

Woodland Stewardship Management Plan



Coldwell Timber Consulting, LLC

"We Represent the Interests of the Forest Landowner"

33759 Hull Road
Salineville, Ohio 43945

330-831-4374
jedcoldwell@yahoo.com
www.coldwelltimberconsulting.com

Owner's Information:

Owner: David L. Funk

Smoke Rise

Signed: *David Funk*

Date: May 24, 2016

Case Number: 05-1287

Preparer's Information:

Prepared by: Jed Coldwell

Signature: *Jed Coldwell*

Jed Coldwell

Coldwell Timber Consulting, LLC

33759 Hull Road

Salineville, Ohio 43945

Date: May 24, 2016

This plan is valid for the period beginning May 24, 2016 and ending May 24, 2026.

Plan Status: New

NRCS Representative Signature: _____

Date: _____

Woodland Stewardship Management Plan



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NRCS Representative Signature: _____ Date: _____

Woodland Stewardship Management Plan

Owner David L. Funk
Address PO Box 186
Athens, Ohio 45701
Phone 740-592-2177 Case Number 05-1287
Cell 740-591-4738 Email Address dfunk@capstonecompany.com
County Athens Township/Village/City: Trimble Twp.
Parcel(s): M020350364611, M010010090505, M020350364612, M020350364614,
M010010090503, M020350101201, M010010090506, M020350354600, *wrong parcel*
M020350364609, M020350364604, M020350364605, M020350364606,
M023050364607, M020350364610, M020350364608
Location: Sections 29, 35, and 36. 6751 Hunterdon Road

Woodland Stewardship Acreage: 888 Non-woodland Stewardship Acreage*: 8
Total Property Acres 962.407 * 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 coordinates (report in WGS 84, decimal degrees.)

Longitude: 82.147459W Latitude: 39.530826N

Landowner Objectives

1. To manage the timber resource and maintain forest cover for both wildlife habitat and timber production.
2. To harvest timber on a timely basis, removing mature and defective and otherwise undesirable trees.
3. To maintain a simple system of access trails to all parts of the woods for management activities, wildlife viewing, hunting, and hiking.
4. To protect the watershed during all woodland activity.
5. To maintain a woodlot for future generations of family and friends to utilize and enjoy.

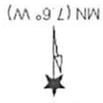
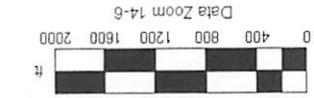
General Woodland Description

The David Funk property at SmokeRise Ranch is a 962 acre contiguous property that is over 90% forested. The majority of the forested acreage is made up of poletimber and small and medium sawtimber mixed hardwoods, although pockets of large sawtimber hardwoods are also present. The overall species composition is average to good, but could be improved by implementing cull tree removal. Grapevine control has already been completed on approximately 1/3 of the property, and although the grapevines throughout the remainder of the forest are present at low to moderate levels of intensity, their control should still be a management priority. Pockets of ailanthus were observed at five locations, although more may be present.

