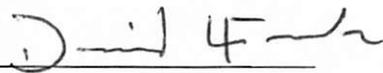


Woodland Stewardship Management Plan

Owner's Information:

Case Number: _____

Owner: Black Bear Holdings, LTD.

Signed: 
David Funk_ Owner

Date: May 7, 2019

Preparer's Information:

Prepared by: Dean A. Berry

Signature: 

Woodland Management Services
c/o Dean A. Berry, Consulting Forester
10935 Rosewood Lane
Athens, Ohio 45701
TSP 10-6547

Date: April 20th, 2019
Field Inspection Date

740-541-4647 mobile
fatlabtreefarm@gmail.com

This plan is valid for the period beginning May 5th, 2019 and ending May 4th, 2029.

Plan Status: New

Woodland Stand Description and Management Recommendations

General Definitions

Stand: A contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality, to be a distinguishable and manageable unit.

Diameter: Diameter breast height (DBH) is measured at 4.5 feet above ground.

Seedling – DBH is not measureable.

Sapling – 1” to 4” DBH

Poletimber – 5” to 11.5” DBH

Small Sawtimber – 12” to 16” DBH

Medium Sawtimber – 18” to 22” DBH

Large Sawtimber – 24” DBH and larger

Topography: Refers to the slope of the land.

Aspect: Is the direction that a slope faces.

Stocking Level/Basal Area: An indication of growing-space of the stand. Basal area is the cross-sectional area of all stems of a species or all stems in a stand measured at DBH. Low basal areas are considered to be understocked which can lead to negative impacts on the residual trees in a stand. High basal areas are considered to be overstocked and can lead to negative impacts on the residual trees in a stand.

Silviculture: The art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands to meet the diverse needs and values of landowners and society on a sustainable basis.

Invasive Species: Species not native to Ohio and in most cases not native to the United States. Invasive species can inhibit growth and establishment of native hardwoods if they are not controlled.

Timber Stand Improvement (TSI): Improving the quality of a forest stand by removing or deadening undesirable species to achieve desired stocking levels and species composition.

Crown Classes:

Dominate – Crown extends above canopy, direct sunlight to the top and sides of crowns

Co-Dominate – Crown within the main canopy, direct sunlight to the top and limited on sides

Intermediate – Crown in the lower part of main canopy, limited sunlight

Overtopped – Crown entirely under the main canopy, no direct sunlight

Forestry Terms – Forestry Terminology for Landowners, Professional foresters, and others:

Consistent forestry terminology is essential to anyone interested and involved in the science, management, and conservation of forests.

The Society of American Foresters (SAF) offers a great resource for such forestry terminology: “The Dictionary of Forestry”. This dictionary is an excellent tool available for anyone to learn more about the language used in forestry. The dictionary provides precision, clarity, and consistency in communication of forestry terms.

You may access “The Dictionary of Forestry” for free at SAF at www.dictionaryofforestry.org. If internet access is not available, one may purchase a printed version from SAF (toll free 866-897-8760).

A list of common forestry terms is included as a handout in this plan.

PARID: K010010066401
STARLINE MATTHEW W

3 RIVER RD

Address 3 RIVER RD
 Unit
 Class R - RESIDENTIAL
 Tax Roll RP_OH
 Land Use Code 561 - R - HTRL/MH 0-9.99 AC ON RE
 Neighborhood 00018000 - K01
 Total Acres 5.03
 Taxing District K01
 District Name ROME TOWNSHIP
 Gross Tax Rate 73.15
 Effective Tax Rate

Tax Year 2018
 Owner STARLINE MATTHEW W
 ANGIE E

Mailing Name and Address

Mailing Name 1 BLACK BEAR HOLDINGS LTD
 Mailing Name 2
 Address 1 PO BOX 384
 Address 2
 Address 3 ATHENS OH 45701
 Mortgage Company
 Mortgage Company Name
 Treas Code

Legal Desc 1 SEC 32 5.030 AC
 Legal Desc 2
 Legal Desc 3
 Legal Acres 5.03

Homestead Exemption NO
 Owner Occupancy Reduction YES

PARID: K010010066402
STARLINE MATTHEW W

RIVER RD

Address

Address	RIVER RD
Unit	
Class	A - AGRICULTURAL
Tax Roll	RP_OH
Land Use Code	100 - A - AGRICULTURAL VACANT LAND
Neighborhood	00018000 - K01
Total Acres	45
Taxing District	K01
District Name	ROME TOWNSHIP
Gross Tax Rate	73.15
Effective Tax Rate	

