

Woodland Stewardship Management Plan

Owner's Information:

Case Number: _____

Owners: Frances R. Grimm

Regina A. Weber

Signed: Frances R. Grimm

Signed: Regina A. Weber

Pamela C. Stanton

Mary F. McFee

Signed: Pamela C. Stanton

Signed: Mary F. McFee

Date: May 15, 2016

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

Date: May 7th, 2016
Inspection Date

740-541-4647 mobile
fatlabtreefarm@gmail.com

This plan is valid for the period beginning May 9th, 2016 and ending May 8th, 2026.

Plan Status: Revised Initial 10Year Forest Management Plan written August 21, 2015

Woodland Stewardship Management Plan

Owner _____
Address _____
Phone _____ Case Number _____
Cell _____ Email Address _____
County Athens Township/Village/City: Sec 35 Carthage Twp.
Parcel(s): _____
Location: At junction of S. Rodeheaver Road and Metcalf Road, near Asbury Cemetery

Woodland Stewardship Acreage: 79.2 Non-woodland Stewardship Acreage*: 15.8
Total Property Acres 94.991 * 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 Tax Reduction

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

Latitude: N 39 15' 15.025" Longitude W 81 57' 17.659"

Landowner Management Objectives

1. Protect & 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 condition of the woodlands and habitat for game species of animals and birds.
3. Manage the property for long term ownership.

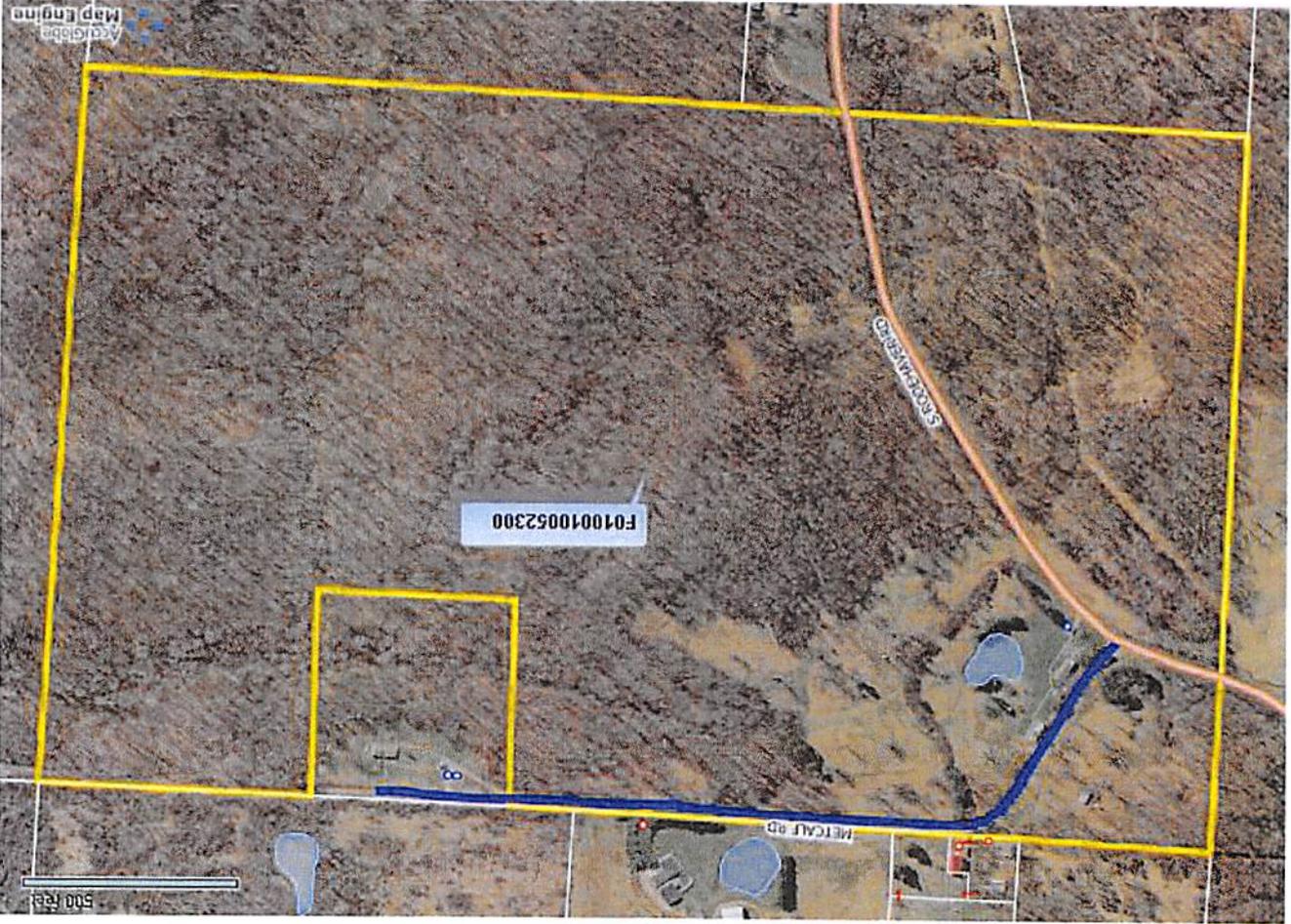
General Woodland Description

Athens County is located in the unglaciated hill country of southeastern Ohio. Slope and erosion hazard is the major land use limitations. Athens County is in the central hardwood forest region. Major forest types include Appalachian hardwoods, bottomland hardwoods, oak-hickory, successional, Virginia pine, and white pine plantations.

Most of the woodland in Athens County is in areas of steep and very steep terrain. This terrain is well suited to trees. Pulp, lumber & alternative forest products are important local commodities for Athens County.

Mrs. Grimm and her family have owned this tract for many years. Part of this farm was logged in the early 1980's and has recovered well. Overall, this is a young healthy woods with some issues with non-native invasive species having an impact on the natural ecosystem.

Athens County GIS



Notes

F. Grimm Tract, Carthage Twp., Athens Co., OH

Data For Parcel F010010052300

Base Data

Parcel: F010010052300
Owner: GRIMM FRANCES R
Address: 4384 RODEHAVER RD



[+] Map this property.