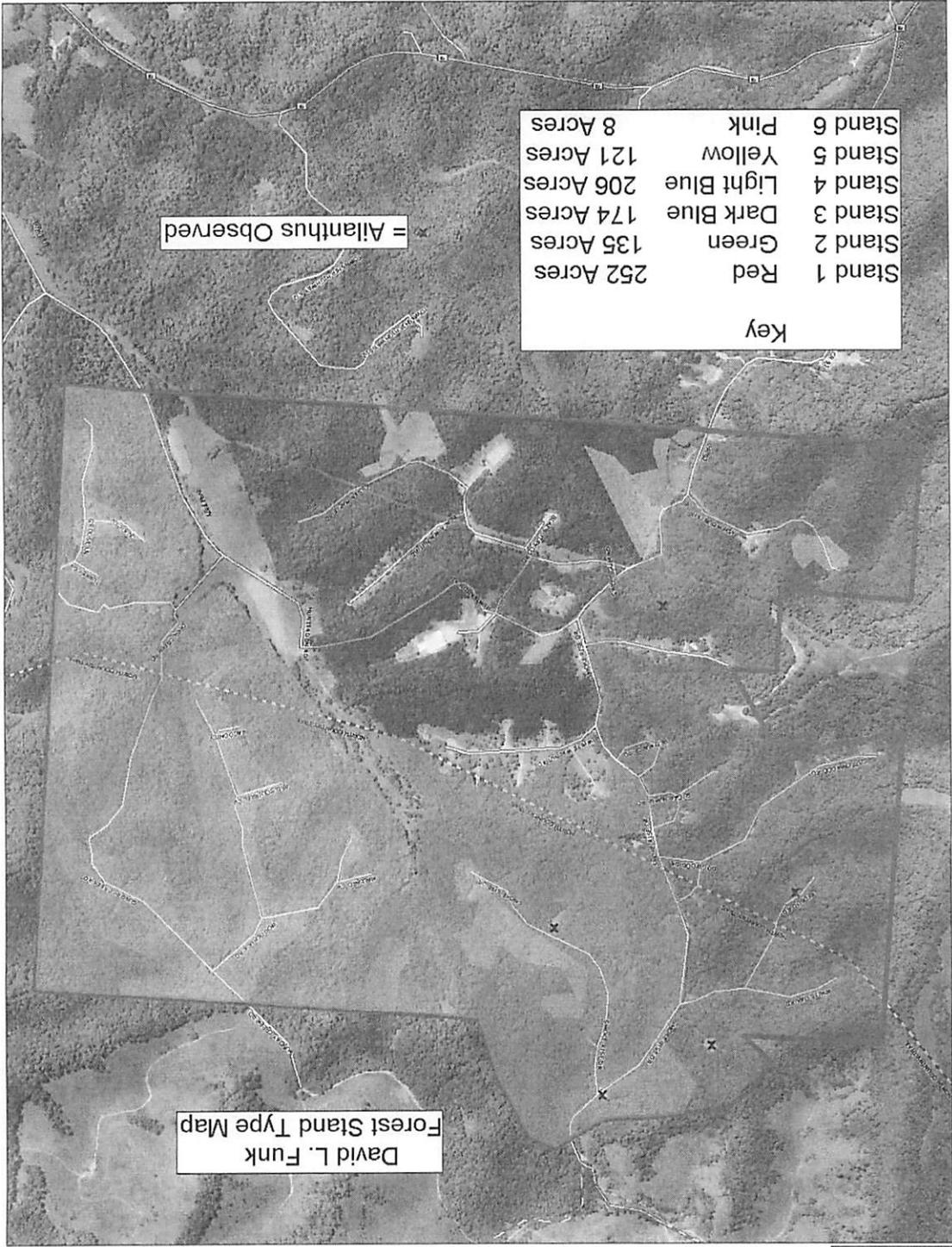
364605 Sweet Gum
364606 Black Junco
364607 Holly Holdings
364610 Beech Holdings
364608 Juniper Poplar

MO20350364613 - not in
plan -
owned by
Woodland
Preserve

90505 - Woodland Preserve
364611 - Woodland Preserve
364612 - " "
364614 - " "
90503 Woodland Preserve
12-01 Woodland Preserve
90500 Woodland Preserve
364600 Semington Ent
364609 Black Gum
364604 White Walnut



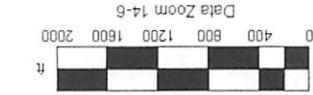
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Key	
Stand 1	Red 252 Acres
Stand 2	Green 135 Acres
Stand 3	Dark Blue 174 Acres
Stand 4	Light Blue 206 Acres
Stand 5	Yellow 121 Acres
Stand 6	Pink 8 Acres

* = Ailanthus Observed

David L. Funk
 Forest Stand Type Map



MN (7.6° W)



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Data use subject to license



David L. Funk
Potential EQIP Practice Map
(Multiple EQIP Sign-Ups)

DeLorme Topo USA® 7.0



Woodland Stand Description and Management Recommendations

Stand # 1 - 252 acres

Dominant Species: Red Oak, White Oak, Sugar Maple, Yellow-poplar, Beech, Ash, Hickory

Forest Type or Dominant Vegetation: Upland Central Hardwoods

Stand Diameter or Size Class: Poletimber/Small sawtimber, Pockets of Med /Large Sawtimber

Stocking Level: Fully stocked

Stand History: Harvesting - "Select cut"

Topography: Draws/Ravines

Invasive plants or insects impacting this stand: Ailanthus

Present conditions or resource concerns to consider: The invasive species ailanthus, also known as Tree-of-Heaven, was observed in three areas within this stand (see map). Ailanthus has almost no timber value and competes with native tree species. Furthermore, ailanthus is a prolific seeder and can be hard to control once it establishes itself in your woods. Additionally, this stand would benefit from a cull tree removal, a non-commercial thinning that removes undesirable trees that are competing with more desirable trees. Portions of this stand will be ready to harvest in 10 or more years.