Tax

Tax Year	2018
Owner	STARLINE MATTHEW W ANGIE E

Tax Mailing Name and Address

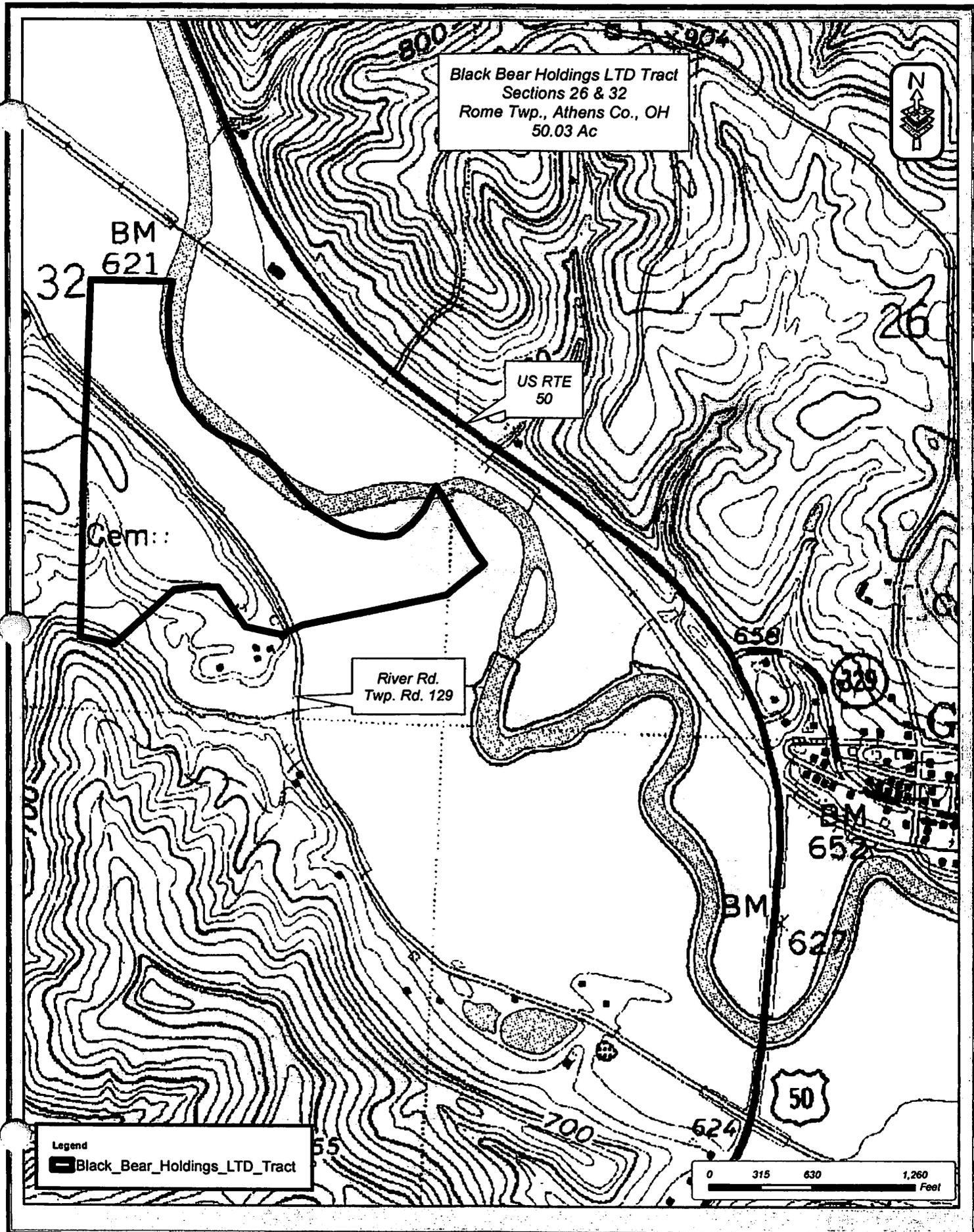
Mailing Name 1	BLACK BEAR HOLDINGS LTD
Mailing Name 2	
Address 1	PO BOX 384
Address 2	
Address 3	ATHENS OH 45701
Mortgage Company	
Mortgage Company Name	
Treas Code	

Legal

Legal Desc 1	SEC 32 45.00AC
Legal Desc 2	
Legal Desc 3	
Legal Acres	45

Homestead Credits

Homestead Exemption	NO
Owner Occupancy Reduction	NO



Black Bear Holdings LTD Tract
 Sections 26 & 32
 Rome Twp., Athens Co., OH
 50.03 Ac



BM
 621
 32

US RTE
 50

Cem::

River Rd.
 Twp. Rd. 129

Legend
 [Thick black line symbol] Black_Bear_Holdings_LTD_Tract

0 315 630 1,260
 Feet

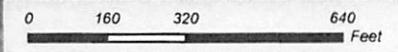
Black Bear Holdings LTD Tract
Sections 26 & 32
Rome Twp., Athens Co., OH
50.03 Ac



US RTE
50

River Rd.
Twp. Rd. 129

Legend
Black_Bear_Holdings_LTD_Tract



Black Bear Holdings LTD Tract
Sections 26 & 32
Rome Twp., Athens Co., OH
50.03 Ac



US RTE
50

Hocking
River

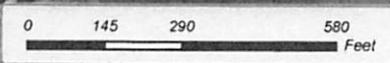
River Rd.
Twp. Rd. 129

Legend

Black_Bear_Holdings_LTD_Tract

Id

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9



Black Bear Holdings LTD Tract
Sections 26 & 32
Rome Twp., Athens Co., OH
50.03 Ac

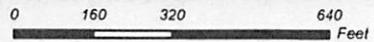


US RTE
50

River Rd.
Twp. Rd. 129

Legend

Black_Bear_Holdings_LTD_Tract



Black Bear Holdings LTD Tract
Sections 26 & 32
Rome Twp., Athens Co., OH
50.03 Ac
Activity Map



Stands 2,4,6 & 9
at minimum: cut grapevines for all "crop" trees
as time permits: work on eradicating the invasive
species identified in these areas.
Supplemental plantings of Walnut & Oak spp.
would improve stand composition.

Stands 1 & 8
If these areas are not to be used for
agricultural purposes, site prep the areas
and plant with a mixture of trees/shrubs
appropriate for soil conditions.

Locate and mark all external property lines
with paint or signage to prevent trespass.

Legend

Black_Bear_Holdings_LTD_Tract

Id

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

0 180 360 720
Feet

Woodland Stand Description and Management Recommendations

Stand #1 - 13.52 acres Non-Forested Area - fallow bottomland agricultural fields

Dominant Species: grasses and broadleaf plants__scattered clumps of sapling/pole trees – Sycamore, Silver Maple, Box Elder & a few Black Walnut

Forest Type or Dominant Vegetation: NA

Stand Diameter or Size Class: N/A

Stocking Level: N/A

Stand History: No Prior Management, old agricultural fields

Topography: Nearly level

Invasive plants or insects impacting this stand: Autumn Olive scattered along field edges.

Stand Description: This stand includes the bottomland fields located adjacent to the Hocking River. Because of lack of activity, this area is beginning to regenerate with non-desirable plant & woods shrub species. If this area is not going to be utilized for agricultural purposes, all or parts of this area should be planted with a mixture of desirable tree species. A gas well and associated pipelines are located in this area.

SEE PLANTING RECOMMENDATIONS BELOW

Past management activities completed in this stand: This tract recently acquired & landowner has not begun improvements on these fields yet.

<i>Management Recommendations:</i>
Eradicate Autumn Olive along the edges of field before planting area
Plant area to appropriate desirable tree species – EQIP / CRP project

Comments: Work on eradicating the clumps of Autumn Olive located along the edges of the field if area is to be planted to trees and not going to be farmed or annually mowed.

Planting recommendations developed by ODNR DOF Service Forestry

Summer prior to planting: mow a strip at least 3 - 4 feet wide where each row of trees will be planted.