Mailing Address

Mailing Name: GRIMM FRANCES R
Address: 4384 S RODEHAVER RD
City State Zip: GUYSVILLE OH 45735

Geographic

City: UNINCORPORATED
Township: CARTHAGE TOWNSHIP
School District: FEDERAL HOCKING SCHOOL DISTRICT

Legal

Neighborhood: 00019000
Legal Description: 12-05-00 SEC 35 94.991A

Legal Acres: 94.991
Land Use: (101) A - CASH GRAIN OR GENERAL FARM

Map Number: 0-0-0-0

Property Class: AGRICULTURAL
Range Township Section: 12-05-000

Valuation

	Appraised	Assessed (35%)
Land Value:	\$120,340.00	\$42,120.00
Building Value:	\$44,900.00	\$15,720.00
Total Value:	\$165,240.00	\$57,840.00
CAUV Value:	\$56,340.00	
Taxable Value:	\$35,440.00	

Tax Credits

Owner Occupancy Credit: YES
Homestead Reduction: YES

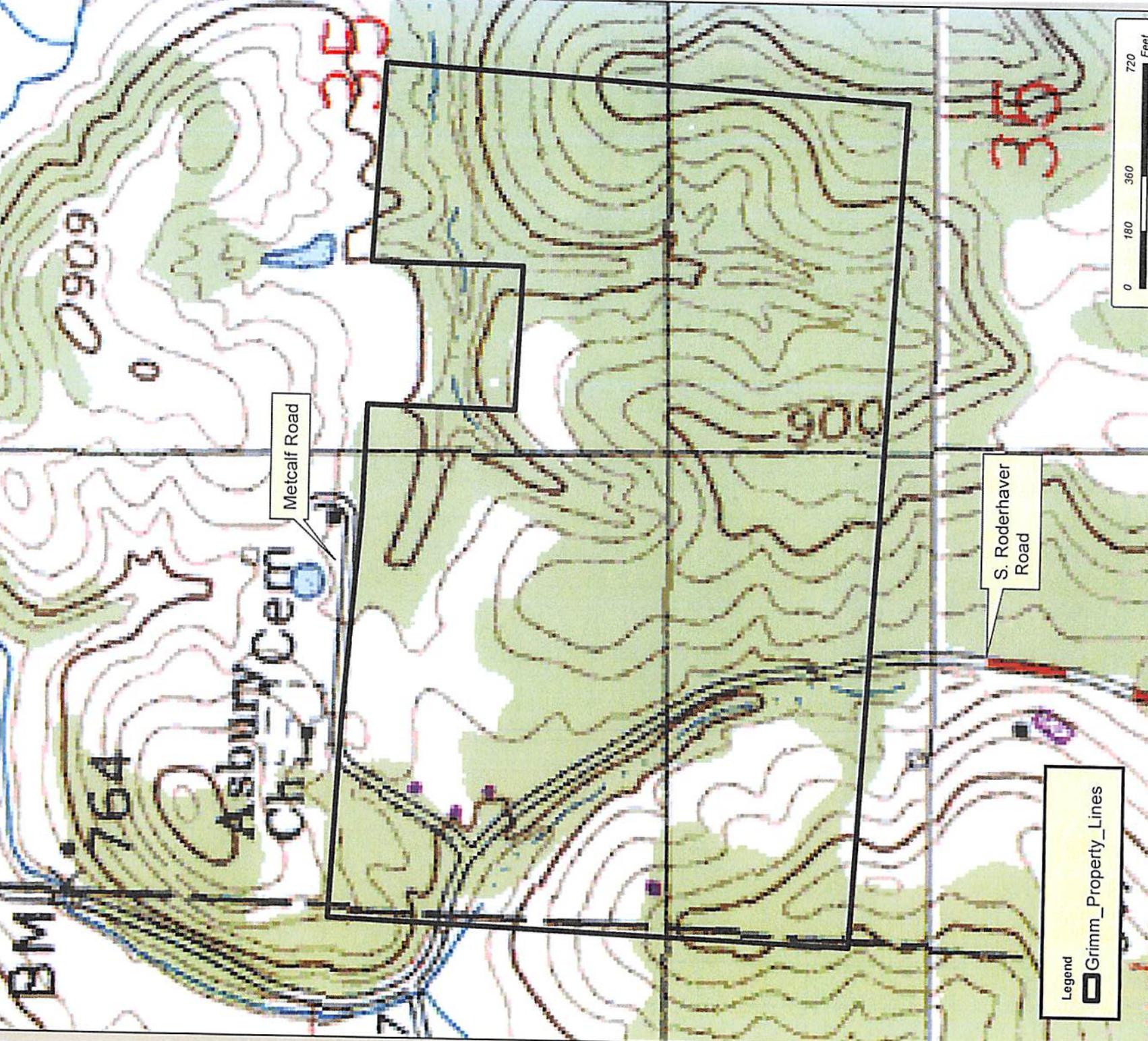
Notes

Notes:

*GIS parcel shapefile last updated 4/19/2016 3:02:02 PM.
 CAMA database last updated 4/15/2016 2:40:47 PM.*



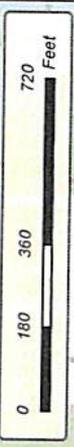
F. Grimm Farm
Sec 35 Carhage Twp.,
Athens Co., OH