Past management activities completed in this stand: Grapevine Control completed

<i>Management Recommendations:</i>
Invasive Species Control – Ailanthus, where mapped
Cull Tree Removal
Timber Harvest Assessment in 10 years

Is a timber harvest recommended? No

Comments: Ailanthus Control - Use a basal bark application method by which you use a backpack or atv sprayer to apply a mixture of approximately 25% Garlon 4 (or generic triclopyr equivalent), and 75% crop oil or basal oil to the bottom 18 inches of all ailanthus trees. Coat the bark but avoid run-off from overspraying. Application should take place from May to October on dry days. Monitor this area for at least three consecutive years and continue ailanthus control as necessary.

Cull Tree Removal –Cut down or girdle undesirable trees interfering with the growth and regeneration of desirable hardwoods. **Cut down or girdle beech, black gum, buckeye, aspen, sycamore, basswood, sassafras, and ironwood tree species that are competing with more desirable tree species, as well as low quality red maples.** Girdle trees by cutting two rings around the tree at waist height with a chainsaw. The cuts should be about a half inch deeper than the bark and about 6 to 10 inches apart from one another.

Timber Harvest Assessment – Meet with a forester to assess whether this stand is ready for a commercial thinning. If it is, have a forester assist with tree selection. The primary goal of the thinning should be to harvest mature and defective hardwoods to increase growth rates of residuals and regeneration in the understory.

Woodland Stand Description and Management Recommendations

Stand # 2 - 135 acres

Dominant Species: Red Oak, Black Oak, White Oak, Chestnut Oak, Yellow-poplar, Sugar Maple, Beech, Ash

Forest Type or Dominant Vegetation: Upland Central Hardwoods

Stand Diameter or Size Class: Small/Medium sawtimber, Some Large sawtimber

Stocking Level: Fully stocked

Stand History: Harvesting - Diameter limit

Topography: Draws/Ravines

Invasive plants or insects impacting this stand: Ailanthus

Present conditions or resource concerns to consider: Grapevines are present in portions of this stand at varying levels of density, but overall, low to moderate. Left uncontrolled, grapevines will slow the growth of trees, and in some instances when vines are abundant, grapevines will physically pull them down. This stand contains fewer undesirable trees than stand one, but would still benefit from a conservative cull tree removal. Finally, while the northeast portion of this stand may not be ready, the majority of this stand could be harvested sometime within the next ten years. I recommend completing the grapevine control before harvesting.

Past management activities completed in this stand: Some Grapevine Control Completed

<i>Management Recommendations:</i>
Invasive Species Control – Ailanthus, where mapped
Grapevine Control, where mapped
Cull Tree Removal
Timber Harvest

Is a timber harvest recommended? Yes Single Tree and Small Group Selection

Comments: Ailanthus Control – Same method as in stand 1.

Cull Tree Removal – Same method as in stand 1.

Grapevine Control – Cut the grapevines wherever they enter the ground. Application of herbicide to the cut stump is recommended. The herbicides Tordon RTU, or Glyphosate (round-up or generic equivalent, 50% mix with water) work well. Apply herbicide directly to the cut surface of the severed vine wherever they enter the ground. Herbicide should be applied to the cut stump within minutes of cutting the vine. This method works best from July 1 to November 30.

Timber Harvest – Harvest mature and defective hardwoods to increase growth rates of residuals and regeneration in the understory. Use a forester to assist with tree selection and sale oversight.

Woodland Stand Description and Management Recommendations

Stand # 3 - 174 acres

Dominant Species: Red Oak, White Oak, Yellow-poplar, Cherry, Beech, Aspen, Basswood

Forest Type or Dominant Vegetation: Upland Central Hardwoods

Stand Diameter or Size Class: Poletimber/Small sawtimber, Pockets of Med /Large Sawtimber

Stocking Level: Fully stocked

Stand History: Harvesting - "Select cut"

Topography: Draws/Ravines

Invasive plants or insects impacting this stand: None found

Present conditions or resource concerns to consider: This stand is similar to stand one, except no grapevine control has taken place in this stand. Grapevines are scattered throughout this stand at mostly moderate levels of intensity. As with stand 1, portions of timber within this stand will be ready to harvest in 10 or more years. Portions of this stand look as though they are currently being pastured. Pasturing in woodlands leads to tree browse and soil compaction, both of which are bad for forest health and regeneration.