September prior to planting: Spray glyphosate herbicide in a strip 3-4 feet wide where each row of trees will be planted in the rows that were mowed in the summer. (Mow these strips in your field as low as possible, and then spray) **I would recommend you also apply a treatment of OUST or a similar herbicide for pre-emergent control.**

Autumn prior to planting: order recommended number of seedlings of each recommended species. (Suggest –Black Walnut, Swamp White Oak, Swamp Chestnut Oak, Sycamore, Bald Cypress). This area has a high site index for growing Black Walnut so planting quality seedlings like “Purdue Walnut” cultivars would be a possibility worth researching.

March: plant recommended seedlings at recommended spacing. (I recommend a 8' X 8' spacing– 680 trees/acre or a maximum of 8' X 10' spacing – the 10' being the width between rows 544 trees/ac.

Each summer for 1 to 3 years after planting: mow between each row of seedlings or apply herbicide around seedling to control competing grasses. Note –do not damage seedling stem by weedeating or scraping the seedling with the mower. This will damage the tree and cause a permeant defect in the tree.

Each March for 1 to 3 years after planting: plant replacement seedlings as necessary to maintain at least 300 trees per acre.

Desired Future Conditions: Develop this fallow land into a quality forest by planting trees

Desired Forest Type or Dominant Vegetation: Bottomland Hardwoods - better drained site

Desired Stand Structure: Even Aged

Woodland Stand Description and Management Recommendations

Stand # 2 - 4.7 acres

Dominant Species: Box Elder, Sycamore, Red Maple, Black Walnut, Cottonwood, American Elm, Black Willow, a few Hickories and Sugar Maple trees in the area

Forest Type or Dominant Vegetation: Bottomland Hardwoods - better drained site

Stand Diameter or Size Class: All size classes with the larger trees scattered along the river bank.

Stocking Level: Fully stocked in most areas, but not with desirable species

Stand History: Unknown

Topography: Nearly level

Invasive plants or insects impacting this stand: Autumn Olive, scattered grapevines are the major issues, some Privet identified

Stand Description: This is a catch-all area – narrow strip of ground that follows the western bank of the Hocking River and an identified freshwater forested/shrub wetland area. (See Wetland Map included in report) Trees species present are mainly bottomland hardwood species, because this is a flood prone area.

Past management activities completed in this stand: new property owner, property lines located and will be marked with signage.

<i>Management Recommendations:</i>
Cut grapevines from all crop trees in this area
Work on eradicating the Autumn Olive from areas adjacent to Stand 1

If a timber harvest is recommended: No not in this 10-year management cycle.

Comments:

The Hocking River is an important asset to this ownership. In addition, the continuous water source enhances the overall quality of this farm, it is very beneficial to both the game and non-game species of reptiles, fish, mammals and birds occupying the adjacent lands. (Note- a Bald Eagle nest is located along the riverbank less than 1/2 mile downstream from this farm).

A Streamside Management Zone (SMZ) is a forested strip or area next to a creek or stream that is managed with specific attention to instream and downstream water protection. SMZ's should be maintained around both intermittent and perennial streams, lakes, ponds, naturally flowing springs, and reservoirs. Forest management activities within an SMZ should leave the forest floor essentially undisturbed with minimum soil exposure. Mechanical site

preparation, logging decks, skid trails, and firelanes are restricted within an SMZ. Similarly, roads should not be constructed within an SMZ, except at designated crossings (see Stream Crossing Alternatives below). Roads should cross the stream at a right angle. Drainage structures such as wing ditches, water bars, and cross drain culverts should vent their runoff before they enter the SMZ.

Functioning as buffer strips, SMZ's are very effective in filtering sediment (soil particles) from surface runoff. The water in the runoff can and should reach the stream, but the vegetation in the SMZ filters sediment and other suspended solids resulting from the forest management activity. This filtering process may also lessen any negative effects that pesticides may have on water quality. The trees immediately adjacent to the water provide woody debris to benefit aquatic organisms. The trees also provide shade to the stream, preventing any unnatural changes in water temperature. Direct sunlight can drastically raise water temperatures, which may lower the oxygen content of the water and make it difficult for fish and other aquatic organisms to survive.

Desired Future Conditions: Maintain this area as an uneven aged bottomland hardwood stand.

Desired Forest Type or Dominant Vegetation: Bottomland Hardwoods - better drained site

Desired Stand Structure: Uneven Aged

Woodland Stand Description and Management Recommendations

Stand # 3 - 6.3 acres Non-Forested Area_ Hocking River

Dominant Species: NA

Forest Type or Dominant Vegetation: N/A

Stand Diameter or Size Class: N/A

Stocking Level: N/A

Stand History: N/A

Topography: Level

Invasive plants or insects impacting this stand: (addressed in adjacent stand descriptions)

Stand Description: This stand covers the open water and sandbars that form the Hocking River. This river delineates the eastern property line of the property tract. This area is a high use recreational activity area – fishing, canoeing and wildlife observation

Past management activities completed in this stand: N/A

<i>Management Recommendations:</i>
Annually inspect for invasive species along streambanks and work on the eradication of any found

Is a timber harvest recommended? N/A

Comments: As indicated in Stand 2, there is an actively used Bald Eagle nest located along the riverbank less than 1/2 mile downstream from this farm).

Desired Future Conditions:

Desired Forest Type or Dominant Vegetation:

Desired Stand Structure:

Woodland Stand Description and Management Recommendations

Stand # 4 - 2.24 acres Conservation Reserve Program (CRP) Area

Dominant Species: Box Elder, Sycamore, Water Maple, Cottonwood, American Elm, Black Willow, a few Hickories and Sugar Maple trees in the area

Forest Type or Dominant Vegetation: Bottomland Hardwoods - better drained site

Stand Diameter or Size Class: Poletimber/Small sawtimber

Stocking Level: Fully stocked in most of area except for the cleared pipeline easement area.

Stand History: Other enrolled by previous Owner in CRP Program

Topography: Nearly level

Invasive plants or insects impacting this stand: Autumn Olive, scattered grapevines are the only issues identified at time of inspection.

Stand Description: This area was separated out of adjacent Stand 2 because it is enrolled in a Government Program, CRP, that limits some activities in this area. This area needs to remain undisturbed and maintained in its present forested condition. Trees species present are mainly bottomland hardwood species, because this is a flood prone area. A gas pipeline easement passes through this area.

Past management activities completed in this stand: new ownership of this area and no activities done yet.

