

Woodland Stewardship Management Plan

Owner's Information:

Case Number: _____

Owner: Jessica Adine-Kuchta

Shawn R. Kuchta

Signed: Jessica Adine-Kuchta

Signed: Shawn R. Kuchta

Date: May 11, 2018

Preparer's Information:

Prepared by: Dean A. Berry

Signature: Dean A. Berry

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

RECEIVED
FEB 25 2022
Jill Thompson
Athens County Auditor

Date: April 26th, 2018
Field Inspection Date

740-541-4647 mobile
fatlabtreefarm@gmail.com

This plan is valid for the period beginning May 8th, 2018 and ending May 7th, 2028.

Plan Status: New

NRCS Representative Signature: _____

Date: _____

Woodland Stewardship Management Plan

Owner Jessica Adine-Kuchta & Shawn Kuchta
Address 11727 Salem Rd
Athens, Ohio 45701
Phone _____ Case Number _____
Cell 740-818-2902 Email Address jessica.adine@gmail.com
County Athens Township/Village/City: Waterloo Twp. Sec 6
Parcel(s): N020020000200, N020020000302, N020020000400,
Location: Tract location on southwestern side of Salem Road, Athens Ohio

Woodland Stewardship Acreage:	<u>21.000</u>	Non-woodland Stewardship Acreage*:	<u>3.578</u>
Total Property Acres	<u>24.578</u>	* Non-woodland acres for which stewardship recommendations are made.	

This plan was written to qualify the landowner's woodland for the programs checked below:

- Ohio Forest Tax Law American Tree Farm Program
 Environmental Quality Incentives Program (EQIP) CAUV Property Tax Reduction

Property coordinates (report in WGS 84, degrees min sec.)

Longitude: 39 22' 24.915" Latitude: -82 11' 22.644" W

Landowner Management Objectives

1. Manage the property for all attributes and opportunities that exist in a forest ecosystem of interest to the owner including recreation, wildlife management, soil and water management, forest protection, timber products management, and other compatible conservation uses.
2. Improve the productivity of this land for future generations. This involves restoring the native forested landscape by working to eradicate non-native invasive species of trees & shrubs and completing ecological restoration activities.

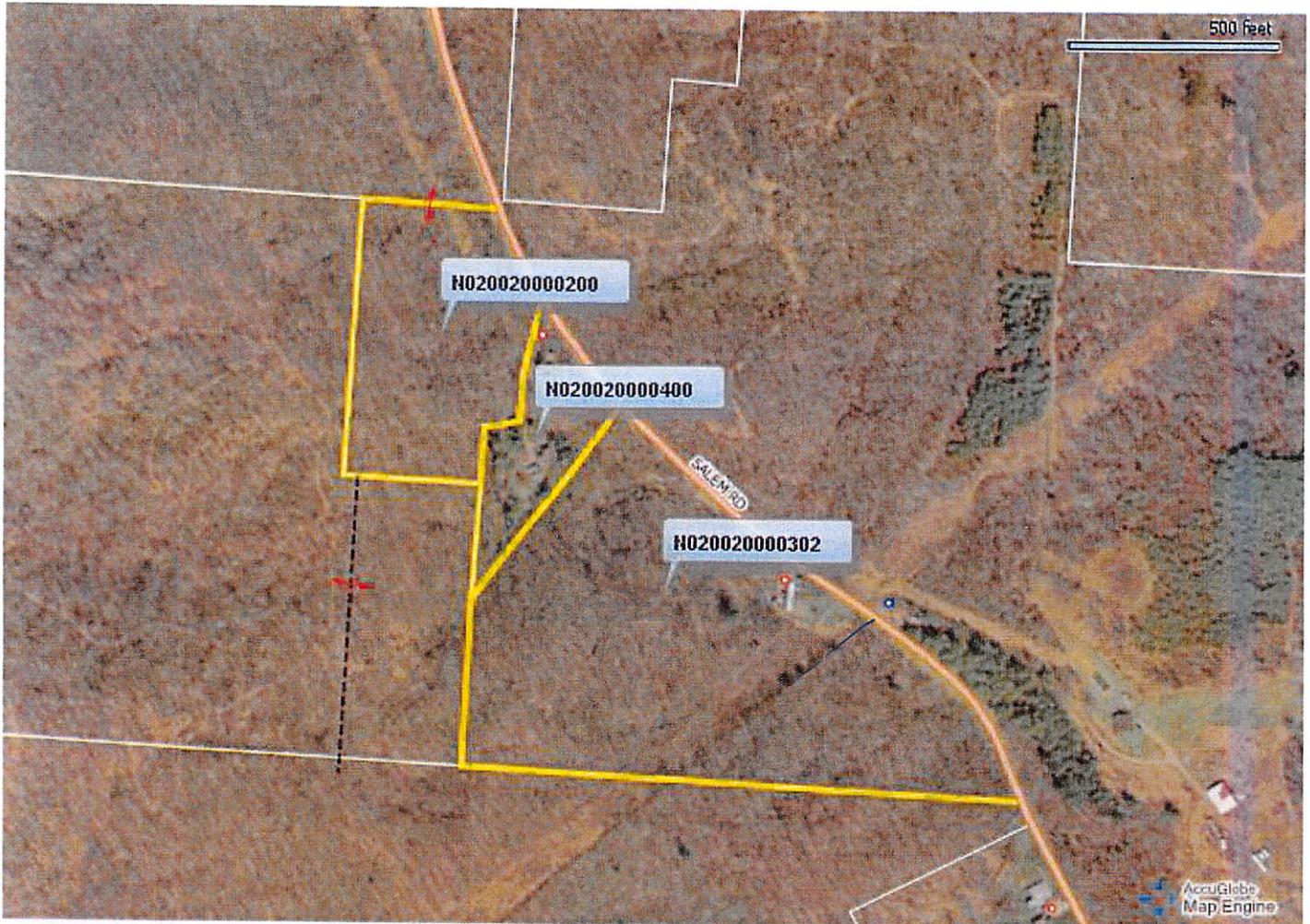
General Woodland Description

Athens County is located in the unglaciated hill country of southeastern Ohio. Slope and erosion hazard is the major land use limitations. Seasonal wetness, droughtiness, flood hazard, and the moderately slow to very slow permeability of some soils also limit land use.

Athens County is in the central hardwood forest region. Most of the woodland in Athens County is in areas of steep and very steep terrain. This terrain is well suited to trees.

Shawn & Jessica purchased their first tract of land in of April of 2012. They added on to their ownership with a purchase of 22 + ac in Dec. of 2016. It appears a previous landowner had lightly logged this area 15+ years ago. After that, little management was done to improve the forest land. As time permits, Shawn & Jessica plan on planting medicinal plants and improving the condition of this forested tract.

Athens County GIS



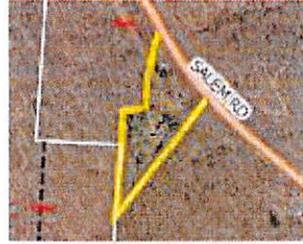
Notes

Shawn R. Kuchta
Jessica Adine Kuchta

Data For Parcel N020020000400

Base Data

Parcel: N020020000400
Owner: KUCHTA SHAWN R ADINE JESSICA
Address: 11727 SALEM RD



[+] Map this property.