Past management activities completed in this stand: None

Management Recommendations:

Fence out livestock, where necessary

Grapevine Control

Cull Tree Removal

Timber Harvest Assessment

Is a timber harvest recommended? No

Comments: Grapevine Control – Cut the grapevines wherever they enter the ground. Application of herbicide to the cut stump is recommended. The herbicides Tordon RTU, or Glyphosate (round-up or generic equivalent, 50% mix with water) work well. Apply herbicide directly to the cut surface of the severed vine wherever they enter the ground. Herbicide should be applied to the cut stump within minutes of cutting the vine. This method works best from July 1 to November 30.

Cull Tree Removal –Cut down or girdle undesirable trees interfering with the growth and regeneration of desirable hardwoods. **Cut down or girdle beech, black gum, buckeye, aspen, sycamore, basswood, sassafras, and ironwood tree species that are competing with more desirable tree species, as well as low quality red maples.** Girdle trees by cutting two rings around the tree at waist height with a chainsaw. The cuts should be about a half inch deeper than the bark and about 6 to 10 inches apart from one another.

Timber Harvest Assessment – Meet with a forester to assess whether this stand is ready for a commercial thinning. If it is, have a forester assist with tree selection. The primary goal of the thinning should be to harvest mature and defective hardwoods to increase growth rates of residuals and regeneration in the understory.

Woodland Stand Description and Management Recommendations

Stand # 4 - 206 acres

Dominant Species: Red Oak, White Oak, Basswood, Sugar Maple, Yellow-poplar, Beech, Sycamore, Ash

Forest Type or Dominant Vegetation: Central Hardwoods

Stand Diameter or Size Class: Poletimber/Small sawtimber

Stocking Level: Fully stocked

Stand History: Harvesting - Diameter limit

Topography: Draws/Ravines

Invasive plants or insects impacting this stand: None found

Present conditions or resource concerns to consider: This is a younger stand than stands 1-3. Complete management in stands 1-3 before starting management in this stand.

Past management activities completed in this stand: None

<i>Management Recommendations:</i>
Grapevine Control
Cull Tree Removal

Is a timber harvest recommended? No

Comments: Grapevine Control – Cut the grapevines wherever they enter the ground. Application of herbicide to the cut stump is recommended. The herbicides Tordon RTU, or Glyphosate (round-up or generic equivalent, 50% mix with water) work well. Apply herbicide directly to the cut surface of the severed vine wherever they enter the ground. Herbicide should be applied to the cut stump within minutes of cutting the vine. This method works best from July 1 to November 30.

Cull Tree Removal –Cut down or girdle undesirable trees interfering with the growth and regeneration of desirable hardwoods. **Cut down or girdle beech, black gum, buckeye, aspen, sycamore, basswood, sassafras, and ironwood tree species that are competing with more desirable tree species, as well as low quality red maples.** Girdle trees by cutting two rings around the tree at waist height with a chainsaw. The cuts should be about a half inch deeper than the bark and about 6 to 10 inches apart from one another.

Woodland Stand Description and Management Recommendations

Stand # 5 - 121 acres

Dominant Species: Red Maple, Aspen, Yellow-poplar, Red Oak, Sugar Maple, Ash, Cherry

Forest Type or Dominant Vegetation: Upland Central Hardwoods

Stand Diameter or Size Class: Poletimber/Small sawtimber

Stocking Level: Fully stocked

Stand History: Old-Field Reversion

Topography: Rolling

Invasive plants or insects impacting this stand: None found

Present conditions or resource concerns to consider: This stand contains an abundance of undesirable red maple and aspen trees.

Past management activities completed in this stand: None

<i>Management Recommendations:</i>

Commercial Clearcut, retaining all sawtimber sized oak and yellow-poplar trees
--

Is a timber harvest recommended? Yes Clearcut, Retain all sawtimber sized (12" DBH and larger) Oaks and Yellow-poplars

Comments: Clearcut timber harvest, where all trees larger than 2" DBH must be cut/harvested. All oak and poplar trees of sawtimber size should remain uncut to act as a seed source.

Woodland Stand Description and Management Recommendations

Stand # 6 - 8 acres

Dominant Species: Grasses, light brush

Forest Type or Dominant Vegetation: As Listed in Dominant Species

Stand Diameter or Size Class: N/A

Stocking Level: Under stocked

Stand History: Grazing

Topography: Gently sloping

Invasive plants or insects impacting this stand: None found

Present conditions or resource concerns to consider: The landowner expressed interest in planting this stand to a mix of hardwoods and softwoods.