<i>Management Recommendations:</i>
Cut grapevines from all crop trees in this area
Work on eradicating the Autumn Olive from areas adjacent to Stand 1
Follow guidelines for CRP enrollment

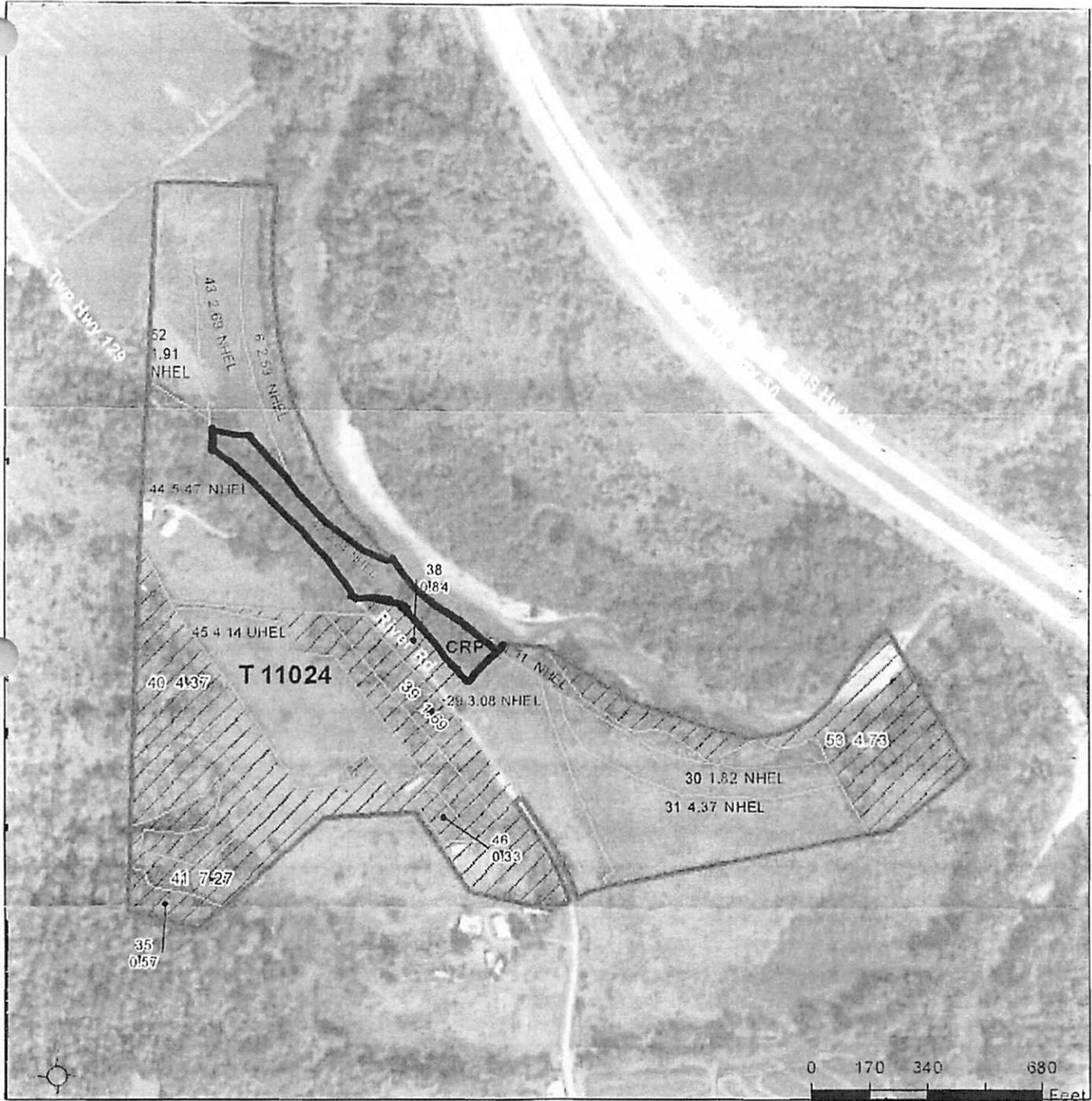
If a timber harvest is recommended: No not in this 10-year management cycle.

Comments: new property owner has agreed to remain in the CRP and maintain this area per contract stipulations.

Desired Future Conditions: Maintain this area as an uneven aged bottomland hardwood stand.

Desired Forest Type or Dominant Vegetation: Bottomland Hardwoods - better drained site

Desired Stand Structure: Uneven Aged



- Common Land Unit**
- Non-Cropland
 - Cropland
- Wetland Determination Identifiers**
- Restricted Use
 - Limited Restrictions
 - Exempt from Conservation Compliance Provisions
- CRP**
- Tract Boundary

All of the following are true unless otherwise indicated:
 All Crops=NI All Crops=GR
 Corn=YEL Soybeans=COM
 Wheat=SRW

Athens/Hocking County
 Farm Service Agency
 69 S Plains Rd
 The Plains, OH 45780-1339
 740-797-4610 (p)
 855-842-4898 (f)

2019 Program Year
 Map Created November 26, 2018
Farm 2850
Tract 11024

Tract Cropland Total: 29.42 acres

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).

Woodland Stand Description and Management Recommendations

Stand # 5 - **1.0** acres Non-Forested Area_ Road R/W

Dominant Species: NA

Forest Type or Dominant Vegetation: N/A

Stand Diameter or Size Class: N/A

Stocking Level: N/A

Stand History: N/A

Topography: Nearly level

Invasive plants or insects impacting this stand: Autumn Olive, Japanese Vine Honeysuckle, Multi Flora Rose, Garlic Mustard along edges (addressed in adjacent stand descriptions)

Stand Description: This stand covers the gravel township road r/w, which passes through the center of this farm. River Road_ Twp. Rd. 129.

Past management activities completed in this stand: N/A

<i>Management Recommendations:</i>
Annually inspect for invasive species and work on the eradication of any found

Is a timber harvest recommended? N/A

Comments: The edges of this area will be a persistent "problem areas" for the landowner, in regard to non-native invasive plants becoming established in.

Desired Future Conditions:

Desired Forest Type or Dominant Vegetation:

Desired Stand Structure:

Woodland Stand Description and Management Recommendations

Stand # 6 - 5.5 acres

Dominant Species: Yellow Buckeye, Sassafras, Ash (dead), Red Maple, Dogwood, Black Cherry, American Elm, Spice Bush, Honey Locust, Sycamore-- scattered Black Walnut, Red Oak, White Oak, Tulip Poplar and Hickory spp.