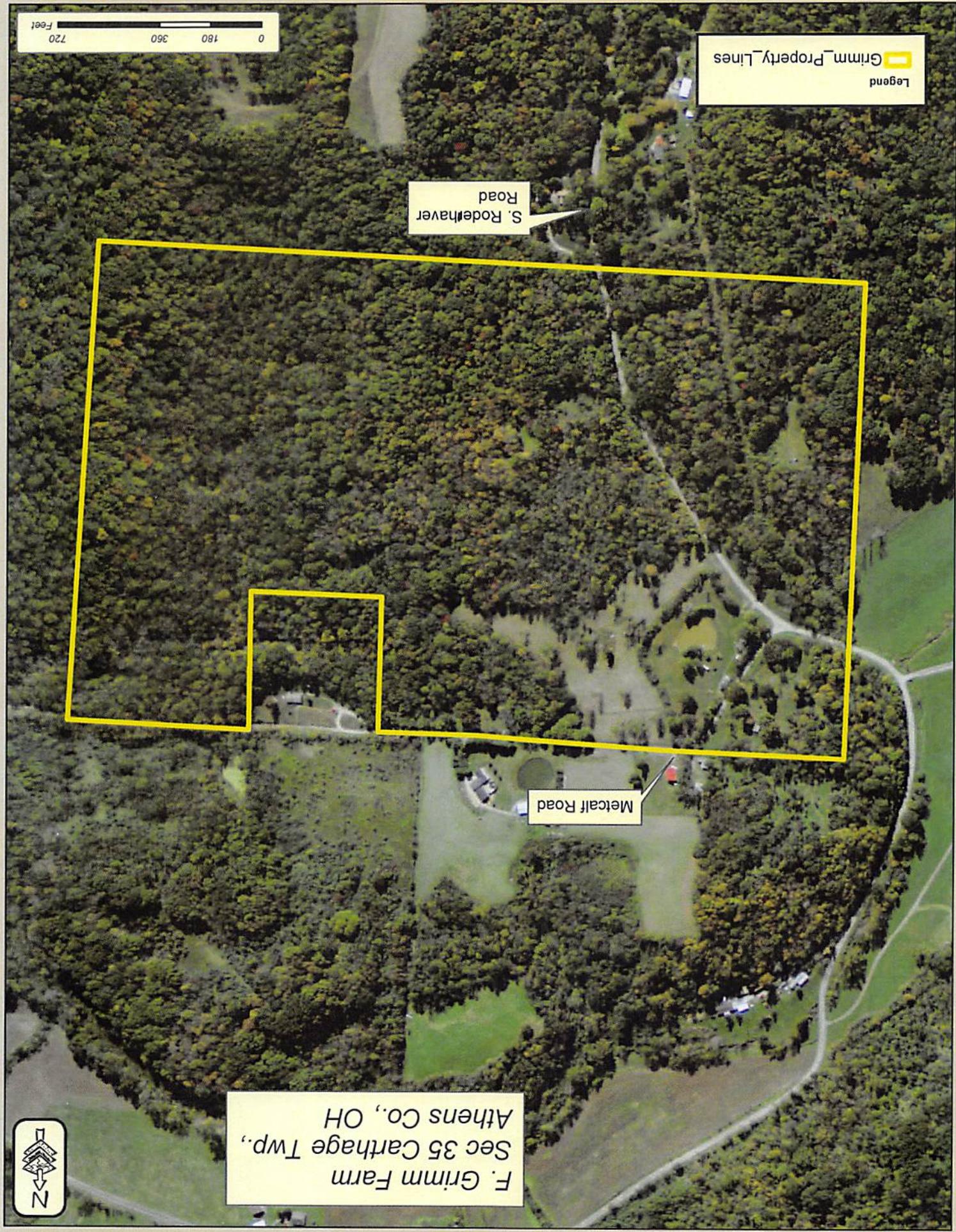


Metcaif Road

S. Roderhaver
Road

Legend
Grimm_Property_Lines





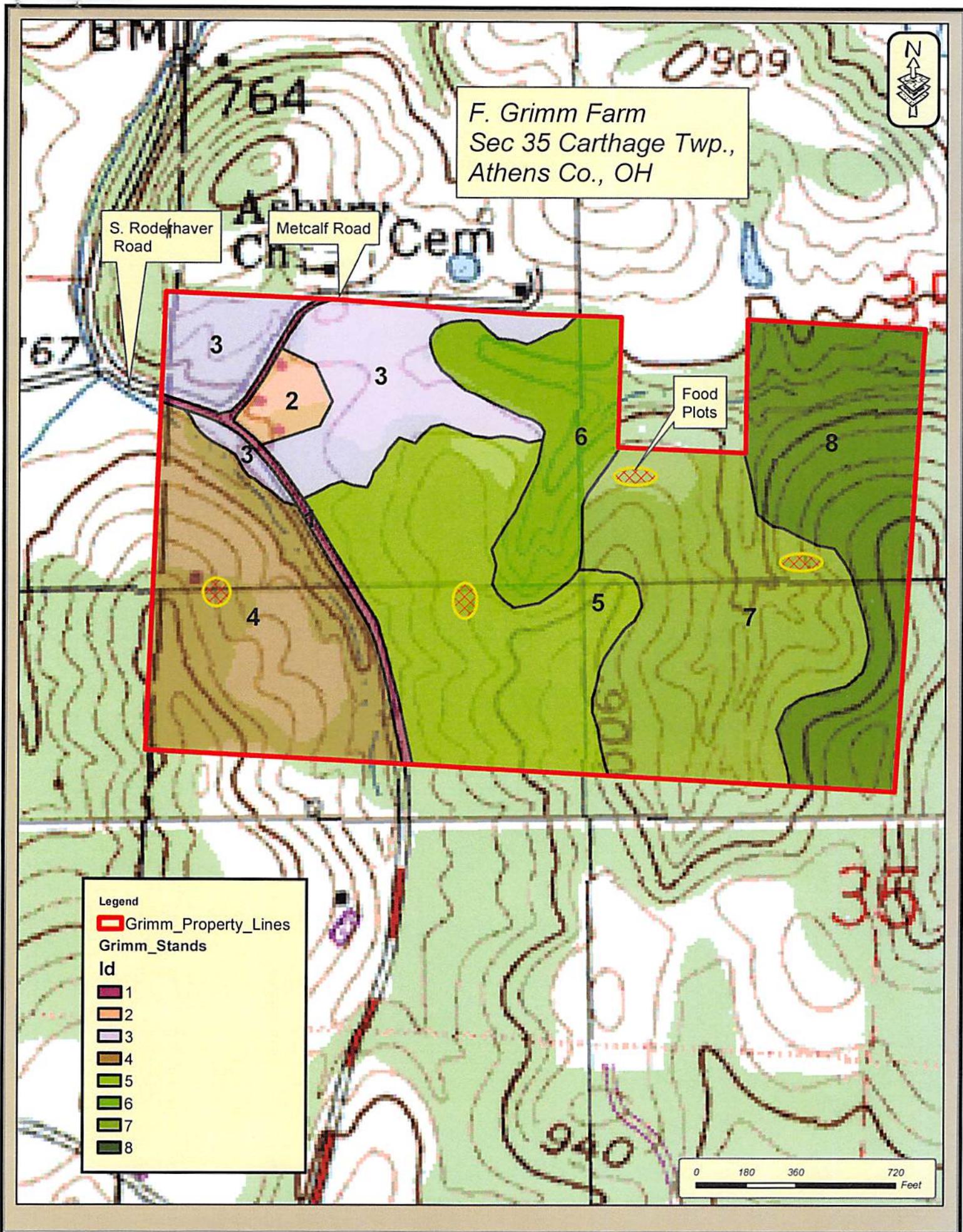
Legend
 Grimm_Property_Lines

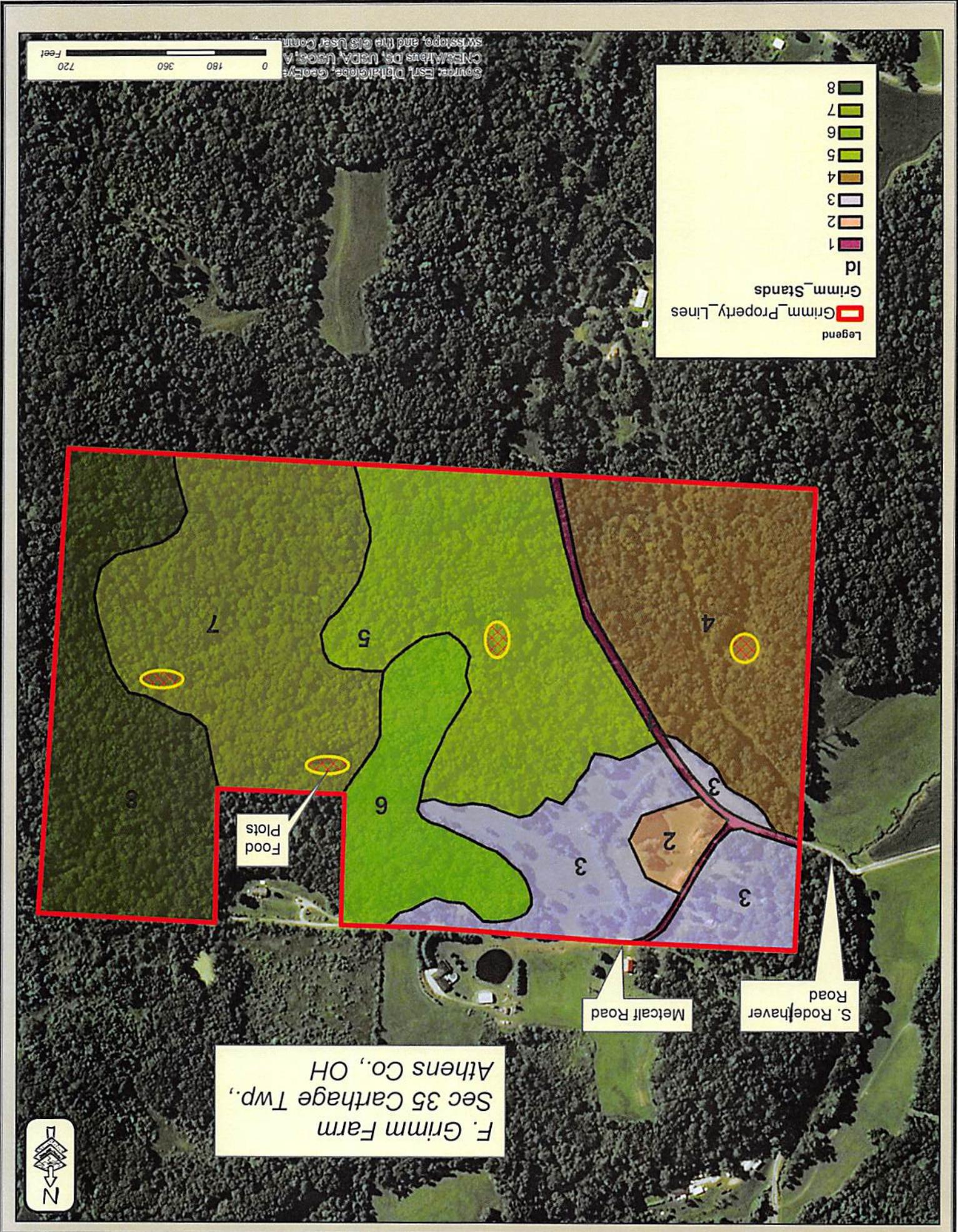
S. Roderhaver
 Road

Metcalf Road

F. Grimm Farm
 Sec 35 Carhage Twp.,
 Athens Co., OH







Woodland Stand Description and Management Recommendations

Stand # 1 - 1.3 acres non-forested area – S. Rodehaver Road (Co Rd 57) &
Metcalf Road (Twp. Rd. 104)

Dominant Species: N/A

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 at edges of roads – addressed in adjacent stands.

Present conditions or resource concerns to consider: County/Township Roads

Past management activities completed in this stand: N/A

<i>Management Recommendations:</i>
See Adjacent forested stands

Is a timber harvest recommended? N/A

Comments: County Rd. 57 is a chip & seal road, Twp. Rd 104 is a gravel road that pass thru or form the boundary of this farm.

Woodland Stand Description and Management Recommendations

Stand # 2 - 1.3 acres Non-forested area – mowed area – driveway – house site

Dominant Species: NA

Forest Type or Dominant Vegetation: NA

Stand Diameter or Size Class: NA

Stocking Level: NA

Stand History: NA

Topography: Nearly level

Invasive plants or insects impacting this stand: Autumn Olive along the edges

Present conditions or resource concerns to consider: This stand is the houses, outbuildings, yard and pond area.

Past management activities completed in this stand: mowing, some Autumn Olive cut

<i>Management Recommendations:</i>
Annual inspections of invasive species along county road bank & yard edges, work on eradicating the Autumn Olive found.

Is a timber harvest recommended? NA

Comments: Mowing has eliminated the establishment of some of the non-native invasive species. Ms. Grimm lives at this location.

Woodland Stand Description and Management Recommendations

Stand # 3 - 13.0 acres Semi-forested area – old field areas

Dominant Species: mainly grasses, mixed conifers, Black Locust, Ash, Autumn Olive

Forest Type or Dominant Vegetation: NA

Stand Diameter or Size Class: NA

Stocking Level: NA

Stand History: NA

Topography: Rolling

Invasive plants or insects impacting this stand: Autumn Olive along the edges and anywhere not being mowed Ailanthus on road bank across from house.