Mailing Address

Mailing Name: KUCHTA SHAWN R & JESSICA ADINE
Address: 11727 SALEM ROAD
City State Zip: ATHENS OH 45701

Geographic

City: UNINCORPORATED
Township: WATERLOO TOWNSHIP
School District: ATHENS CITY SCHOOL DISTRICT

Legal

Neighborhood:	00013001	Legal Acres:	2.43
Legal Description:	SEC 6 2.430AC	Land Use:	(511) R - SINGLE FAMILY, 0-9.999 AC
		Property Class:	RESIDENTIAL
Map Number:	0-0-0-0	Range Township Section:	0-0-0

Valuation

	Appraised	Assessed (35%)
Land Value:	\$18,730.00	\$6,560.00
Building Value:	\$100,060.00	\$35,020.00
Total Value:	\$118,790.00	\$41,580.00
CAUV Value:	\$0.00	
Taxable Value:	\$41,580.00	

Tax Credits

Owner Occupancy Credit: YES
Homestead Reduction: NO

Notes

Notes:

Data For Parcel N020020000302

Base Data

Parcel: N020020000302
Owner: ADINE JESSICA SHAWN R KUCHTA
Address: 0 SALEM



[+] Map this property.

Mailing Address

Mailing Name: ADINE JESSICA SHAWN R KUCHTA
Address: 11727 SALEM RD
City State Zip: ATHENS OH 45701

Geographic

City: UNINCORPORATED
Township: WATERLOO TOWNSHIP
School District: ATHENS CITY SCHOOL DISTRICT

Legal

Neighborhood: 00013001
Legal Acres: 0
Legal Description: SEC 6 16.227AC
Land Use: (100) A - AGRICULTURAL VACANT LAND
Property Class: AGRICULTURAL
Map Number: 0-0-0-0
Range Township Section: 0-0-0

Valuation

	Appraised	Assessed (35%)
Land Value:	\$35,890.00	\$12,560.00
Building Value:	\$0.00	\$0.00
Total Value:	\$35,890.00	\$12,560.00
CAUV Value:	\$0.00	
Taxable Value:	\$12,560.00	

Tax Credits

Owner Occupancy Credit: NO
Homestead Reduction: NO

Notes

Notes:

Data For Parcel N020020000200

Base Data

Parcel: N020020000200
 Owner: ADINE JESSICA SHAWN R KUCHTA
 Address: 0 SALEM



[+] Map this property.

Mailing Address

Mailing Name: ADINE JESSICA SHAWN R KUCHTA
 Address: 11727 SALEM RD
 City State Zip: ATHENS OH 45701

Geographic

City: UNINCORPORATED
 Township: WATERLOO TOWNSHIP
 School District: ATHENS CITY SCHOOL DISTRICT

Legal

Neighborhood:	00013001	Legal Acres:	5.921
Legal Description:	SEC 6 5.921AC	Land Use:	(100) A - AGRICULTURAL VACANT LAND
		Property Class:	AGRICULTURAL
Map Number:	0-0-0-0	Range Township Section:	0-0-0

Valuation

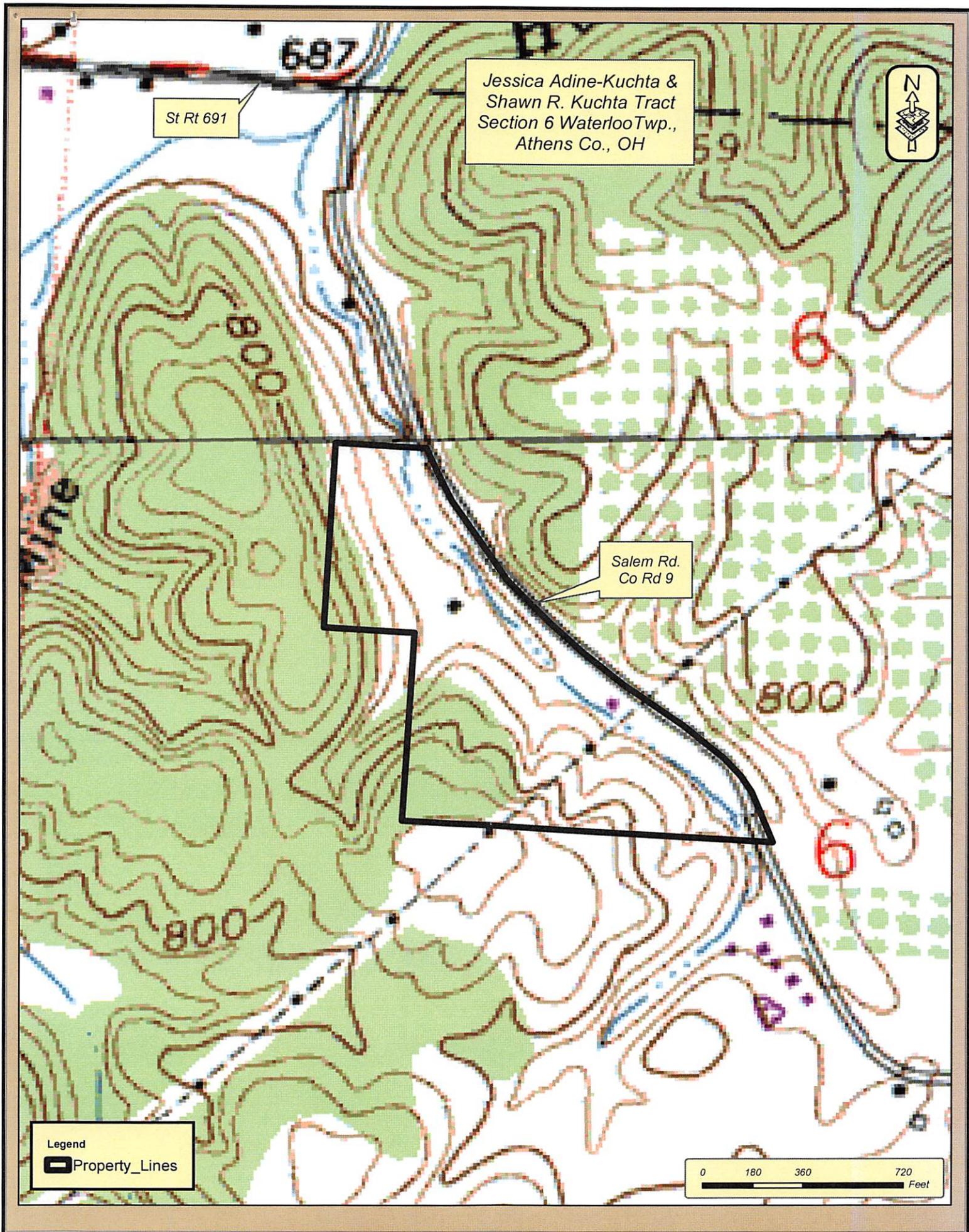
	Appraised	Assessed (35%)
Land Value:	\$7,160.00	\$2,510.00
Building Value:	\$0.00	\$0.00
Total Value:	\$7,160.00	\$2,510.00
CAUV Value:	\$0.00	
Taxable Value:	\$2,510.00	

Tax Credits

Owner Occupancy Credit: NO
 Homestead Reduction: NO

Notes

Notes:



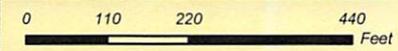
Jessica Adine-Kuchta &
Shawn R. Kuchta Tract
Section 6 WaterlooTwp.,
Athens Co., OH