Past management activities completed in this stand: None

<i>Management Recommendations:</i>

Site preparation and Tree Planting

Is a timber harvest recommended? No

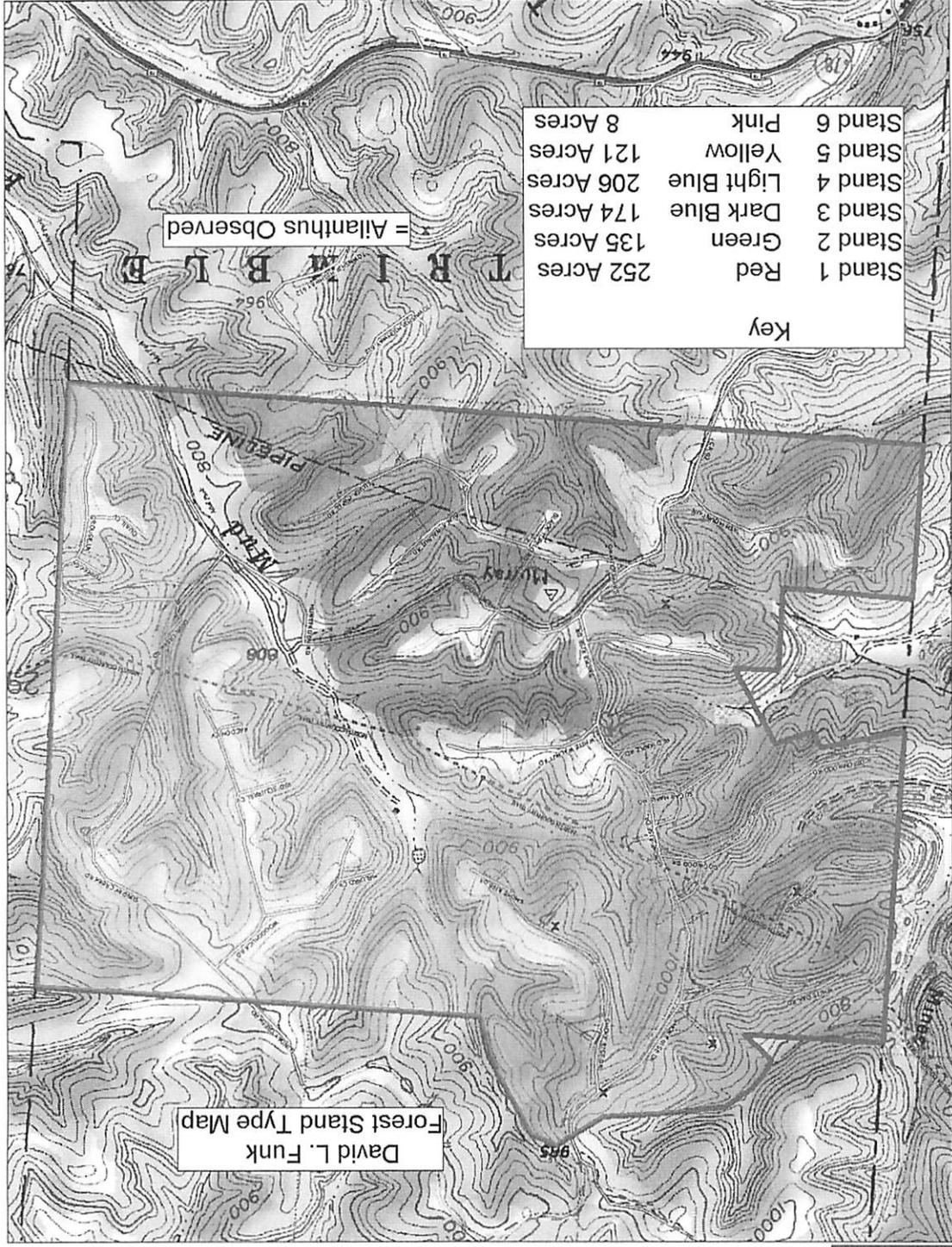
Comments:

Site Preparation and Tree Planting – First, if this site is currently being used for grazing, fence out the livestock. Prepare the site by mowing it with a brush hog. Plant 436 seedlings per acre at approximately 10' x 10' spacing between March 1st and April 15th. A mix of red oak, white oak, yellow-poplar, white pine, and Norway spruce are well suited for this site. Use tree tubes to reduce deer damage. After trees are planted, do not mow between rows. The Clements State Nursery in West Virginia is a good place to purchase seedlings. Seedlings should be ordered to previous fall. Their number is 304-675-1820.