Forest Type or Dominant Vegetation: Upland Central Hardwoods

Stand Diameter or Size Class: Sapling/Poletimber scattered larger trees

Stocking Level: Fully stocked in most areas with desirable species

Stand History: Old-Field Reversion

Topography: Gently sloping, to steep side slope area

Invasive plants or insects impacting this stand: grapevines in stand, EAB, Autumn Olive & Multi Flora Rose, Japanese Honeysuckle, Bush Honeysuckle, Garlic Mustard

Stand Description: This area covers the wooded slope along River Road. This area had been open land and reverted back into forestland – late successional stage of development. Part of this area is heavy briars and brush that is difficult to traverse. Patches of pole trees are beginning to have crown closure, with a more open understory and a more advanced stand development. Overall, grapevines are present throughout the entire stand.

Past management activities completed in this stand: new ownership and work in this area is still being planned.

Management Recommendations:

If seeking EQIP Project funding – Cut all grapevines from this area and begin treatment of the non-native invasive woody shrubs & vines that were identified in this area.

A minimal intensity activity that would benefit this area greatly would be to cut the grapevines from “crop” trees (Walnut, Oak spp., Sugar Maples, Cherry) in this area

Work on eradication of Autumn Olive/ Bush Honeysuckle as time permits

If a timber harvest is recommended: No, not in this 10-year Plan

Comments: EAB present in the Ash trees in this area. Nice scattering of Black Walnut trees in this area. Non-native invasive species in this area is almost beyond control, at least work on eradicating the grapevines in the “crop” trees. Let this area develop for this 10-year management period.

Succession is the natural process of reforestation. This transition from grass to weeds to shrubs to trees may happen in one decade or it may take as long as a century to complete. Often, forests are cleared and farmed until it is no longer profitable to do so. This causes fields to be abandoned and lie fallow.

During early succession the weeds are the first plants to appear in an abandoned field. Asters, goldenrod, honeysuckle, thistle, ragweed and blackberry are common weeds to quickly invade an abandoned field.

During middle succession the next wave of invaders to gain a foothold are the shrubs and small trees. Some common shrubs and small trees found on transition sites are multi-flora rose, sumac, poison ivy, highbush blueberry, dogwood, crabapple, persimmon and sassafras.

During late succession, if the seed source is close by, black locust, Virginia pine, black cherry, red maple, and tulip poplar soon become established. After five to ten years these intolerant and moderately tolerant trees will have overtopped and eliminated the shrubby plants. These intolerant trees usually reach maximum development at 60 to 75 years of age. Following this, at a slower pace, the intermediate tolerant oaks and tolerant sugar maple begin to occupy the understory.

Desired Future Conditions: Let area develop into a hardwood forest again, lower slope area should produce quality Walnut trees.

Desired Forest Type or Dominant Vegetation: Upland Central Hardwoods

Desired Stand Structure: Uneven Aged

Woodland Stand Description and Management Recommendations

Stand # 7 - 1.0 acres Non-Forested Area_ Residential Area

Dominant Species: NA

Forest Type or Dominant Vegetation: N/A

Stand Diameter or Size Class: N/A

Stocking Level: N/A

Stand History: N/A

Topography: Gently sloping

Invasive plants or insects impacting this stand: Autumn Olive, Japanese Honeysuckle, Garlic Mustard are found along edges.

Stand Description: This stand includes the residential area (rental house). The associated outbuilding, yard space and driveway are included in this stand. The residential area was occupied at time of inspection

Past management activities completed in this stand: New tenants are cleaning up area, mowing and completing general maintenance. Landowner is planning on maintaining this as a rental unit.

<i>Management Recommendations:</i>
Annually inspect for invasive species & eradicate any found

Is a timber harvest recommended? N/A

Comments: The edges of this area will be a persistent "problem area" for the landowner, in regard to non-native invasive plants to become established in.

Desired Future Conditions:

Desired Forest Type or Dominant Vegetation:

Desired Stand Structure:

Woodland Stand Description and Management Recommendations

Stand # 8 - 12.57 acres Non-Forested Area - agricultural field

Dominant Species: grasses, broadleaf plants, Autumn Olive, Honey Locust, woody shrubs

Forest Type or Dominant Vegetation: NA

Stand Diameter or Size Class: N/A

Stocking Level: N/A

Stand History: No Prior Management, old ridgetop agricultural field

Topography: Gently sloping

Invasive plants or insects impacting this stand: Autumn Olive

Stand Description: This stand is the open ridgetop field that has sat fallow for several years except for the area that was being developed into a possible pasture area by the previous Owner. A powerline runs through the center of this area. Two structures are located in the southern end of this stand, a barn and an old trailer. Neither is utilized at this time. Golden rod, milkweed, grasses, briars and other early successional plants & shrubs are becoming well established. Landowner is planning on planting parts/all of this area to trees in the near future.
SEE PLANTING RECOMMENDATIONS BELOW

Past management activities completed in this stand: Tract recently acquired & landowner has not begun improvements on this overgrown field yet other than cleaning up previous operations.

<i>Management Recommendations:</i>
Eradicate Autumn Olive along the edges of field before planting area
Plant area to appropriate desirable tree species – EQIP project

Comments: A small private cemetery is in the center of this tract.

Planting recommendations developed by ODNR DOF Service Forestry

Summer prior to planting: mow a strip at least 3 - 4 feet wide where each row of trees will be planted.

September prior to planting: Spray glyphosate herbicide in a strip 3-4 feet wide where each row of trees will be planted in the rows that were mowed in the summer. **(Mow these strips in your field as low as possible, and then spray)**

Autumn prior to planting: order recommended number of seedlings of each recommended species. **(Suggest –Sugar Maple, White Oak, Red Oak, Tulip Poplar, possibly Dogwood or American Plum for wildlife benefit)**

March: plant recommended seedlings at recommended spacing. (I recommend a 8' X 10' spacing – the 10' being the width between rows – 544 trees/acre or a maximum of 10' X 10' spacing _436 trees/ac.

Each summer for 1 to 3 years after planting: mow between each row of seedlings or apply herbicide around seedling to control competing grasses. Note –do not damage seedling stem by weedeating or scraping the seedling with the mower. This will damage the tree and cause a permeant defect in the tree.

Each March for 1 to 3 years after planting: plant replacement seedlings as necessary to maintain at least 300 trees per acre.