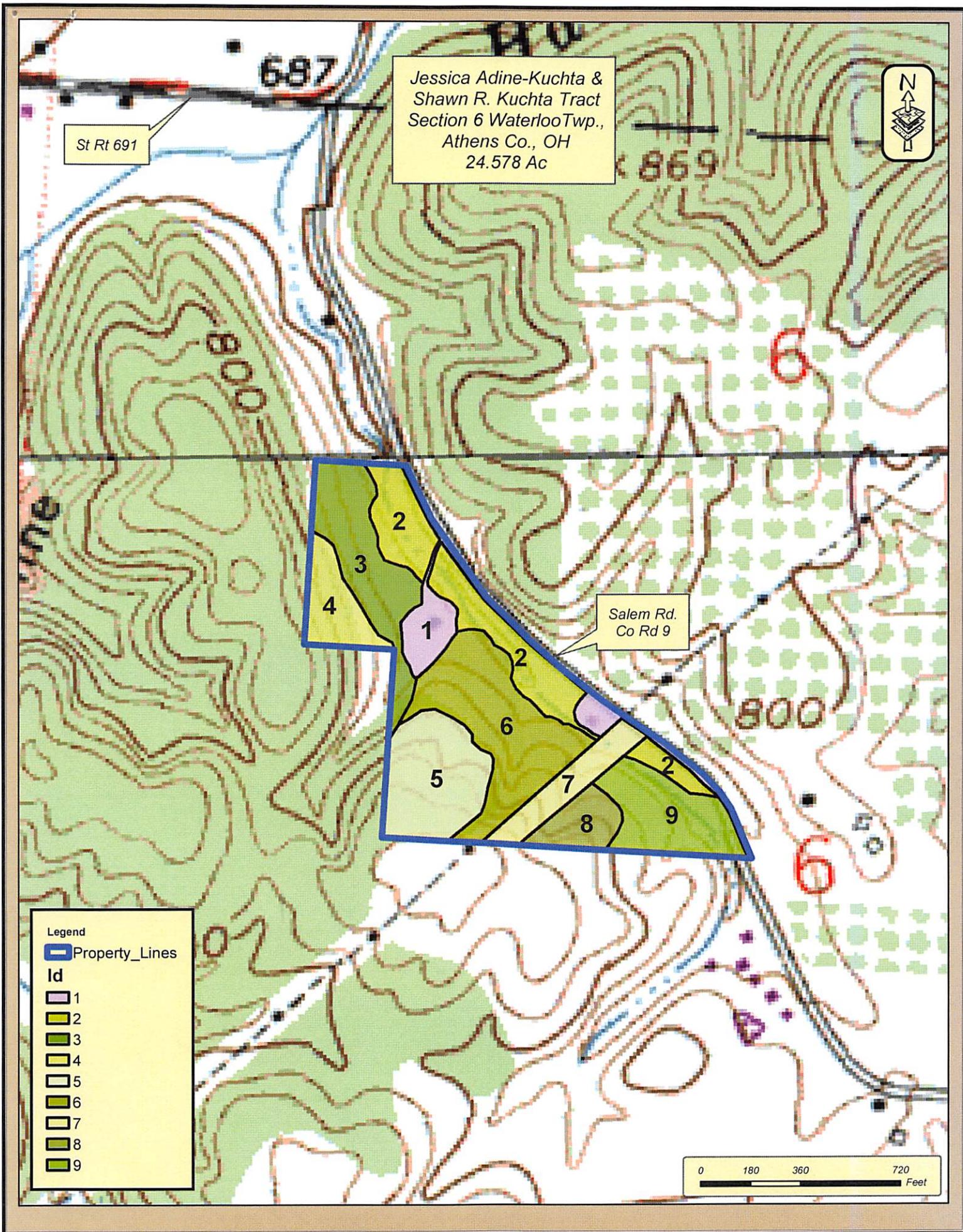


Salem Rd.
Co Rd 9

Legend

- Property_Lines
- Athens Co. Parcels_June 2017





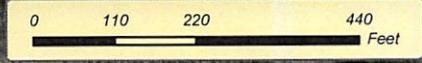
Jessica Adine-Kuchta &
Shawn R. Kuchta Tract
Section 6 Waterloo Twp.,
Athens Co., OH
24.578 Ac



Salem Rd.
Co Rd 9

Legend

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



Woodland Stand Description and Management Recommendations

Stand # 1 - 2.078 acres Non-Forested Areas_ Residential Areas (2), County Road

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, Grapevines – noted in adjacent stands.

Stand Description: This stand covers the residential area, where Shawn & Jessica reside. This area includes the house, associated outbuildings, yard space and driveway. This area is a semi-wooded home site with large conifer and hardwood trees surrounding the house. A variety of native shrubs and flowers have been maintained.

In addition, this stand includes a second residential area located adjacent to the transmission line right-of-way. This is a small site occupied by a trailer, which is a rental property.

Finally, the portion of Co Rd 9 (Salem Rd.) that is included in this ownership is included in this non-forest stewardship area.

Past management activities completed in this stand: Area is well maintained. A small outbuilding was under construction at time of inspection. 4wHLer activity near the trailer site has been halted to eliminate potential erosion issue.

Management Recommendations:

Annually inspect for non-native invasive species & 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 area” for the landowner, in regards 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 # 2 - 4.1 acres

Dominant Species: Yellow Poplar, Sycamore, Black Walnut, Honey Locust, Red Maple, American Elm, Yellow Buckeye, Ash (dying from EAB), Dogwood, Hawthorn, Box Elder
Along Road- a few scattered Oaks and Sugar Maple also in stand composition

Forest Type or Dominant Vegetation: Upland Central Hardwoods

Stand Diameter or Size Class: Poletimber/Small sawtimber, larger trees along stream bank and County Road

Stocking Level: Fully stocked overall –some areas understocked with desirable saplings, Power line passes through this area.

Stand History: No Prior Management

Topography: Gently sloping

Invasive plants or insects impacting this stand: Autumn Olive, Japanese Honeysuckle, grapevines, Barberry, Emerald Ash Borer (EAB)

Stand Description: This is an old streamside field reversion area that is developing into forestland. This area is in the late successional stage of development. Overstory is mainly pioneer species, such as: Red Maple, Dogwood, Ash, Sycamore, Box Elder and Hawthorn. Understory is in grass cover in the powerline easement area.

This stand is a composite of a drainage and lower slope area along the County Road. This area contains a little bit of everything. This area could have been broken into a couple of separate areas, but for management purposes, all were combined and will be treated as one area. Some areas have heavy underbrush, other areas still have grass present. The entire area needs to be covered and have the Autumn Olive patches eradicated & scattered grapevines cut. Presently there is an abundance of Multi Flora Rose and briars in this area

Past management activities completed in this stand: This area has been left alone to help discourage trespass onto this farm, via the roadway.

Management Recommendations:

Mark property lines with paint

Work on eradicating the grapevines from future “crop” trees, Autumn Olive, and other non-native invasive species like Barberry. This can be done by mechanical, chemical or possible rotational grazing in specific parts of this stand.

Tree planting in open areas – mass producing species for wildlife

Is a timber harvest recommended? No commercial harvesting operations. May utilize dead Ash for fuelwood and lumber for personal usage.

Comments: This area offers limited timber potential but should be inspected for possible silvicultural work to improve species composition at a later date. Hand planting of desirable tree species is an activity that would benefit this area.

The open areas in this stand provide diversity in habitat for a variety of wildlife species. The gaps in stand provided areas for oak reproduction to become established. Some timber stand improvement work could be done in this stand to improve the composition and spacing. Because of the proximity to the house, this is a higher priority area for working in.

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: Develop into forestland again.