Present conditions or resource concerns to consider: This stand was open pasture/field area that is being partially mowed for hay, but mainly reverting back to forestland. Autumn Olive was planted in this area as a hedge row. A small patch of Ailanthus was identified on the road bank, by the house.

Past management activities completed in this stand: mowing, some Autumn Olive & Ailanthus cut

<i>Management Recommendations:</i>
work on eradicating the Autumn Olive in this area
eradicate the small Ailanthus patch by the road, inspect area annually for other patches

Is a timber harvest recommended? NA

Comments: Mowing has eliminated some of the non-native invasive species, but the edges of all the openings are Autumn Olive.

If any parts of this area is not going to be utilized for agricultural use or mowed annually, it should be planted to trees. A mixture of conifers and hardwood trees would benefit various species of wildlife. Red Oaks, White Oak, Sugar Maple, Spruces and Loblolly pine and well as Chokeberry, Dogwood and Plum would provide a diverse mixture of desirable species that would benefit wildlife. Addition of nesting structures for bats and birds would further enhance the use of this area .

Site preparation will be needed before any tree planting because of the heavy grass cover present.

Woodland Stand Description and Management Recommendations

Stand # 4 - 16.5 acres

Dominant Species: B. Walnut, Sycamore, Am. Elm, Tulip Poplar, Ash, Maple, Yellow Buckeye

Forest Type or Dominant Vegetation: Upland Central Hardwoods

Stand Diameter or Size Class: Sapling/Poletimber a few scattered sized sawlog trees

Stocking Level: Under stocked most areas, openings in stand along creek & powerline area

Stand History: No Prior Management

Topography: Gently sloping

Invasive plants or insects impacting this stand: Autumn Olive (bad), grapevines, Japanese Honeysuckle, EAB

Present conditions or resource concerns to consider: This area encompasses both lower side slopes adjacent to a intermittent stream. This Stand was separated out in this Plan due to the importance of protecting the stream side management zone (SMZ). All activities in this area need to be completed in a manner that will minimize the impact on the stream. Lush understory plants in this area, thick multi flora rose and Autumn Olive. Powerline bisects this tract. Old well site is now a food plot.

Past management activities completed in this stand: previous owners created a trail

<i>Management Recommendations:</i>
Continue to mark Property Lines with Paint
Cut grapevines from crop trees
Work on eradication of non-native invasive species as time permits

Is a timber harvest recommended? No Not necessary in this 10 year period

Comments: 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. Trails should not be constructed within an SMZ, except at designated crossings 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. 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 live. This is a great wildlife area, but a nasty area to walk through. Autumn Olive is beyond hope of eradicating in the lower slope part of this area.

Woodland Stand Description and Management Recommendations

Stand # 5 - 18.5 acres

Dominant Species: Red Maple, Sugar Maple, Sassafras, Yellow Poplar, Ash, Hickory, Honey Locust, Black Locust, Black Cherry, Black Walnut
Dogwood, Red Bud & Paw Paw understory trees

Forest Type or Dominant Vegetation: Upland Central Hardwoods

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

Stocking Level: Fully stocked in areas, under stocked in others

Stand History: Old-Field Reversion

Topography: Gently sloping

Invasive plants or insects impacting this stand: Autumn Olive, patches of Japanese Honeysuckle, heavy grapevines, multiflora rose. Small patch of Ailanthus by food plot.

Present conditions or resource concerns to consider: This stand was once a cleared area that through natural succession has reverted back to forest land. Stocking rates of desirable tree species varies, depending on location in stand. Some areas have heavy stocking of MF Rose in the understory. Some nice pole trees present. Larger trees found in this area have defect. Area was pastured in the past. Trees range from seedling size to pole sized 14" diameter trees. Ave. diameter would be 6"-8" in diameter.

Past management activities completed in this stand: Trails in this area maintained. Food plot developed in this area.

<i>Management Recommendations:</i>
Continue to mark property lines with paint.
Cut grapevines out of potential crop trees -Cherry, Walnut, Hickories, Hard Maple, Poplar
Work on eradication of non-native invasive species- Ailanthus & Autumn Olive

Is a timber harvest recommended? No No commercial harvest Ash trees should be utilized for firewood needs.

Comments: This area is lower on priority work list once the Ailanthus patch is eradicated. Autumn Olive on the slope facing the Co. Rd is not heavy and should be worked on before it spreads as well as around the food plot area. Good trail system. Like the labels identifying the different trees.

Woodland Stand Description and Management Recommendations

Stand # 6 - 8.5 acres

Dominant Species; Sugar Maple, Red Maple and then lesser stocking of ; Sycamore, B. Cherry, Sassafras, Black Oak, Hickories, Yellow Poplar, Ash and Aspen

Forest Type or Dominant Vegetation: Upland Central Hardwoods heavy to Maple Trees

Stand Diameter or Size Class: Poletimber/Small sawtimber

Stocking Level: Fully stocked

Stand History: No Prior Management

Topography: Gently sloping

Invasive plants or insects impacting this stand: Scattered grapevines (light), Autumn Olive in openings and along stand edges, Barberry in understory, EAB

Present conditions or resource concerns to consider: This area is one of the nicer forest stands on this tract. Young stand with full crown closure, shading out understory plant development. This area contains two shall hollows with streams. Emerald Ash bore is killing the Ash trees in this stand resulting in a natural stand thinning.

Past management activities completed in this stand: None

<i>Management Recommendations:</i>
Continue to mark property lines with paint and signage
Cut all grapevines in this area
Possible single tree harvest or TSI work to remove ash & dying trees

Is a timber harvest recommended? No Again, no commercial harvesting - Single tree selection by landowner utilizing trees for firewood. Efforts focused on removing Ash trees.

Comments: Stand is slightly overstocked, but do not recommend CTR work at this time because of the Autumn Olive issue on this tract and with the Ash mortality. Great area to develop a maple syrup operation (sugar bush). Easiest stand to walk through on this tract.

Woodland Stand Description and Management Recommendations

Stand # 7 - 19.7 acres

Dominant Species: Yellow Poplar, Ash, Sugar Maple, Red Maple, Beech, B. Cherry, Sassafras, Black Oak, Yellow Buckeye, Aspen, Spice Bush

Forest Type or Dominant Vegetation: Upland Central Hardwoods

Stand Diameter or Size Class: All size classes

Stocking Level: Fully stocked

Stand History: Harvesting - "Select cut"

Topography: Gently sloping

Invasive plants or insects impacting this stand: grapevines,, scattered Autumn Olive and Barberry plants in the understory, EAB.