Desired Future Conditions: Develop this fallow land into a quality forest by planting trees

Desired Forest Type or Dominant Vegetation: As Listed in Dominant Species

Desired Stand Structure: Even Aged

Woodland Stand Description and Management Recommendations

Stand # 9 - 3.2 acres

Dominant Species: Ash (dead), Red Maple, Black Cherry, Am. Elm, Hawthorn, Autumn Olive, Black Locust, honey Locust, Yellow Poplar, Hickory spp., a few Black Walnut

Forest Type or Dominant Vegetation: Upland Central Hardwoods

Stand Diameter or Size Class: Poletimber/Small sawtimber

Stocking Level: Under stocked with desirable species

Stand History: Old-Field Reversion

Topography: Gently sloping upper slope area

Invasive plants or insects impacting this stand: Autumn Olive, Japanese Honeysuckle, Multi Flora Rose

Stand Description: This upper slope area was pastured and then abandoned. Again, this is a composite area of natural early to middle successional development of woody shrubs and saplings. Thick understory of brush & briars because of the open canopy Autumn Olive becoming established in this area. Numerous openings of grass cover are still found in this area.

Past management activities completed in this stand: Again, because this farm was recently acquired, the landowner has not begun improvements on this area yet.

<i>Management Recommendations:</i>
Continue eradicate of Autumn Olive as time permits
Possible tree planting of hard mass-producing trees in openings to improve stocking

If a timber harvest is recommended: No not in this 10-year management cycle

Comments: This area will continue to naturally develop into forestland again, but this could be supplemented with planting Black Walnut, Red Oak, White Oak, Sugar Maple, Cherry and Yellow Poplar would provide a diverse mixture of desirable species.

Desired Future Conditions: Work to create a fully stocked stand of desirable trees

Desired Forest Type or Dominant Vegetation: Upland Central Hardwoods

Desired Stand Structure: Uneven Aged

Recommended Management Activity Schedule

Year(s) Suggested	Mgmt. Unit	Required Task?	EQIP Practice?	Acres	Recommendations
2019, 2024 & 2029	All	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NA	Inspect & remark any portions of property lines with paint and signs necessary to help prevent illegal trespass. This task must be completed before this farm is eligible for enrolment into either OFTL or CAUV property tax reduction programs.
2020 -2029	1 & 8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	26 ac	Site prep and plant all or parts of this field to trees. In addition, cut and treat the non-native invasive species along the field edge to eliminate seed source and planting site contamination.
2020 -2029	6 & 9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8 ac	Work on cutting grapevines from trees in these areas – cover entire stand. This work could be done in conjunction with other TSI activities: Non-native woody shrub eradication if applying as an EQIP Project. Minimal activities in these areas should be cutting the grapevines from all potential “crop” trees
2024 & 2029	Whole Property	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Next Site Visit – Woodland reviews are recommended at least once every five years, and no more than ten years, based upon the date of the last actual woodland evaluation conducted by your forester

Before entering a timber sale agreement or conducting other forestry work that is not listed in your activity schedule, contact your forester first to ensure compliance with your approved woodland stewardship management.

Woodland Resource Descriptions

General Soils Information – a general description of the soil type(s) and the general productive capacity of the soil:

Soil Type(s): BrD, Chg1AF, Hay1AF, Lic1C2, OwC, VbE, W, WhE, WkF

Soil Drainage Class: Moderately well drained to well drained

General Description: See Soils maps and descriptions in Addendum for detailed descriptions. Also included in the Addendum is a map and associated chart showing the Forest Productivity (Tree Site Index) of the tract.

An on-line resource that can be used to obtain detailed soils information is:

<http://websoilsurvey.nrcs.usda.gov/app/>

Site Class: (using Woodland Productivity): Good _ Species Used - Northern Red Oak rating

Timber Information - a general description of the timber characteristics of quality and potential:

Short term timber production potential is limited for this property because the majority of the stands are young and just beginning to mature. The woodlands are stocked with a variety of marketable timber species that will produce valuable wood products in the future. Timber stand improvement (TSI) management practices such as grapevine control cull tree & undesirable hardwood species control, and elimination of non-native invasive species of woody shrubs & trees, will certainly enhance the quality and value of your timber resources over time, and are important tasks to implement in order to maximize the timber production potential in your woodlands. Emerald Ash Bore has caused damage to the forested areas throughout the farm.

Wildlife – a general description of the wildlife habitat quality and potential:

Your forestland provides valuable habitat for wildlife, including mammals, birds, and amphibians. Many of the tree species are used by this wildlife for food, cover and nesting sites. Some of the more valuable wildlife food trees species include oaks, beech, cherry, dogwood and hickory. Many other tree species are critically important to certain species of wildlife. Grapevines also are an important food and cover for birds and can be left in low quality and cull trees. Cover, food and water are all necessary to attract wildlife. Different species use different cover types and maintaining a diversity of cover is key to attracting a wide variety of wildlife. A mixture of sapling areas, pole areas and sawtimber areas will help meet the need for habitat diversity. Small openings in the forest and/or open areas along woodland roads help provide areas for birds and their young to come and catch insects. Openings can also be seeded to grass and clover mixes to provide an additional variety of food.

Please note all habitats don't necessarily have to be present on your property...your neighbor's land may offer a habitat type different than what is available at your forest. You can extend habitat benefits using complimentary cover types beyond your boundaries...the wildlife doesn't mind

The diversified size class of trees & shrubs of the forested land on this tract provides suitable habitat for a variety of game and non-game species of birds and animals. Openings, such as the bottomland field, access roads, powerline right-of-ways that are grass covered are providing the additional feeding & nesting sites. Areas of thick understory benefit both game & non-game species of mammals and birds. The river area is an important ecological asset for a variety of amphibian species, reptiles, fish and insects.

Wetlands – a general description of any wetland resources and/or vernal pools:

There is one area identified in the National Wetlands Inventory Database, as a freshwater emergent forested wetland, as well as the Hocking River and the perennial stream in Stand 8, near the southern property line. Review was completed 4/2019

Water - a general description of the water resources on the property: Soil and water conservation practices can be applied to this property. Perennial streams should always be buffered with trees. Livestock should be kept out of streams. Water control structures should be used in areas where access trails and roadways are present.