Desired Forest Type or Dominant Vegetation: Upland Central Hardwoods

Desired Stand Structure: Uneven Aged

Woodland Stand Description and Management Recommendations

Stand # 3 - 3.3 acres

Dominant Species: Yellow Buckeye, Sassafras, Tulip Poplar, Ash, Red Maple, Dogwood, Black Cherry, Spice Bush, Am. Elm, Sycamore, Black Locust, Black Walnut, Hickories, Hawthorn, Red Bud

Forest Type or Dominant Vegetation: Upland Central Hardwoods

Stand Diameter or Size Class: Seedling/Sapling scattered larger pole trees (Yellow Poplar)

Stocking Level: Under stocked in most areas with desirable species

Stand History: Old-Field Reversion

Topography: Gently sloping lower slope area

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

Stand Description: This lower side slope area was once open lands, abandon and allowed to regenerate naturally. Stand is understocked because of mortality of Ash (EAB) and Am. Elm (Dutch elm disease) trees. These openings in the overall stand canopy have allowed non-native invasive species to become established in this area. Parts of this area are infested with Spice Bush and Multi-Flora-Rose. Many of the trees in this area are infested with vines. Poplar trees showing crown damage due to the vines and wind damage. Possible old water well is located in the lower slope of this area.

Past management activities completed in this stand: Property lines located

<i>Management Recommendations:</i>
Continue to locate & mark property lines with paint, redo every 5 years, or as needed
Cut grapevines from crop trees in this area – cover entire stand
Work on the eradication of Autumn Olive and other non-native invasive woody shrubs and vines as time permits
Plant seedlings or nuts in this area to improve species diversity in this area.

If a timber harvest is recommended: No, Landowner may utilize dead Ash for firewood

Comments: EAB present in the Ash trees in this area. Nice Poplar trees scattered around this site. Keep property lines painted, and let it 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: Reduction of non-native invasive species, allowing native tree seedlings to develop.

Desired Forest Type or Dominant Vegetation: Upland Central Hardwoods

Desired Stand Structure: Uneven Aged

Woodland Stand Description and Management Recommendations

Stand # 4 1.5 acres

Dominant Species: Am. Beech, Sugar Maple, Red Oak, Yellow Poplar, Ash, Red Maple, White Oak, Am. Elm, Hickory spp., Black Walnut, Dogwood

Forest Type or Dominant Vegetation: Upland Central Hardwoods

Stand Diameter or Size Class: Poletimber/Small sawtimber

Stocking Level: Fully stocked

Stand History: No Prior Management

Topography: Gently sloping with some small steep upper slope areas

Invasive plants or insects impacting this stand: EAB, scattered grapevines

Stand Description: This is a heavily forested upper slope area that contains a wide variety of tree species. Overall this area is older and further along in development than the adjacent Stand 3. The area is fully stocked with Yellow Poplar, Red Maple, Red Oak and Sugar Maple trees. This area appeared to have been lightly harvested with only the larger, quality sawlog trees being removed. Full crown closure has shaded the open understory. This area is populated with ferns, native flowers and medicinal plants. Grapevines (in "crop" trees) within this area need cut – cover entire area.

Past management activities completed in this stand: Property line surveyed and marked.

<i>Management Recommendations:</i>
Cut the scattered grapevines found in this area
Maintain the painted property lines
Inspections for non-native invasive species – eradicate Autumn Olive, Barberry as time permits

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

Comments: Area should produce quality hardwood trees in the future. Moist soils and high site index make this a productive site for growing a variety of trees and plants.

Desired Future Conditions: Area supports a desirable mixture of trees that are developing into a quality hardwood stand.

Desired Forest Type or Dominant Vegetation: Upland Central Hardwoods

Desired Stand Structure: Uneven Aged

Woodland Stand Description and Management Recommendations

Stand # 5 3.4 acres

Dominant Species: Sugar Maple, Red Oak, Yellow Poplar, Ash (dead), Red Maple, White Oak, Chestnut Oak, Scarlet Oak, Black Oak, Hickory spp., Dogwood, Hawthorn spp., Hornbeam & Hophornbeam (Ironwood)

Forest Type or Dominant Vegetation: Oak-Hickory

Stand Diameter or Size Class: All size classes

Stocking Level: Fully stocked in most areas, small opening of saplings scattered in area

Stand History: Unknown

Topography: Gently sloping with some steep upper slope areas near ridgetop

Invasive plants or insects impacting this stand: EAB, scattered grapevines

Stand Description: Again, this is a heavily forested upper slope area that contains a variety of tree species, but is a different forest type than Stand 4. The area is fully stocked with Black, White, Chestnut and Scarlet Oak species with a variety of Hickories and then Beech and Maple trees. Being a dry area with thin, rocky topsoil, tree growth is marginal and the low quality; less desirable commercial tree species (Scarlet Oak & Hickory) are now dominating the stand composition. That said, this is the best hard mass production area on the tract. Full crown closure has shaded the open understory – the only brushy areas are where “wind throws” have created canopy gaps. Scattered grapevines in this stand need treated –cover entire area.

Past management activities completed in this stand: Property line surveyed and marked. A previous owner harvested the area lightly. Area utilized for hunting deer.

<i>Management Recommendations:</i>
Cut the scattered grapevines found in this area
Inspections for non-native invasive species – eradicate Autumn Olive along border with Stand 6as time permits

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

Comments: Area should produce large hardwood trees in the future. This area has the largest trees on this tract –unfortunately some are old hollow Oak trees. Again these trees are important for wildlife.

Desired Future Conditions: Area supports a desirable mixture of trees that are developing into a mass producing hardwood stand.

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

Desired Stand Structure: Uneven Aged

Woodland Stand Description and Management Recommendations

Stand # 6 - 4.7acres

Dominant Species: Red Maple, Sycamore, Honey Locust, Black Locust, Yellow Poplar, Yellow Buckeye, Box Elder, Spice Bush_ Limited – Hickories, Oak Spp., Black Walnut trees

Forest Type or Dominant Vegetation: Upland Central Hardwoods

Stand Diameter or Size Class: Poletimber/Small sawtimber scattered larger trees

Stocking Level: Under stocked in most areas with desirable species

Stand History: Old-Field Reversion

Topography: Gently sloping lower slope area

Invasive plants or insects impacting this stand: Scattered grapevines, EAB, Autumn Olive & Multi Flora Rose, Japanese Honeysuckle, Barberry, Multi Flora Rose

Stand Description: Basically, this area is a continuation of Stand 3 but was separated out because of the dense understory in the majority of this area. The lower slope is heavy Multi Flora Rose and Spice Bush. This is inhibiting the development of hardwood seedlings/sapling in the understory. There are limited areas with crown closure and an open understory. Overall this is a moist, high productivity site area and will produce quality trees and diverse fauna. Two small hollows bookend this area.

Past management activities completed in this stand: To limit soil erosion issues, 4w hler activity has been curtailed in this area.

Management Recommendations:

Cut grapevines from crop trees (Walnuts) in this area – cover entire stand

Work on the eradication of Autumn Olive and other non-native invasive woody shrubs and vines as time permits. Possible rotational grazing on a limited basis in this area.

Possible planting of native medicinal plants in portions of this area.

If a timber harvest is recommended: No, Landowner may utilize dead Ash for firewood

Comments: EAB present in the Ash trees in this area. Nice Poplar/Walnut trees scattered around this site.

Desired Future Conditions: Reduction of non-native invasive species, allowing native tree seedlings to develop.

Desired Forest Type or Dominant Vegetation: Upland Central Hardwoods

Desired Stand Structure: Uneven Aged

Woodland Stand Description and Management Recommendations

Stand # 7 - 1.5 acres Non-Forested Area – powerline right-of-way

Dominant Species: grasses, broadleaf plants, shrubs & a variety of hardwood seedlings

Forest Type or Dominant Vegetation: NA

Stand Diameter or Size Class: N/A

Stocking Level: N/A

Stand History: Other, electric transmission line

Topography: Gently sloping

Invasive plants or insects impacting this stand: Autumn Olive scattered along edges
(addressed in adjacent stand recommendations)

Stand Description: This stand covers the AEP Ohio electric transmission line easement that bisects this tract.