Management Activity Schedule

Year(s) Suggested	Mgmt. Unit	Required Task?	Acres	Recommendations
Every 5 Years		<input type="checkbox"/>		Mark property boundaries.
2016-2026	1, 2	<input type="checkbox"/>	< 2	Invasive Species Control - Ailanthus
2016-2026	1, 2, 3, 4	<input type="checkbox"/>	767 Acres	Cull Tree Removal
2016-2026	2, 3, 4	<input type="checkbox"/>	441 Acres	Grapevine Control
2016-2026	6	<input type="checkbox"/>	8 Acres	Tree Planting
2016-2026	2	<input type="checkbox"/>	< 135 Acres	Timber Harvest – Single and small group tree
2016-2026	5	<input type="checkbox"/>	121 Acres	Timber Harvest - Clearcut
2026	1, 3	<input type="checkbox"/>	426 Acres	Timber Harvest Assessment
2026	Whole Property	<input type="checkbox"/>	Next Site Visit – Woodland reviews are recommended at least once every five years, and plan updates once every ten years, based upon the date of the last woodland evaluation conducted by your forester	

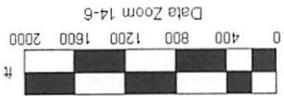
Before entering a timber sale agreement, or conducting other forestry work that is not listed in your activity schedule, contact your forester first to ensure compliance with your approved woodland stewardship management plan



Key	
Stand 1	Red 252 Acres
Stand 2	Green 135 Acres
Stand 3	Dark Blue 174 Acres
Stand 4	Light Blue 206 Acres
Stand 5	Yellow 121 Acres
Stand 6	Pink 8 Acres

= Ailanthus Observed

David L. Funk
Forest Stand Type Map



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Woodland Resource Descriptions

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

Timber Information - a general description of the timber characteristics of quality and potential: Timber production potential is excellent for this property. The woodlands are stocked with a variety of marketable timber species that can produce valuable wood products now and into the future. Timber stand improvement (TSI) management practices such as grapevine 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. Quality potential is good, especially with more grapevine and crop tree release implemented.

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. 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.

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.

Best Management Practices (BMP's)–During timber harvest activities, you should 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.

Forest Health – No major insect pests or diseases were noted during the woodland review.

Wetlands – a general description of any wetland resources and/or vernal pools: Wetlands are extremely important for water quality, and they provide unique habitats for fish and wildlife. These are an important forest resource component for overall health of the forest system. Ephemeral or seasonal wetlands – also called vernal pools - are typically small in size, and tucked within the forest cover. Vernal pools periodically dry up and do not contain fish.

This drying may occur annually or just during drought years. However, these ephemeral pools provide unique habitat for amphibians like salamanders and frogs, as well as many other species of wildlife. Many landowners find that wetlands improve the aesthetics and overall enjoyment value to their land. It is very important to protect permanent and ephemeral wetland areas for the health of the forest and the environment.

Fire –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.

Prescribed Burning – Except in rare cases, the resources to conduct prescribed burning on private lands are not available. Substitute practices like use of mechanical treatments and herbicides are more common to control stand composition. Prescribed Fire is not used on this property.

Integrated Pest Management – Consider all relevant mechanical, chemical or a combination of treatments to control pests with least amount of collateral damage.

Threatened & Endangered Species – On the site inspection, no threatened or endangered species were noted within your forestland. Specific information on threatened or endangered species may be obtained by contacting.

ODNR, Natural Areas and Preserves
2045 Morse Road, Bldg. F-1
Columbus, OH 43229-6693
Phone: (614) 265-6453

Special Sites, Natural/Archeological/Historical – These sites 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 conserving them whenever possible when they are present on the property. If present special sites are described in the General Woodland Description.

Recreation – This forest could be used for hunting, hiking, picnicing, camping, wildlife watching, or other activities. Many landowners find enjoyment in doing improvement work in their woods.

Aesthetics – Forest stewardship management addresses the various aesthetic tastes.

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

Herbicides & Pesticides – Make sure all herbicides and pesticides are used according to the EPA-approved labels and applied by licensed applicators if relevant.

Invasive Species – Monitor for and control non-native invasive plants in your woodland. Non-native invasive plants vie for space with our native plants and degrade the quality of our ecosystems.