Present conditions or resource concerns to consider: This stand covers the entire middle section of this tract of woods. This area was harvested in 1984-85 time period and several of the old logging roads show erosion. This series of hollows, slopes and benches makes this a diverse woods and provides some management challenges. The area is stocked with scattered sawlog trees (20+”dia Red Oak, Tulip Poplar and Ash), that could not be easily accessed for removal by the logger.. Some of the largest trees on this tract are located in this stand. Understory contains paw paw. Both Barberry and Autumn Olive are present in the understory along with heavy Beech reproduction..

Past management activities completed in this stand: Trails maintained

<i>Management Recommendations:</i>
Continue to mark property lines with paint, redo every 5 years or as needed.
Annual inspection of this area for non-native invasive species –eradicate any found
Grapevine eradication cover entire stand
Work on the trails in this area

Is a timber harvest recommended? No

Comments: This area has recovered well in 30 years since the harvest. Vines should be cut from this area before any other activities are planned. Additional trail work is planned in this area. Food plots located in this area.

Woodland Stand Description and Management Recommendations

Stand # 8 - 16.0 acres

Dominant Species: Hickory Spp., Sassafras, Red Maple, Sugar Maple, Black Cherry Tulip Poplar, Ash, Black Locust, Black Oak, White Oak, American Beech, Chestnut Oak

Forest Type or Dominant Vegetation: Upland Central Hardwoods

Stand Diameter or Size Class: Small/Medium sawtimber

Stocking Level: Fully stocked

Stand History: Harvesting - "Select cut" light cut in part of the area 1984-85

Topography: Gently sloping moderately steep spots on slopes

Invasive plants or insects impacting this stand: EAB, grapevines scattered throughout stand, Autumn Olive present along trails and in openings

Present conditions or resource concerns to consider: This is a ridge top and side slope area. Trees are varied in size, with an occasional large sawlog tree present with the smaller trees. Understory of briars and brush in part of this stand. Limited EAB mortality in this area. This area had a fairly high stocking rate of Oak trees in the stand composition.

Past management activities completed in this stand: trails maintained, property line marked

<i>Management Recommendations:</i>
Maintain trail system
TSI work to remove grapevines from potential crop trees
Work on eradication of non-native invasive species

Is a timber harvest recommended? No Not necessary in the next 10 yr period.

Comments: Timber stand improvement in this area could be accomplished by removing the Ash trees and utilizing them for firewood or having them sawn for lumber. EAB infestation will be a continual issue in this area as long as any living Ash trees are present. Access is an issue in doing much work in this area

Recommended Management Activity Schedule

Year(s) Suggested	Mgmt. Unit	Required Task?	EQIP Practice?	Acres	Recommendations
2016 -2018	all	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NA	Continue to mark property lines with paint and signage, redo every 5 years or as needed
2017 -2018	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8	Cut grapevines
2016 -2017	3 & 5	<input type="checkbox"/>	<input type="checkbox"/>	1+	Work on eradicating non-native invasive species- Ailanthus patches
2018-2020	8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8	Cut grapevines out of potential crop trees, cover entire area
2016- 2026	Entire Tract	<input type="checkbox"/>	<input type="checkbox"/>	NA	Maintain trails, install BMP's where possible
2018-2020	5	<input type="checkbox"/>	<input type="checkbox"/>	18.5	Cut scattered grapevines in potential crop trees before starting on Autumn Olive. Cover entire stand
2016 -2026	3 & 7	<input type="checkbox"/>	<input type="checkbox"/>	25+	Work on eradicating non-native invasive species- Autumn Olive
2020 & 2025	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

F. Grimm Farm
Sec 35 Carthage Twp.,
Athens Co., OH
Activity Map



Continue to mark property lines with paint and signage.
redo every 5 years or as needed

ST 3 & 5
eradicate Ailanthus
2 small patches

Cut Grapevines

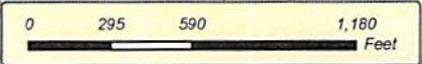
Cut Grapevines

ST 3
work on Autumn Olive fenceline

cut grapevines from crop trees
work on Autumn Olive

Legend
Grimm_Stands
Id

1
2
3
4
5
6
7
8



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): Chg1AF, CmC, Om1C1, StF, VbD, WmC, WmD

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 of Northern Red Oak (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): Fair to Good

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

In time, timber production is practical and possible for this property. The woodlands are stocked with a variety of desirable timber species that can produce valuable wood products now and into the future. Timber stand improvement (TSI) management practices such as grapevine control, cull tree & undesirable hardwood species control, and crop tree release 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.

Overall, this tract has issues with grapevines and non-native invasive plants. Grapevines should be cut from future crop trees. You have already utilized some of the trees from this farm for firewood. As you need more wood, Ash trees should be utilized when possible, removing the mature trees before being killed by EAB. The large Oaks on this farm should remain, providing hard mass for wildlife and a seed source for new seedlings. Until the Autumn Olive is eradicated, do not create new openings in your forested stands. The shade of the fully developed canopy will help slow the spread of this invasive plant.

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

Your food plots and mowed openings will provide an additional incentive for wildlife populations of both game and non-game species of birds and animals.

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 (for personal use), TSI work and firewood harvests will include the removal of Ash trees to minimize the impact of the Emerald Ash Borer.

Gypsy Moth infestations are in Athens County and this site will be monitored for damage, annually.

Invasive plants are another destructive agent to the health of your woods. Locally, Autumn Olive, Bush Honeysuckle, Privet, and Ailanthus are some of the non-native species.

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.

Numerous trails were constructed and most follow ridgetops or benches on the hillsides. Several trails have some steep sections and these will need additional care and maintenance to prevent erosion. Keeping them in grass cover should be sufficient.

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 landowners did not reveal any indication of this tract being located in a unique landscape classification.

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

There are no certified wetlands are located on this tract identified in the National Wetlands Inventory, Wetlands Web Services GIS data as of a review completed 5/7/2016.

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.