Past management activities completed in this stand: none noted

<i>Management Recommendations:</i>
Work on eradicating the Autumn Olive along the edges of the roadway

Comments: As stated before, these open areas are the points that non-native invasive plants become established in and spread into adjacent areas.

Desired Future Conditions: N/A

Desired Forest Type or Dominant Vegetation:

Desired Stand Structure:

Woodland Stand Description and Management Recommendations

Stand # 8 1.2 acres

Dominant Species: Hickory spp., Scarlet Oak, Black Oak, White Oak, Yellow Buckeye

Forest Type or Dominant Vegetation: Oak-Hickory

Stand Diameter or Size Class: Poletimber/Small sawtimber

Stocking Level: Fully stocked for site, but additional stocking could be added

Stand History: Unknown

Topography: Steep upper slope area near ridgetop

Invasive plants or insects impacting this stand: none noted

Stand Description: Like Stand 5, this is a dry, upper slope area with an open understory. Again, not a highly productive area and trees are growing slowly. Some green briar present in understory. Fairly steep hollow area adjacent to the powerline (inspect for Autumn Olive annually). Some supplemental planting could be done in this area to improve stocking levels and tree composition diversity within this stand.

Past management activities completed in this stand: Property line surveyed and marked.

<i>Management Recommendations:</i>
Keep property lines painted.
Inspections for non-native invasive species – eradicate Autumn Olive along border with Stand 7 as time permits
Possible understory tree planting in openings – mass producing species for wildlife benefit

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

Comments: This is a low productive area and needs little attention at this time.

Desired Future Conditions: Area supports a desirable mixture of trees that are developing into a mass producing hardwood stand.

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

Desired Stand Structure: Uneven Aged

Woodland Stand Description and Management Recommendations

Stand # 9 - 2.8 acres

Dominant Species: Ash, Box Elder, Red Maple, Black Cherry, Am. Elm, Hawthorn, Autumn Olive, Black Locust, Honey Locust, Red Bud, scattered Black Walnut, Sassafras

Forest Type or Dominant Vegetation: Upland Central Hardwoods

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

Stocking Level: Under stocked with desirable species

Stand History: Old-Field Reversion

Topography: Gently sloping lower slope area

Invasive plants or insects impacting this stand: Autumn Olive, grapevines

Stand Description: This lower slope area is a continuation of the same timber type as Stands 3 & 6. 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 is becoming established in this area. Numerous openings of just briars are still found in this area. Low quality and non-desirable species trees make this an undesirable commercial timber area but is a great wildlife area.

Past management activities completed in this stand: Property lines located.

<i>Management Recommendations:</i>
Continue eradicate of Autumn Olive and non-native invasive species 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 will take time because of the heavy understory. Great wildlife area. This is a low priority area for work in this 10 year period.

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

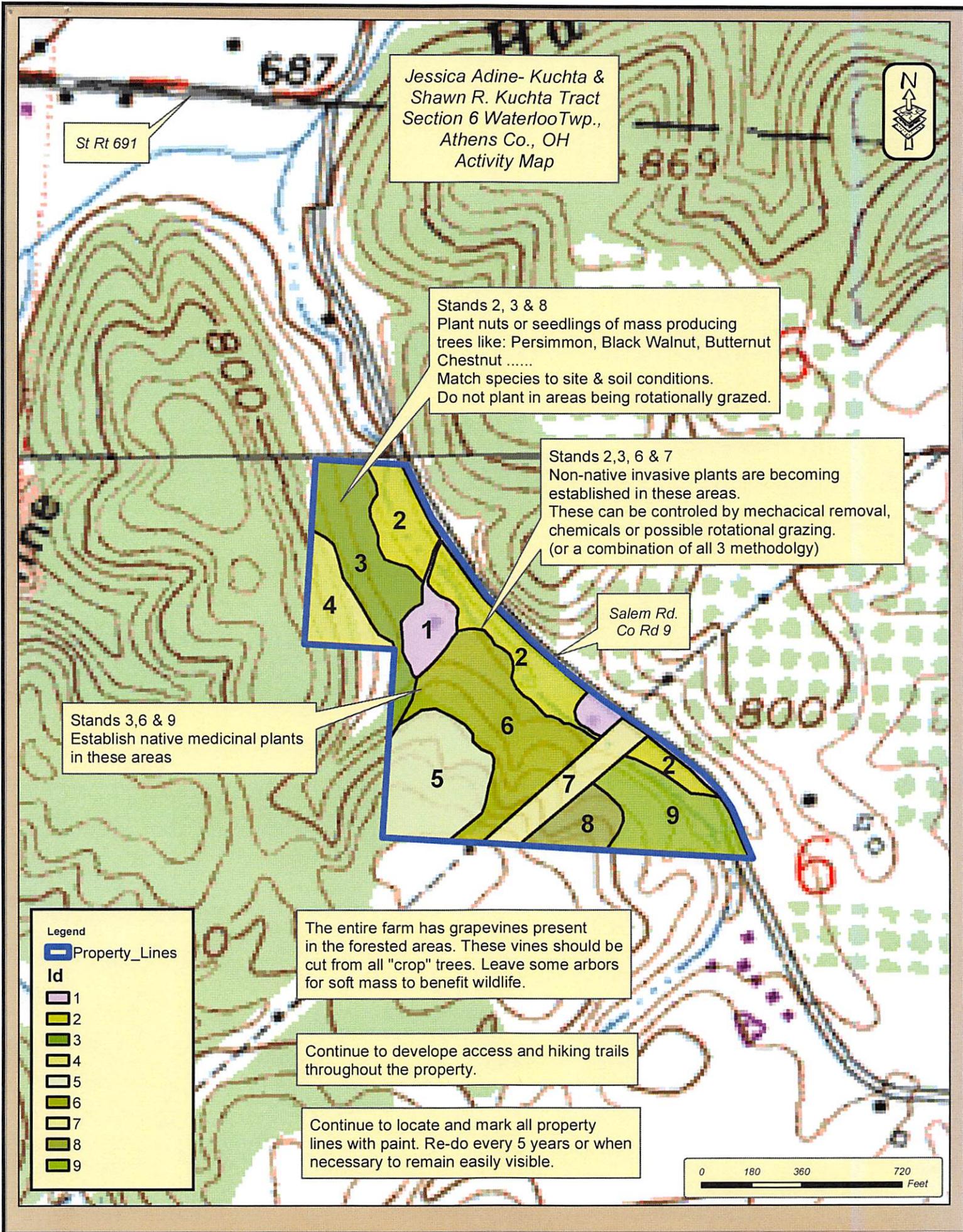
Desired Forest Type or Dominant Vegetation: Upland Central Hardwoods

Desired Stand Structure: Uneven Aged

Recommended Management Activity Schedule

Year(s) Suggested	Mgmt. Unit	Required Task?	EQIP Practice?	Acres	Recommendations
2018, 2023, 2028	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.
2019 -2028	2,3 & 8	<input type="checkbox"/>	<input type="checkbox"/>	2+ ac total	Plant seedlings or nuts in openings in these areas. Match the tree species to the soil type and site conditions. Mass producing trees like: Oaks, Persimmon, Walnut & Butternut would benefit wildlife.
2018 -2028	2, 3 6 & 7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5 ac more or less	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. Areas may be rotationally grazed.
2019-2028	3,6 & 9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2+ ac	Establish native plants in these areas. These plants may be for medicinal use or just for ecological enhancement of these woodlands.
2018 -2028	All	<input type="checkbox"/>	<input type="checkbox"/>		Create and maintain trails –Keep in grass cover to prevent erosion.
2023 & 2028	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 plan



Jessica Adine- Kuchta & Shawn R. Kuchta Tract
 Section 6 Waterloo Twp., Athens Co., OH
 Activity Map



St Rt 691

Stands 2, 3 & 8
 Plant nuts or seedlings of mass producing trees like: Persimmon, Black Walnut, Butternut Chestnut
 Match species to site & soil conditions.
 Do not plant in areas being rotationally grazed.

