harvest are present
- The area has become a woods successional stage (the canopy has been opened and is no longer closed like a forest and is closed more than a savannah)
- Healthy understory for wildlife with plenty of brush and browse and hard mast species oak and hickory present
- Plenty of White Oak present for future timber harvests and wildlife food
- The understory has a lot of good regeneration with valuable timber and wildlife tree species
- This area needs 10 years until the next timber harvest to be at its peak value rate and to stay on the managed 15-year rotation for the timber management schedule. This rotation schedule allows the next trees to be released for the next rotation.

<u>Summary</u> – Gordon Farms property (Bailey Postum Tract) forestland with an estimated 89 Acres of marketable timber:

- Property was last logged in 2021: logging operation was managed by a forester and continued to follow the previous landowner's forest management rotation

- Forest consists of bottomlands and upland hardwood areas

- 4 different areas of marketable timber. These areas have all been managed with timber production and wildlife habitat in mind. They are healthy and on a 15-20 year revenue timber management cycle. With this cycle and keeping the forest in a sustainable composition of valuable timber and wildlife species it allows the undergrowth to be brush and bedding and habitat until it is time to cut again.

- All of the forested areas are healthy wildlife habitats with plenty of hard masts and bedding and browse available

- Soils are primarily silt loams and well drained.

The bottomlands are well suited for timber productivity and agriculture
The bottomlands in the north were retired from crops and planted into oak plantations. The oak plantations are healthy and have been successful. The species are red oak and white oaks of different types

- The uplands are best suited for timber productivity

- Sugar Creek traverses the property from the southeast to the west towards the Cumberland River

- The Cumberland River runs along the northern border

- There is an intermittent drain that goes through the NE section on the eastern part of the property

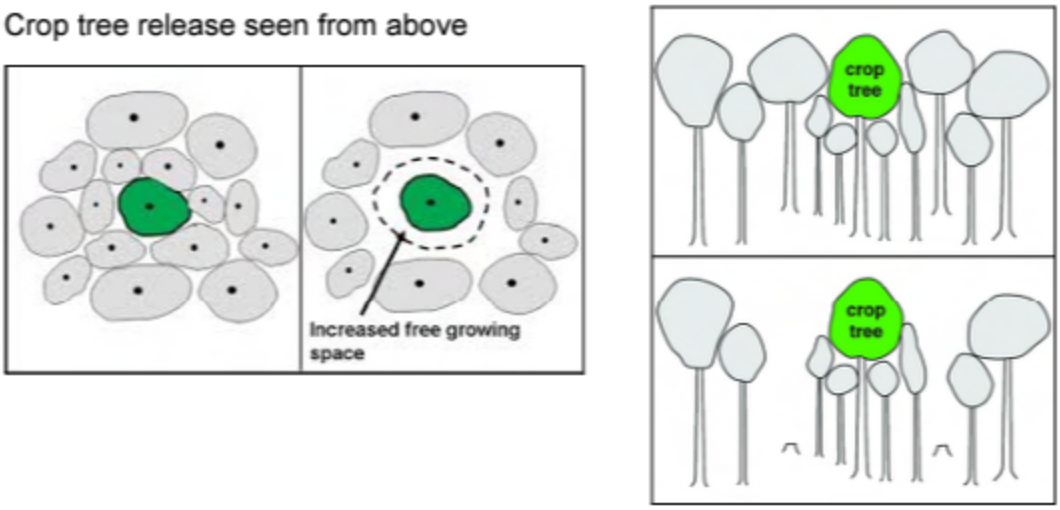
Timber management health:

- The forest is healthy and has been managed for timber production on a 15-20-year rotation. Agriculture fields have been successfully planted into red and white oak trees of different bottomland species.

- The potential for timber production is high with increasing potential

- Prescribe fire can be beneficial and considered throughout the property to continue favoring the tree species towards oaks and continue to have healthy wildlife habitat and control the faster growing lower value timber species

- The tree planting areas need a thinning to make room for the oaks and remove the undesirable species and trees. This will allow the resources to go into the trees that are ready to grow and keep the forest from becoming stagnant and dense - this is called a Crop Tree Release



General recommendations for all forests:

- Protect all forestland from livestock grazing, unless being managed for Silvopasture.
- Cut grape vines that are growing on valuable timber tree species. The vines will grow into the tree's canopy and impede its growth.
- Have a forester come out periodically to reassess the forest's health and growth to continue meeting management objectives

Reforestation, Afforestation, and Understory Health:
The understory and regeneration on the property are good and healthy.
Lots of diversity and desirable species. The White Oak regeneration has been managed for future timber harvest.

Invasive/ Nonnative Plants and Pests - Forest Health:

Stiltgrass, Japanese honeysuckle, vinca (only around the old gravesite)

- The Emerald Ash Borer (EAB) will be coming in unless it is already here. There is very little Ash on the property for this to be obvious at the time of the forest inventory

- It is recommended to monitor the invasives and be sure they do not become a problem with forest regeneration and productivity.

- Continue to monitor for any new invasives

Wildlife Management:

- General wildlife: The forest is healthy and has a large diversity of insects, songbirds, mammals, reptiles, and amphibians.