This tract has several intermittent streams that eventually flows into the East Branch of the Shade River. Located in Stand 3 is a small pond that provides a water source for a variety of amphibians, reptiles, insects, mammals and bird species, as well as for recreational use.

Archeological/Historical Resources (Special Sites) – 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.

There are no known significant / historical / ecological sites are listed in the State Registry for this tract, as of a review completed 5/7/2016.

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

No specific threatened or endangered species were noted on this forest land. Some threatened or endangered species that may be found in southern Ohio include the Timber Rattlesnake, Indiana Bat, Long Eared Bat and American Burying Beetle. 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

Specific information on threatened or endangered species may be obtained by contacting the Ohio Department of Natural Resources Division of Wildlife directly to access the "Ohio Biodiversity Database":

ODNR - Division of Wildlife
2045 Morse Road, Bldg. G-3,
Columbus, OH 43229-6693

Phone: (614) 265-6452.

After reviewing the NHDA, (5/7/2016) it was determined this tract has no listed species located on it. Habitat does exist on this tract that may be suitable for various species that are presently considered T & E.

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 but it can also be a time to relax. The woodlands can be a quiet place of solitude after a busy day at work, or anytime for that matter.

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.

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.

Prescribed burns will not be part of the management of this predominately hardwood forest.

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.

Conservation of energy and reducing the carbon impact is a founding principal of the membership. All have agreed to minimize the use of non-renewable resources as well as strive for self-sufficiency in food and energy.

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.

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).

Included in the Addendums to this Plan is a list of common forestry term definitions.

Forest Health – a general description of the health of the woodland: These forest areas are in acceptable condition, considering no management has been done. The stands have not been harvested for some time and offer management opportunities for the landowner

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

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

Landowner Plan packet also contains:

- How to treat grapevines.
- Forestry Terms
- Helpful Web Sites
- How to mark boundary lines
- Crop tree management fact sheet
- Ohio Woodlands Magazine
- Invasive plant handout
- EAB handout

Soil Map—Athens County, Ohio
(Frances R. Grimm Tract)



Map Scale: 1:4,670 if printed on A landscape (11" x 8.5") sheet.



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

Soil Map—Athens County, Ohio
(Frances R. Grimm Tract)

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: <http://websoilsurvey.nrcs.usda.gov>
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 16, Sep 24, 2015

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

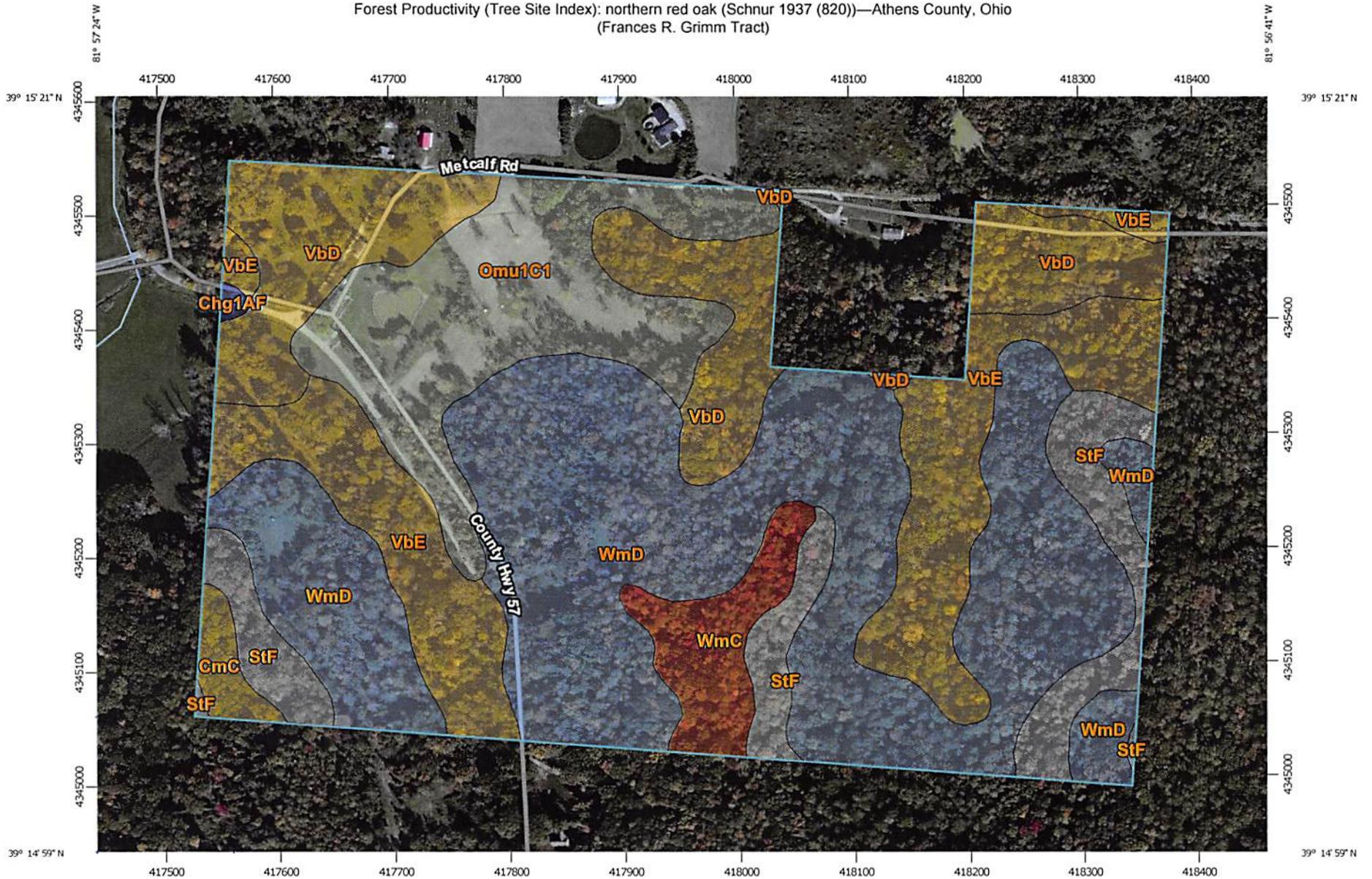
Date(s) aerial images were photographed: Oct 7, 2011—May 11, 2012