Stands 2,3, 6 & 7
 Non-native invasive plants are becoming established in these areas.
 These can be controlled by mechanical removal, chemicals or possible rotational grazing. (or a combination of all 3 methodolgy)

Salem Rd.
 Co Rd 9

Stands 3,6 & 9
 Establish native medicinal plants in these areas

Legend

Property_Lines

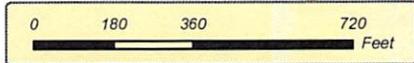
Id

- 1
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- 5
- 6
- 7
- 8
- 9

The entire farm has grapevines present in the forested areas. These vines should be cut from all "crop" trees. Leave some arbors for soft mass to benefit wildlife.

Continue to develop access and hiking trails throughout the property.

Continue to locate and mark all property lines with paint. Re-do every 5 years or when necessary to remain easily visible.



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): GsC, Mel1AF, RcD, WhC, WhE, WkF

Soil Drainage Class: Moderately well drained to well drained, except for Mel1AF – poorly drained and floods frequently

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 fairly young and just beginning to mature. This mature forested part of this tract was lightly harvested 10-15 years ago. 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 potential in your woodland. Emerald Ash Bore is causing damage to the forested areas throughout the farm. Dead trees will be utilized for fuelwood. Shawn may saw some for lumber on his Alaska mill.

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 don'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 powerline right of way that is grass/shrub covered, provide the additional feeding & nesting sites required by some species. Areas of thick understory benefit both game & non-game species of mammals and birds.

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

There are no areas identified in the National Wetlands Inventory Database on this farm except for the stream. A wetlands delineation map is included in this Plan.

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. Stand 2 was separated out of adjacent wooded areas because of the importance of protecting the Streamside Management Zone.

There are no year round water sources on this tract. Several wet weather vernal pools and springs were noted during the site inspection. An intermittent stream is located along the road, near the residence.

Best Management Practices – maintaining the integrity and productivity of woodland sites: As bad as the last harvest was (in regards to tree selection), the logger did construct water bars and seeded the log roads during sale closeout. Trails are in good shape and erosion is minimal.

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 was some 4wHLer activity on the newly acquired ownership, but it has been halted. Several of those paths show some erosion issued, but Mother Nature is healing them over quickly.

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. 5/5/2018



Jessica Adine-Kuchta &
Shawn R. Kuchta Tract
Section 6 WaterlooTwp.,
Athens Co., OH
Wetlands Map

St Rt 691

Salem Rd.
Co Rd 9

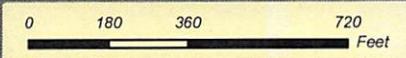
Legend

- Property_Lines

Wetlands

WETLANDS

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



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. Landowner did not know of any unique sites on this tract. 5/5/2018 What appears to be an old “family” well is located in the western end of the farm.

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.

Maintaining the trails will improve access and your opportunities for use of the area. A walk in the forest provides a time of learning for all family members, but it can also be a time to relax. The woodlands can be a quiet place of solitude after a busy day, or anytime. This tract is also utilized for bow hunting.

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 farm is visible from the the County Road, so viewscape integrity should be maintained.

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.

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 forests 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.

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.

Fire will not be used as a management tool on this tract.

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.

Forest Health – a general description of the health of the woodland: Most of the forest areas are in good condition, considering the lack of forest management by previous landowners. EAB is having an impact on the forested areas of this tract. Non-native invasive plants, like Autumn Olive, Barberry and Multi Flora Rose in particular, are well established in specific areas throughout the farm.

The only problematic insect pests or diseases noted during the woodland review was Emerald Ash Borer (EAB). Control of grapevines on selected crop trees (Oaks & Walnut) will guard those crop trees from the damage risks posed by this woody native vine. However, native grapevines are part of the forest ecosystem; keeping selected vines may be considered a part of maintaining overall forest health.

Oak species are preferred food sources for the Gypsy moth. The good news is that after the initial wave of Gypsy moths showed up in Ohio, a fungus showed up that keeps these critters in pretty good check. The fungus is named *Entomophaga mima*... "Em" for short. Still, it's a good idea to keep tabs on any oaks present in the forest to see if any egg masses start to show up in July-August - identified as a characteristic tan fuzzy oval mass that looks like Velcro. If you see egg masses, and can count more than 50 during a five minute walk around the oaks, then your trees are at risk of being partially or completely defoliated if the Spring is very dry and therefore not conducive to development of the Em fungus for natural control. There are options for control of Gypsy moth using aerial application of pesticides to the tree leaves, so that larvae ingesting such pesticides then die. One such pesticide is actually a "biocide" - the bacteria *Bacillus thuringiensis* (Bt).

Another woodland pest of great concern is the emerald ash borer (EAB), an invasive insect from Asia that only attacks ash trees. The larvae eat the living tissue of ash trees just underneath the bark. With a large enough infestation, this process essentially chokes off the flow of water and nutrients within the tree which leads to the tree's mortality. This insect can spread naturally from tree to tree, as well as artificially through the movement of ash material such as firewood.

You can reduce the risk of losses by gradually reducing the ash component of your woodlot. When doing a forest thinning or a crop tree release, if you have a choice between an ash and another desirable species, you may choose to cut the ash and let the other species grow. By gradually doing this ash reduction throughout your woods, you can avoid any serious impact on your woods if the emerald ash borer does eventually get there. (Note –it is too late for this)

The best thing you can do now is to stay informed. The following websites should be checked periodically for the most up to date information on the emerald ash borer:

<http://www.agri.ohio.gov/eab>

<http://www.emeraldashborer.info/>

<http://ashalert.osu.edu/>

<http://www.ohiodnr.com/forestry/health/eab.htm>

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*

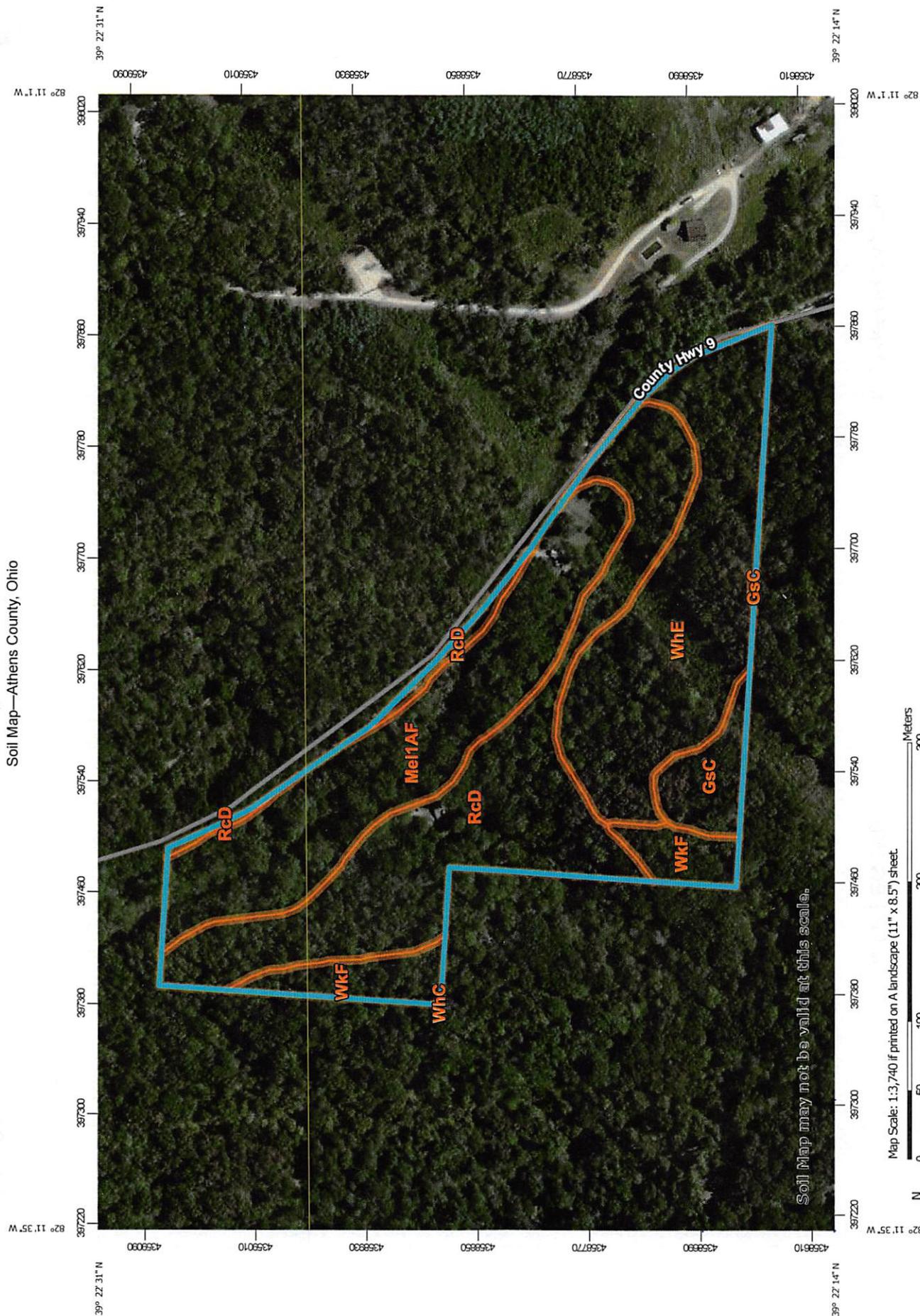
Addendums

- Soils Report with - Soil Map and Map Unit Description
- Forest Productivity (Site Index)

Landowner Plan packet also contains:

- How to mark your property lines
- Forestry Terms
- Barberry Fact Sheet
- Autumn Olive Fact Sheet
- Japanese Honeysuckle Fact Sheet
- How to cut grapevines
- Agro-Forestry Handouts

Soil Map—Athens County, Ohio



Soil Map may not be valid at this scale.

Map Scale: 1:3,740 if printed on A landscape (11" x 8.5") sheet



Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 17N WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

MAP LEGEND

- | | | | |
|--|--|---|--|
| Area of Interest (AOI) | |  Spoil Area | |
|  Area of Interest (AOI) | |  Stony Spot | |
| Soils | |  Very Stony Spot | |
|  Soil Map Unit Polygons | |  Wet Spot | |
|  Soil Map Unit Lines | |  Other | |
|  Soil Map Unit Points | |  Special Line Features | |
| Special Point Features | | Water Features | |
|  Blowout | |  Streams and Canals | |
|  Borrow Pit | | Transportation | |
|  Clay Spot | |  Rails | |
|  Closed Depression | |  Interstate Highways | |
|  Gravel Pit | |  US Routes | |
|  Gravelly Spot | |  Major Roads | |
|  Landfill | |  Local Roads | |
|  Lava Flow | | Background | |
|  Marsh or swamp | |  Aerial Photography | |
|  Mine or Quarry | | | |
|  Miscellaneous Water | | | |
|  Perennial Water | | | |
|  Rock Outcrop | | | |
|  Saline Spot | | | |
|  Sandy Spot | | | |
|  Severely Eroded Spot | | | |
|  Sinkhole | | | |
|  Slide or Slip | | | |
|  Sodic Spot | | | |

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Athens County, Ohio
 Survey Area Data: Version 19, Oct 13, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

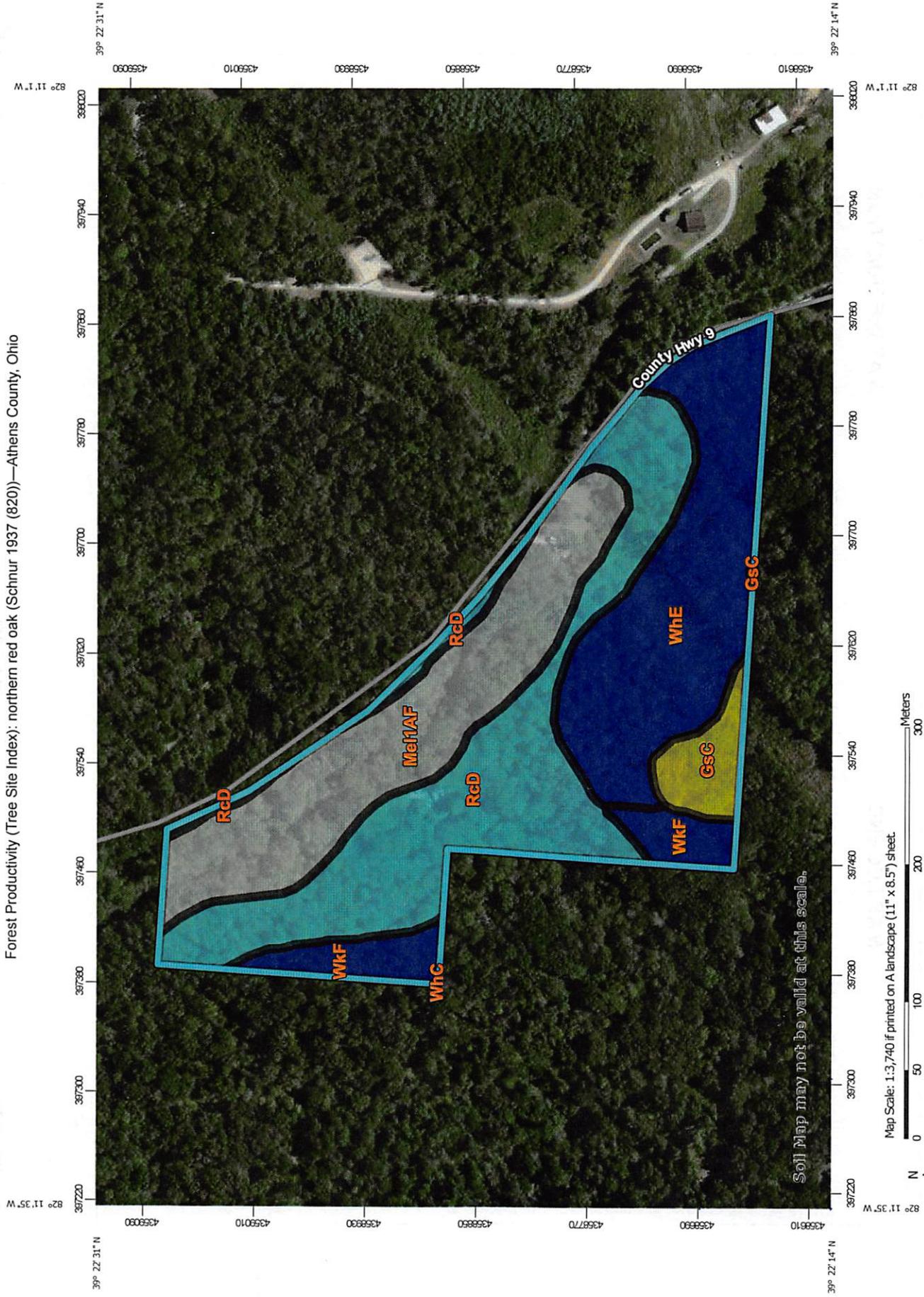
Date(s) aerial images were photographed: Apr 5, 2012—Mar 26, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