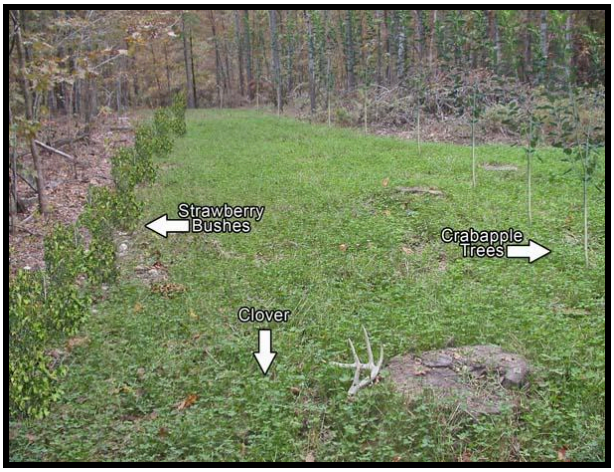
- There is a diversity of wildlife habitat throughout the property with lots of different successional areas

- Plenty of bedding and browse found in all the property areas due to the timber harvest

- The field along Sugar Creek has been utilized and established as a food plot

Shellbark Hickory trees (aka scaley bark hickory) are found scattered about the forest. These are important trees for animals that use the scales such as the endangered Indiana Bat

General information:
Den and cavity trees provide nesting, roosting, and escape sites for many wildlife species.



- Hunting: Wildlife openings, food plots, den trees, and mast tree species are all critical aspects of maintaining long-term wildlife habitat. Planting wildlife food plots is a common practice, as is supplementing foods for the deer herd. Manipulating and maintaining the native habitat can also benefit the local wildlife through sustainable forestry practices.

Working with a Private Lands Wildlife Biologist from KY Fish and Wildlife Resources (KDFWR) is also a great option.

Cultural and Historic Resources and Preservation:

Old gravesite located on the property dating back to the 1800s

There is an invasive species - vinca - that was planted at the gravesite. This needs to be monitored to be sure it does not invade the surrounding area and create problems for the future health of the forest.

Historic and cultural practices are a vital link to past land use practices in Kentucky.

Signs of homestead activity are still present.

Property lines

- A survey has been done and the property is marked
- Cumberland River is the northern boundary
Fences are still present in some areas of the property boundary

Knowing where your property lines are located is very useful. This is helpful for many reasons, particularly during logging operations for yourself and your adjacent landowners, and to help manage trespassing issues. If it has not already been done a licensed surveyor should be consulted. Maintaining your property boundary lines can be done with paint or T posts and will need to be checked and maintained annually by yourself or a reputable company.

KRS 511.070 to allow notice of trespass to be given through the placement of identifying purple paint marks on property

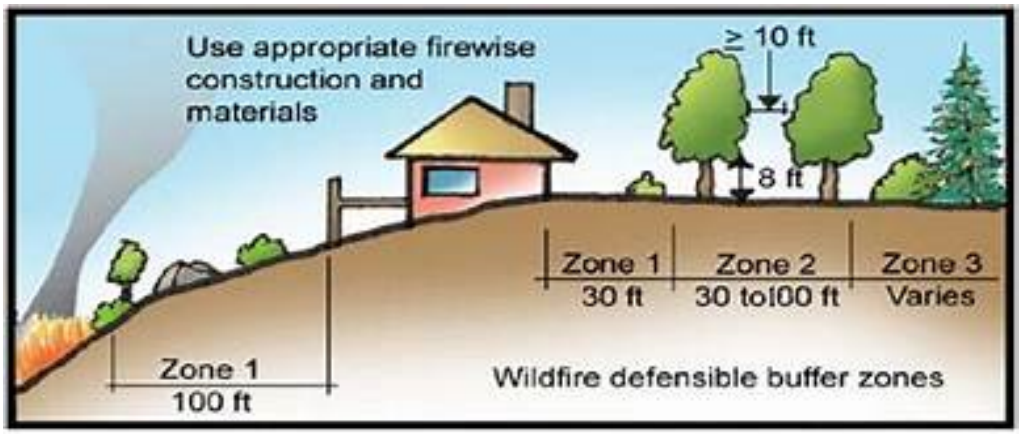
Tip: To help distinguish property corners put double dashes on trees

Purple paint markings need to be 8 inches long by 1 inch wide and be 3-5 feet above the ground. Markings also should be on multiple trees/objects no more than 100 feet apart.

Yes there is a wildfire risk on the property due to the area having uplands

Property can benefit from Prescribed Burns

Forest Fires are a possible threat not only to the development of the forest resources, but also to any nearby structures. Users of the property need to be briefed on campfire practices that will minimize problems. Fires can also enter your property from the adjacent properties, or right-of-way along roads. The maintenance of well-mowed woods roads offer fire break advantages to your property.



Prescribed Fire/Burns and Wildland Fire Information

For assistance in case of forest or field fires, contact 911, the State Police, or the Regional Forestry Office in Madisonville Branch at 270-824-757

FIRE LAWS
No Burning Between 6am - 6pm
within 150' of any woodland or brushland
Unless there is snow on the ground
Dates:
February 15th - April 30th
October 1st - December 15th

Forestry Resources

Reference	Location
A Forest Landowner's Guide to Internet Resources: States of the Northeast	http://www.na.fs.fed.us/pubs/misc/ir/index.htm
KY Division of Forestry	http://www.environment.ky.gov/nrepc/dnr/forestry/ index.asp
UK Department of Forestry	http://www.uky.edu/Ag/Forestry/
UK Extension of Forestry	https://forestry.ca.uky.edu/extension
KFIA - KY Forest Industry Association	https://www.kfia.org/
KY Master Logger Database	https://masterlogger.ca.uky.edu/
Woody Plant Seed Manual	http://www.na.fs.fed.us/pubs/misc/ir/index.htm
Forest Steward Program	https://www.stateforesters.org/districts/kentucky/
American Tree Farm System	https://www.treefarmsystem.org/kentucky
NRCS Incentive Program	http://offices.sc.egov.usda.gov/locator/app
Watershed Information	https://www.epa.gov/waterdata/hows-my-waterway
National Timber Tax	http://www.timbertax.org
Fire Effects Information System, Information about fire effects on plants and animals, USFS	http://www.fs.fed.us/database/feis/welcome.htm