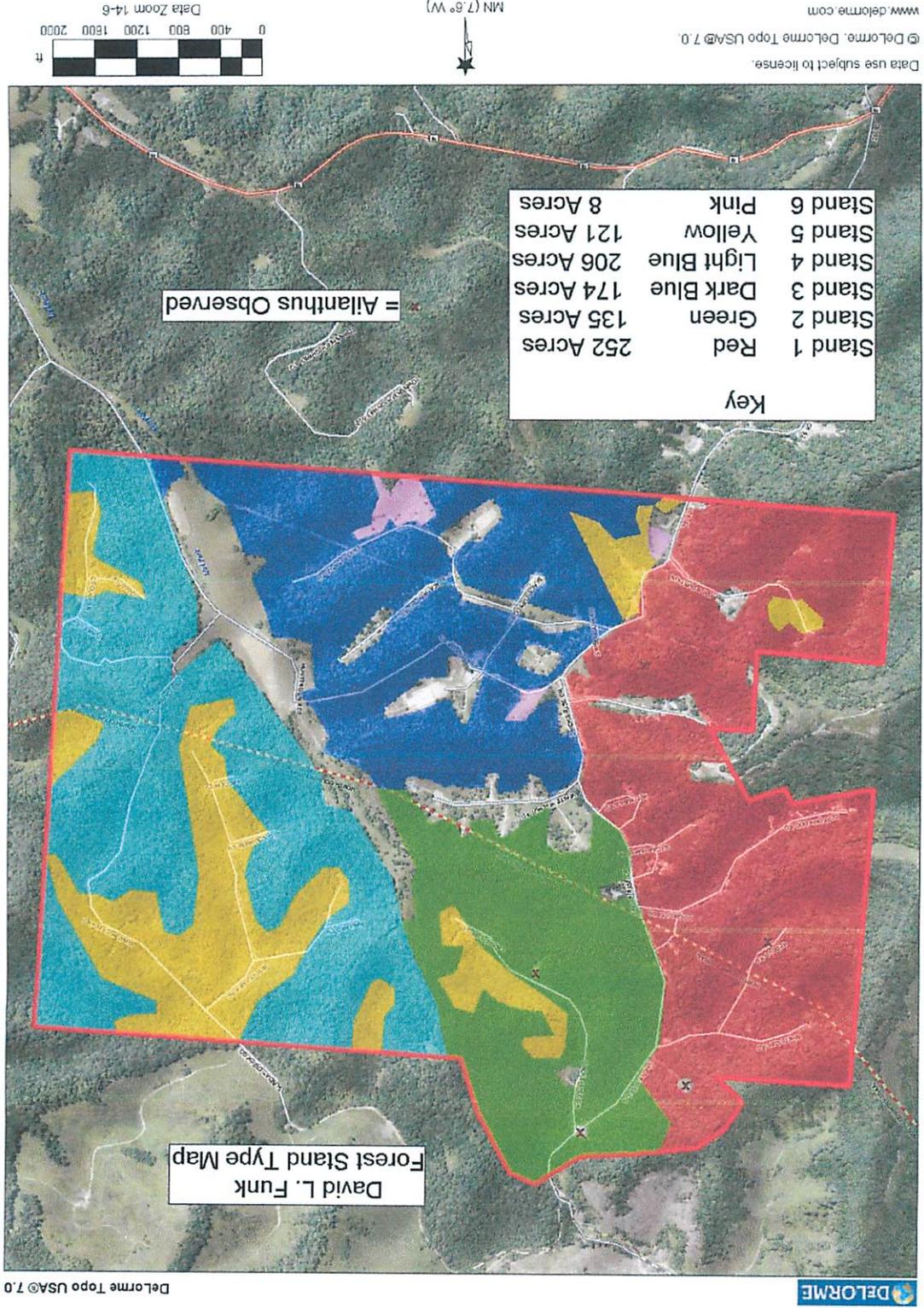
Natural Resource Laws – Comply with all applicable laws governing forest management.

Reforestation – Eastern hardwood forests regenerate well in Ohio. If properly managed replanting is optional. In woodlands where the high grade species like oak, cherry and walnut have been removed replanting of these species may be warranted. Field acreage will also eventually become forestland but replanting may be done to hasten the forestlands development and control its species composition.