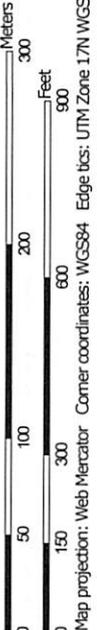
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
GsC	Guernsey silt loam, 8 to 15 percent slopes	1.1	4.4%
Mel1AF	Melvin silt loam, 0 to 2 percent slopes, frequently flooded	6.6	26.9%
RcD	Richland loam, 15 to 25 percent slopes	8.4	34.1%
WhC	Westmoreland-Guernsey silt loams, 8 to 15 percent slopes	0.0	0.0%
WhE	Westmoreland-Guernsey silt loams, 25 to 40 percent slopes	6.8	27.6%
WkF	Westmoreland-Guernsey silt loams, benched, 40 to 70 percent slopes	1.7	7.0%
Totals for Area of Interest		24.6	100.0%

Forest Productivity (Tree Site Index): northern red oak (Schnur 1937 (820))—Athens County, Ohio



Soil Map may not be valid at this scale.

Map Scale: 1:3,740 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

- Area of Interest (AOI)**
 -  Area of Interest (AOI)
- Soils**
 - Soil Rating Polygons**
 -  <= 75
 -  > 75 and <= 78
 -  > 78 and <= 80
 -  > 80 and <= 81
 -  Not rated or not available
 - Soil Rating Lines**
 -  <= 75
 -  > 75 and <= 78
 -  > 78 and <= 80
 -  > 80 and <= 81
 -  Not rated or not available
 - Soil Rating Points**
 -  <= 75
 -  > 75 and <= 78
 -  > 78 and <= 80
 -  > 80 and <= 81
 -  Not rated or not available
- Water Features**
 -  Streams and Canals
- Transportation**
 -  Rails
 -  Interstate Highways
- Background**
 -  US Routes
 -  Major Roads
 -  Local Roads
 -  Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

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 Survey Area Data: Version 19, Oct 13, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 5, 2012—Mar 26, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Forest Productivity (Tree Site Index): northern red oak (Schnur 1937 (820))

Map unit symbol	Map unit name	Rating (feet)	Acres in AOI	Percent of AOI
GsC	Guernsey silt loam, 8 to 15 percent slopes	78	1.1	4.4%
Mel1AF	Melvin silt loam, 0 to 2 percent slopes, frequently flooded		6.6	26.9%
RcD	Richland loam, 15 to 25 percent slopes	80	8.4	34.1%
WhC	Westmoreland-Guernsey silt loams, 8 to 15 percent slopes	75	0.0	0.0%
WhE	Westmoreland-Guernsey silt loams, 25 to 40 percent slopes	81	6.8	27.6%
WkF	Westmoreland-Guernsey silt loams, benched, 40 to 70 percent slopes	81	1.7	7.0%
Totals for Area of Interest			24.6	100.0%

Description

The "site index" is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this attribute, only the representative value is used.

Rating Options

Units of Measure: feet

Tree: northern red oak

Site Index Base: Schnur 1937 (820)

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Forestland Productivity

This table can help forestland owners or managers plan the use of soils for wood crops. It shows the potential productivity of the soils for wood crops.

Potential productivity of merchantable or *common trees* on a soil is expressed as a site index and as a volume number. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forestland managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Reference:

United States Department of Agriculture, Natural Resources Conservation Service, National Forestry Manual.

Report—Forestland Productivity

Forestland Productivity—Athens County, Ohio				
Map unit symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site Index	Volume of wood fiber	
			<i>Cu ft/ac/yr</i>	
GsC—Guemsey silt loam, 8 to 15 percent slopes				
Guemsey	Northern red oak	78	58.00	Northern red oak, Tuliptree
	Tuliptree	95	99.00	

Forestland Productivity--Athens County, Ohio				
Map unit symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site Index	Volume of wood fiber	
			<i>Cu ft/ac/yr</i>	
Mel1AF—Melvin silt loam, 0 to 2 percent slopes, frequently flooded				
Melvin	American elm	—	—	American sycamore, Eastern cottonwood, Loblolly pine, Pin oak, Sweetgum, Willow oak
	Cherrybark oak	91	114.00	
	Common hackberry	—	—	
	Eastern cottonwood	101	129.00	
	Green ash	—	—	
	Hickory	—	—	
	Pin oak	99	100.00	
	Red maple	—	—	
	Sweetgum	89	100.00	
RcD—Richland loam, 15 to 25 percent slopes				
Richland	Black walnut	—	—	Eastern white pine, Northern red oak, Red pine, Tuliptree, White ash, White oak
	Northern red oak	80	57.00	
	Tuliptree	90	86.00	
	White ash	—	—	
WhC—Westmoreland-Guernsey silt loams, 8 to 15 percent slopes				
Westmoreland	Eastern white pine	70	129.00	Black walnut, Eastern white pine, Northern red oak, Tuliptree, White ash, White oak
	Northern red oak	75	57.00	
	Tuliptree	85	86.00	
Guernsey	Black cherry	—	—	Eastern white pine, Red pine, Tuliptree, White ash, White oak
	Black walnut	—	—	
	Northern red oak	78	57.00	
	Sugar maple	—	—	
	Tuliptree	95	100.00	
	White ash	—	—	
	White oak	—	—	

Forestland Productivity--Athens County, Ohio				
Map unit symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site Index	Volume of wood fiber <i>Cu ft/ac/yr</i>	
WhE—Westmoreland-Guernsey silt loams, 25 to 40 percent slopes				
Westmoreland	Eastern white pine	75	143.00	Eastern white pine, Northern red oak, Red pine, Tuliptree, White ash, White oak
	Northern red oak	81	57.00	
	Tuliptree	90	86.00	
Guernsey	Black cherry	—	—	Eastern white pine, Northern red oak, Red pine, Tuliptree, White ash, White oak
	Black walnut	—	—	
	Northern red oak	78	57.00	
	Sugar maple	—	—	
	Tuliptree	95	100.00	
	White ash	—	—	
	White oak	—	—	
WkF—Westmoreland-Guernsey silt loams, benched, 40 to 70 percent slopes				
Westmoreland	Eastern white pine	75	143.00	Eastern white pine, Northern red oak, Red pine, Tuliptree, White ash, White oak
	Northern red oak	81	57.00	
	Tuliptree	90	86.00	
Guernsey	Black cherry	—	—	Eastern white pine, Northern red oak, Red pine, Tuliptree, White ash, White oak
	Black walnut	—	—	
	Northern red oak	78	57.00	
	Sugar maple	—	—	
	Tuliptree	95	100.00	
	White ash	—	—	
	White oak	—	—	

Data Source Information

Soil Survey Area: Athens County, Ohio
 Survey Area Data: Version 19, Oct 13, 2017