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

Athens County, Ohio (OH009)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Chg1AF	Chagrin silt loam, 0 to 3 percent slopes, frequently flooded	0.2	0.2%
CmC	Clymer loam, 8 to 15 percent slopes	1.1	1.2%
Om1C1	Omiga silt loam, 6 to 12 percent slopes	13.5	14.4%
SIF	Steinsburg sandy loam, 40 to 70 percent slopes	7.3	7.7%
VbD	Vandalia-Brookside complex, 15 to 25 percent slopes	14.3	15.2%
VbE	Vandalia-Brookside complex, 25 to 40 percent slopes	15.2	16.1%
WmC	Westmoreland-Upsur complex, 8 to 15 percent slopes	3.6	3.9%
WmD	Westmoreland-Upsur complex, 15 to 25 percent slopes	39.1	41.4%
Totals for Area of Interest		94.3	100.0%

Forest Productivity (Tree Site Index): northern red oak (Schnur 1937 (820))—Athens County, Ohio
(Frances R. Grimm Tract)



Map Scale: 1:4,670 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 200 400 800 1200 Feet

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



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

4/29/2016
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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 <= 75
 > 75 and <= 77
 > 77 and <= 80
 > 80 and <= 81
 > 81 and <= 86
 Not rated or not available

Soil Rating Lines

 <= 75
 > 75 and <= 77
 > 77 and <= 80
 > 80 and <= 81
 > 81 and <= 86
 Not rated or not available

Soil Rating Points

 <= 75
 > 75 and <= 77
 > 77 and <= 80
 > 80 and <= 81
 > 81 and <= 86
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 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.

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: <http://websoilsurvey.nrcs.usda.gov>
 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 16, Sep 24, 2015

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

Date(s) aerial images were photographed: Oct 7, 2011—May 11, 2012

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))

Forest Productivity (Tree Site Index): northern red oak (Schnur 1937 (820))— Summary by Map Unit — Athens County, Ohio (OH009)				
Map unit symbol	Map unit name	Rating (feet)	Acres in AOI	Percent of AOI
Chg1AF	Chagrin silt loam, 0 to 3 percent slopes, frequently flooded	86	0.2	0.2%
CmC	Clymer loam, 8 to 15 percent slopes	77	1.1	1.2%
Omu1C1	Omurga silt loam, 6 to 12 percent slopes	80	13.5	14.4%
StF	Steinsburg sandy loam, 40 to 70 percent slopes		7.3	7.7%
VbD	Vandalia-Brookside complex, 15 to 25 percent slopes	77	14.3	15.2%
VbE	Vandalia-Brookside complex, 25 to 40 percent slopes	77	15.2	16.1%
WmC	Westmoreland-Upshur complex, 8 to 15 percent slopes	75	3.6	3.9%
WmD	Westmoreland-Upshur complex, 15 to 25 percent slopes	81	39.1	41.4%
Totals for Area of Interest			94.3	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</i>	
Chg1AF—Chagrin silt loam, 0 to 3 percent slopes, frequently flooded				
Chagrin	Black cherry	—	—	Black walnut, Eastern white pine, Northern red oak, Red pine, Tuliptree, White ash, White oak
	Black walnut	—	—	
	Northern red oak	86	72.00	
	Sugar maple	86	57.00	
	Tuliptree	96	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</i>	
CmC—Clymer loam, 8 to 15 percent slopes				
Clymer	Eastern white pine	90	143.00	Black cherry, Black walnut, Eastern white pine, Northern red oak, Red pine, Tuliptree, White ash, White oak
	Northern red oak	77	57.00	
	Tuliptree	90	86.00	
Omu1C1—Omulga silt loam, 6 to 12 percent slopes				
Omulga	Black cherry	—	—	Black cherry, Black locust, Black walnut, Eastern white pine, Green ash, Northern red oak, Red pine, Tuliptree, White ash, White oak
	Black walnut	—	—	
	Northern red oak	80	57.00	
	Sugar maple	—	—	
	Tuliptree	—	—	
	White ash	—	—	
	White oak	—	—	
StF—Steinsburg sandy loam, 40 to 70 percent slopes				
Steinsburg	Northern red oak	—	—	Black cherry, Eastern white pine, Red pine, Tuliptree, White ash
	Tuliptree	—	—	
	Virginia pine	70	—	
VbD—Vandalia-Brookside complex, 15 to 25 percent slopes				
Vandalia	Northern red oak	77	57.00	Austrian pine, Eastern white pine, Tuliptree, Virginia pine
	Tuliptree	90	86.00	
	Virginia pine	80	114.00	
Brookside	Black cherry	—	—	Eastern white pine, Northern red oak, Red pine, Tuliptree, White ash, White oak
	Black walnut	—	—	
	Northern red oak	86	72.00	
	Sugar maple	—	—	
	Tuliptree	96	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</i>	
VbE—Vandalia-Brookside complex, 25 to 40 percent slopes				
Vandalia	Northern red oak	77	57.00	Austrian pine, Eastern white pine, Tuliptree, Virginia pine
	Tuliptree	90	86.00	
	Virginia pine	80	114.00	
Brookside	Black cherry	—	—	Eastern white pine, Northern red oak, Red pine, Tuliptree, White ash, White oak
	Black walnut	—	—	
	Northern red oak	86	72.00	
	Sugar maple	—	—	
	Tuliptree	96	100.00	
	White ash	—	—	
	White oak	—	—	
WmC—Westmoreland-Upshur complex, 8 to 15 percent slopes				
Westmoreland	Eastern white pine	70	129.00	Black walnut, Eastern white pine, Northern red oak, Red pine, Tuliptree, White ash, White oak
	Northern red oak	75	57.00	
	Tuliptree	85	86.00	
Upshur	Eastern white pine	80	143.00	Austrian pine, Eastern white pine, Tuliptree, Virginia pine
	Northern red oak	65	43.00	
	Tuliptree	80	72.00	
	Virginia pine	66	100.00	
WmD—Westmoreland-Upshur complex, 15 to 25 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	
Upshur	Eastern white pine	90	172.00	Austrian pine, Eastern white pine, Tuliptree, Virginia pine
	Northern red oak	70	57.00	
	Tuliptree	90	86.00	
	Virginia pine	70	114.00	

Data Source Information

Soil Survey Area: Athens County, Ohio
 Survey Area Data: Version 16, Sep 24, 2015