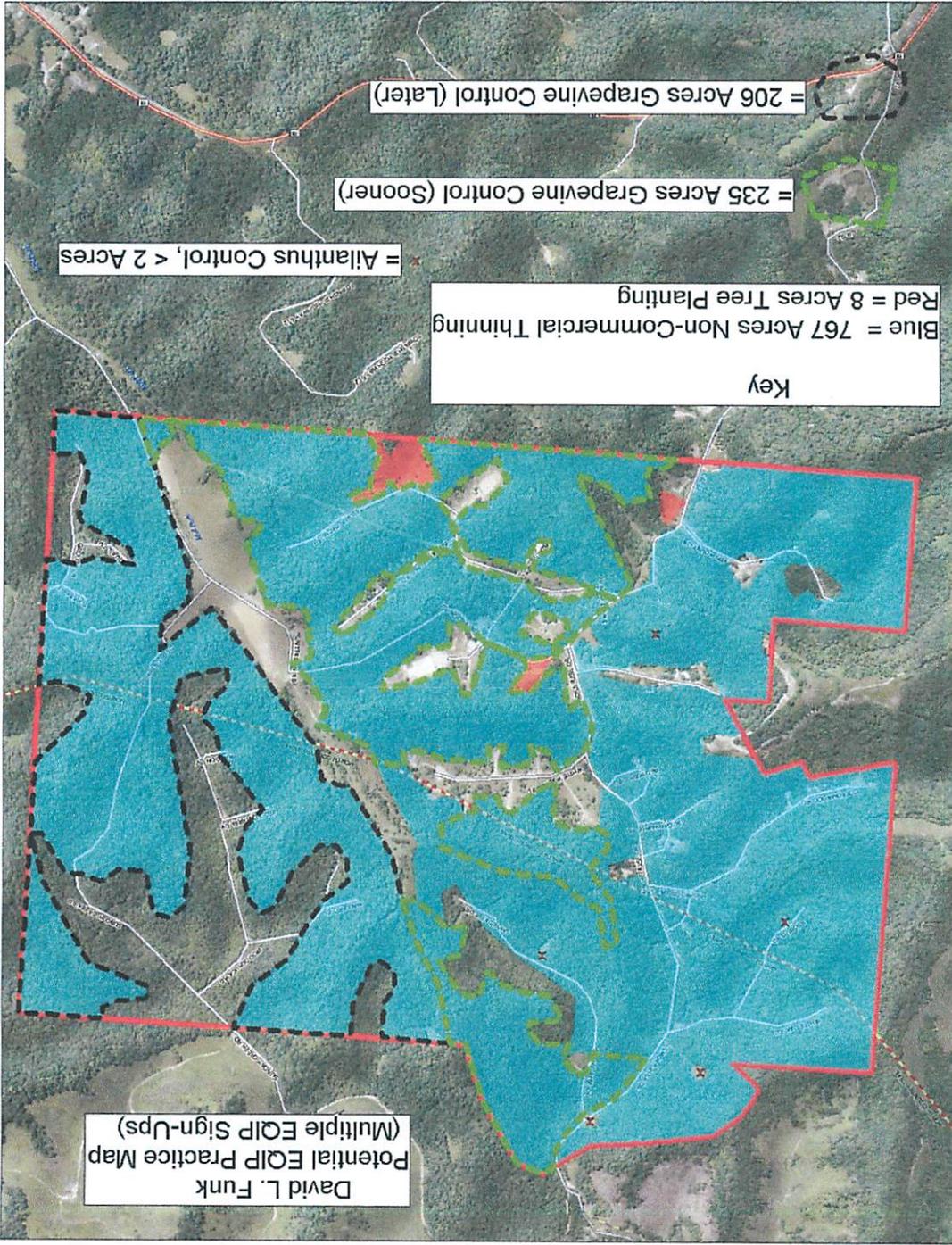
FORI / HCVF – Upon review by Jed Coldwell, Consulting Forester, FORI / HCVF does not apply to this property.

Forestry Terms – The Society of American Foresters (SAF) offers a great resource for such forestry terminology: 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).

Other Resources – Other resources may exist but are beyond the scope of this plan. You may want to ask your forester about other resources so he or she can point you in the right direction.



David L. Funk
Potential EQIP Practice Map
(Multiple EQIP Sign-Ups)



Key
 Blue = 767 Acres Non-Commercial Thinning
 Red = 8 Acres Tree Planting

= Allanthus Control, < 2 Acres

= 235 Acres Grapevine Control (Sooner)

= 206 Acres Grapevine Control (Later)