The water and soil resources on your property should be protected and enhanced. Using the information in this plan and information available through your local Soil and Water Conservation District you can implement sound soil and water conservation practices on your property.

The Hocking River and Butts Run, a perennial stream, are both part of this ownership.

Best Management Practices

Basic protection measures used to guard your forest soils against problems related to soil/site limitations and equipment usage - rutting, excessive disturbance and compaction, erosion, and sedimentation. - are commonly referred to as Best Management Practices (BMP'S). One very easy BMP landowners may use is simply to limit heavy equipment access to dry weather periods.

Hilly to steeply sloped terrain is more subject to site disturbance and subsequent soil erosion and sedimentation. Forest management often may still be accomplished on these steep areas with the use of BMP's. Even when the forest terrain is nearly level to gently rolling, and where slope does not present a hindrance to access for management activities, it is important to keep the trails up away from the small drainages where possible. This helps protect water quality by providing a buffer strip of undisturbed soil and leaf litter where any sediment can be trapped before reaching the drainage, if some should get washed off the path

During timber harvest activities, follow the Best Management Practices outlined in the Ohio State University Bulletin #916 – BMPs for Erosion Control for Logging Practices in Ohio. This booklet is available online at www.ohiodnr.gov/forestry/ or at your local Division of Forestry office.

Practically speaking, the use of BMP's to prevent soil loss is a sound agricultural practice that helps maintain site & timber productivity. Also, implementing BMP's helps you comply with Ohio's Agricultural Pollution Abatement Law (HB 88) standards for Silvicultural Operations. There is not an issue with any of the trails and roads on this tract.

Archeological/Historical Resources – a general consideration and description of such resources:

Historical and cultural resources are nonrenewable and can never be replaced once destroyed. These resources provide us a unique glimpse into the past and a look at the people and how they cared for the land. Good stewardship involves recognizing these resources and protecting them. These resources should be conserved whenever possible when they are present on the property.

No known significant / historical / ecological sites are listed in the State Registry for this tract except for a small ridgetop family cemetery in Stand 8. Landowner did not know of any unique sites on this tract. 4/2019

Black Bear Holdings LTD Tract
Sections 26 & 32
Rome Twp., Athens Co., OH
Wetlands Map



PFO1A

US RTE
50

R2UBH

PFO1A

River Rd.
Twp. Rd. 129

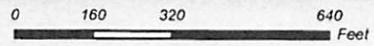
Legend

Black_Bear_Holdings_LTD_Tract
Wetlands

WETLANDS

-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland
-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond
-  Lake
-  Other
-  Riverine

U.S. Fish and Wildlife Service, Nat
wetlands.team@fws.gov



Forests of Recognized Importance –Globally, regionally & nationally significant large forest landscape areas of exceptional ecological, social, cultural or biological values

This forested tract does not contain any attributes that could contribute to what would be considered a unique landscape. Review of maps of the area and records did not reveal any indication of this tract being located in a unique landscape classification. 4/2019

Threatened & Endangered Species – considerations for threatened and endangered species, including the direct relationship with biological diversity:

Threatened and endangered species have certain habitat requirements. Habitat requirements for threatened or endangered species may or may not be found on this forest land

The Division of Wildlife (DOW) participates in an inter-disciplinary Environmental Review Program within the Ohio Department of Natural Resources (ODNR). The DOW conducts its portion of the review subject to its statutory authority. For its' role as the state wildlife agency, the DOW provides guidance and recommendations on how to minimize and/or avoid impacts to threatened and endangered species, and other vulnerable wildlife. An environmental review considers documented species, the habitats that are present, and the potential impacts on species and habitats.

For many projects, demonstrating coordination with ODNR is a requirement that must be fulfilled in order to secure funding, licensing, or permitting, at both the state and federal level. Coordination letters that are prepared through ODNR's Environmental Review Program are done so under the authority of the National Environmental Policy Act (NEPA), the Fish and Wildlife Coordination Act (FWCA), the Clean Water Act (CWA), the Coastal Zone Management Act (CZMA), and other applicable laws and regulations. An environmental review represents coordination with ODNR and fulfills the necessary obligations.

If you are only interested in identifying which state listed species may be present within the vicinity of your project site or area of interest, please refer to the State Listed Wildlife Species by County and the State Listed Wildlife and Plant Species by County. These lists provide the species documented within each county, along with their respective state listing. Please note that these lists should only be used as a cursory reference, and not the only source of information when developing a project. Please note that this type of online review does not represent coordination with the ODNR or DOW.

Included in this Plan is a listing of State Listed Species for Athens County.

What to Submit for Environmental Review

For an environmental review of a proposed project, Landowner must submit the following:

1. Project Description: Site location (e.g., county, latitude and longitude), Onsite habitats, Proposed work
Proposed impacts (for example, is in-water work necessary? Is tree cleaning necessary?),
Proposed BMP's
2. Maps that delineate the area of impact or work area: Topographic, Aerial Site plans
3. Photographs representative of the site
4. Shapefiles, KMZ files

To request an Environmental Review of your project, please submit the project information to the following dedicated email: environmentalreviewrequest@dnr.state.oh.us. Please allow at least 30 days for review and for the coordination letter to be returned.

Before any physical Construction Project is proposed for this tract, Landowner should submit a request for Environmental Review. Habitat does exist on this tract that may be suitable for some species listed.

Aesthetics – current or future aesthetic considerations for the woodland:

Forest aesthetics is often associated with older, more mature forests. However, it also has been said that beauty is in the eye of the beholder. Many folks enjoy mature forests with big trees...yet other folks find beauty in a young forest vibrant with the songs of early successional forest songbirds.

Forest stewardship management addresses these and other various aesthetic tastes, and may weigh in visual goals of the neighbors. When you are weighing aesthetic goals, consider as a "group" 1) visual aesthetics, 2) the aesthetics of a dynamic functioning forest ecosystem, and 3) the particular wildlife species you hope to encourage at your property.

This tract is located within the viewscape of the Village of Guysville and St Rte.50, so maintaining the visual appearance of a natural forest landscape is important to the landowner.

Recreation – current and potential recreational activities at property:

Each forest has a unique history and character...and this continues to build under your stewardship. This forest could be used for hunting, hiking, or wildlife watching. Many landowners find enjoyment in doing improvement work in their woods. Others find pleasure in watching the birds. Some folks gain gourmet foods from the woods, gathering fruits, nuts, or wild mushrooms. Flowering trees like dogwood, redbud and serviceberry, whenever present, add to the beauty of the forest.

Creating hiking/equine trails will improve access and your opportunities for the use of the area. A walk/ride in the forest provides a time of learning for all, but it can also be a time to relax and observe the natural settings. The woodlands can be a quiet place of solitude after a busy workday, or anytime for that matter.

Other Resources – a general description of any other notable woodland resources:

Associated forest resources vary somewhat from forest to forest, but typically include a variety of herbaceous plants present within the woodlands or old fields within a property.

Spring, summer, and fall wild flowers provide non-timber benefits to anyone who takes the time to enjoy the blossoms. Along with the flowers, there is a vast array of insect life – pleasant and sometimes unpleasant – that is essential to good ecosystem function. Native and non-native honey bees and butterflies are examples of beneficial insects. Medicinal shrubs and herbs and maple syrup are more examples of other beneficial forest resources.

Fire – identify hazards, fire breaks, safety zones, note dead trees from insects or disease, etc.:

Properties and homes in Ohio are not immune to the risks of fire and fire-related damage. Spring and fall are Ohio's main "fire seasons". A step one may take to protect one's forest is to have a system of paths that may double as fire breaks. For the home site, maintain good access for fire vehicles, create a defensible space around your home and outbuildings by removing flammable materials such brush, leaves, sticks, and twigs; remove these from roofs and gutters too. Landscape around buildings with less flammable plants and materials, avoid evergreens by or near the home, keep an outdoor water source, and avoid outdoor burning. For more information on outdoor fire safety and fire safety around your home, Firewise brochures are available from the Ohio Division of Forestry (toll-free 877-247-8733). You may also contact your local fire department with questions about Firewise and home safety regarding wildfire.

Ohio Fire Laws: ORC 1503.18 regarding kindled fires prohibits outdoor open burning statewide in unincorporated areas during the months of March, April, May, October, and November between the hours of 6:00 am and 6:00 pm. ORC 1503.18 is administered by the Ohio Division of Forestry; call toll-free 877-247-8733 with questions. OAC 3745.19 regarding outdoor burning is administered by the Ohio Environmental Protection Agency (EPA); EPA notification is required for many types of open burns in Ohio. Call 614-644-2270 with questions, or visit www.epa.ohio.gov/dapc/general/openburning.aspx.

Carbon Cycle – Healthy, sustainably managed forests can help to reduce atmospheric carbon:

When you as a forest landowner choose to maintain your forest land rather than convert it a non-forest use, you are making a significant contribution to the carbon sequestration equation; a healthy forest

sequester carbon. Forest landowners that hold an interest or focus upon the carbon cycle have opportunities to enhance carbon sequestration on the property by conducting various silvicultural practices that enhance the forest's ability to sequester carbon, and by re-establishing woodlands on non-forested land.

Active forest managers may find opportunities for carbon trading and participation in ecosystem service markets.

Integrated Pest Management – The maintenance of destructive agents, including insects, at tolerable levels by planned use of a variety of preventative, suppressive or regulatory tactics and strategies that are ecologically and economically efficient and socially acceptable.

In SE Ohio numerous insects can affect forest health; Gypsy Moth, Emerald Ash Borer, White Pine Adeligid, Hemlock Woolly Adeligid, Bronze Oak Borer.....

Future planned hardwood harvests, TSI work and firewood harvests will include the removal of Ash trees to utilizes trees lost due to the impact of the Emerald Ash Borer.

Invasive plants are another destructive agent to the health of your woods. Locally, Autumn Olive, Bush Honeysuckle, Burning Bush and Ailanthus are some of the non-native species. All of these species are found on this tract. Annual inspections of "openings" should be done and EPA approved herbicides applied on any plants located (refer to handout in Plan Appendix).

Forest Health – a general description of the health of the woodland: Most of the forest areas are in acceptable condition, considering the lack of actual forest management that had been done by the previous Owners. The majority of the forested areas are the result of natural succession, upon abandonment from an agricultural use. EAB is beginning to have a significant impact on the forested areas of this tract. Non-native invasive plants: Autumn Olive, Bush Honeysuckle & Ailanthus in particular, are spreading throughout portions of this farm.

How To Maintain Forest Health

Maintaining the health of your forest is important to help prevent damaging problems from interfering with the benefits you receive from your forest. We recommend that you consider the following general guidelines to maintain forest health:

1. *Consider that some amount of damage from disease, wildlife pest, insects, and weather is normal and can be beneficial to the overall health of your forest.*
2. *Remove excessive numbers of over mature, weak or damaged trees that are most likely to be affected by damaging agents. However, consider that some of these trees are beneficial to certain wildlife species.*
3. *Encourage mixtures of tree species to minimize damage from problems that attack specific types trees.*
4. *Discourage tree species that are not well adapted for the climate and soil properties in your area.*
5. *Maintain a density of trees that provides them with adequate growing space.*
6. *Avoid wounding your trees and compacting the soil during treatments and recreational activities.*
7. *Prevent livestock from grazing in the woods.*
8. *Avoid implementing treatments during or soon after events like droughts or outbreaks of insects or diseases.*
9. *Stay informed of pest alerts and current problems.*
10. *Monitor your forest frequently for symptoms of damaging agents.*
11. *Consider utilizing pest suppression programs recommended by your state or county forestry agency.*
12. *Support regulations geared towards reducing the spread of non-native pests and reducing levels of air pollution.*
13. *Follow quarantine regulations for specific pests and their host plants.*

14. Salvage dead or damaged trees after a problem occurs

Forestry Terms – Forestry terminology for landowners, professional foresters, and others:

Consistent forestry terminology is essential to anyone interested and involved in the science, management, and conservation of forests.

The Society of American Foresters (SAF) offers a great resource for such forestry terminology: "The Dictionary of Forestry". This dictionary is an excellent tool available for anyone to learn more about the language used in forestry. The dictionary provides precision, clarity, and consistency in communication of forestry terms.

You may access "The Dictionary of Forestry" for free at SAF at www.dictionaryofforestry.org. If internet access is not available, one may purchase a printed version from SAF (toll free 866-897-8760).

A list of common forestry terms is included in the addendum of this plan.

Addendums

- Soils Report with - Soil Map and Map Unit Description
- Black Walnut Suitability Index
- Forest Productivity Report

Landowner Plan packet also contains:

- How to mark your property lines
- Forestry Terms