Shimek State Forest Management Plan

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2008-2028

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Purpose

The purpose for developing a management plan for the State Forests is to ensure that these lands are sustained for future generations and that the mission and core functions for the DNR and Bureau of Forestry are reflected in the management of these lands. Furthermore, this plan serves as a record of public input and desired uses for these lands. This plan reflects the management intentions for the next twenty years based on current knowledge of land capability, inventory data, sound forestry practices, land stewardship, and public demands. This plan will be a working document, and will be revised as needed to address the challenge of managing a forest resource that is constantly changing.

The mission and core functions of the DNR are as follows:

Iowa DNR Mission:
To conserve and enhance our natural resources in cooperation with individuals and organizations to improve the quality of life in Iowa and ensure a legacy for future generations.

Iowa DNR Vision:
Leading Iowans in caring for our natural resources

Core Functions of the Iowa DNR:
Conservation, Protection, & Stewardship – Protect, manage, and ensure the lands through the effective use of policies and procedures. Provide sustainable, responsible recreational opportunities where possible. Increase awareness and understanding of natural resources values and needs. Provide all vital infrastructure needs necessary to administer and support agency operations to achieve results for Iowans.

Forestry Bureau Mission:
To help Iowans value, protect, expand and enjoy our trees, forest and prairies and the amenities they provide.

This plan will achieve forest and prairie management goals on the state forest to help accomplish our mission. In the planning process we have developed goals and objectives that will move the forest resource to a desired future condition. This plan ensures a system of orderly management and development of the state forest which reflects the current science regarding harvesting, forest stand improvement, and reforestation. The following management goals and objectives lay a foundation for the implementation of sound forestry management practices.

Management Goals

Sustainability - Manage for healthy, sustainable forests and prairies. Maintain and improve the diversity of plant species and communities on the state forests.

- Improve forest age diversity through the harvest and regeneration of over-mature forest stands
- Use forest stand improvement to enhance species diversity.
- Manage native prairies and savannahs using fire management to promote plant diversity and control unwanted woody plants and invasive species.
- Increase the quality, quantity, and connectivity of public forestlands in Iowa.

Utilization – Ensure a sustainable flow of wood products for public benefit while promoting forest vigor by applying proper forest management techniques.

- Intensify forest management practices to utilize and regenerate over-mature and declining forest stands.
- Use forest stand improvement to enhance tree growth rates and vigor.
- Reduce non-forest acreage through natural succession and tree planting.

Demonstration and Research - Create and maintain forest management demonstration areas and research areas to increase the public awareness of the value and role of forests in Iowa and provide educational opportunities for students, organizations and others.

- Establish and maintain forest research plots.
- Establish forest demonstration areas, host field days, and provide outdoor classrooms to increase awareness and understanding of forest and prairie management.
- Seek partnerships with supporting private organizations, non-profit groups, and educational institutions to promote forestry education and awareness.

Wildlife - Maintain or improve natural wildlife habitat for game and non-game species. Protect known endangered and threatened species, as well as species of concern and their habitats.

- Use forest stand improvement and other practices to improve mast production for wildlife species.
- Maintain prairie and grassland habitats, increase contiguous forest cover, and create forest edge where appropriate to promote habitat diversity.
- Identify, study, and preserve unique habitats and T & E species.

Recreation – Create and enhance primitive, low-impact recreational opportunities.

- Maintain primitive trail and camping facilities where appropriate.
- Promote hunting, fishing and other game management activities.
- Promote other primitive activities such as backpacking and bird-watching.

Water quality – Enhance water quality by protecting watersheds and preventing soil loss by erosion.

- Prevent soil erosion by employing good conservation practices
- Protect and enhance streams and waterways adjacent to agricultural land by establishing riparian buffers.
- Use "Best Management Practices (BMP's)" in all forest management operations.

Management Objectives

- Harvest and regenerate approximately 65 acres per year according to the work plan, primarily using a shelterwood system
- Complete approximately 4,000 acres of Forest Stand Improvement according to the work plan over the next 20 years
- Acquire 500 acres of additional land for expansion of the forest
- Convert approximately 160 acres of introduced conifers and undesirable forest species to native hardwoods with an emphasis on oak reforestation
- Plant approximately 80 acres of open land to native hardwoods, emphasizing expansion of the oak forest
- Demonstrate sound forest management using prescribed fire, stand conversion, forest stand improvement, and harvest areas
- Host at least one forestry field day every year to increase public awareness and forestry education
- Partner with Iowa Woodland Owner Association, American Tree Farm System, Iowa State University Extension, National Wild Turkey Federation, and other related organizations to help educate the public and increase awareness of the value and role of forests in Iowa
- Partner with Parks and Recreation, Fisheries, and Wildlife to help manage recreation facilities and structures
- Maintain approximately 50 miles of trails for wildlife viewing, backpacking, and equestrian riding
- Implement uneven aged management along all major streams to protect water quality

History and Overview

Historical Account

The history of Shimek State Forest dates back to the mid 1930's, when Iowa's General Assembly appropriated $1,000,000 for CCC work. These funds made it possible to purchase approximately 12,000 acres of state forests in southern and northeastern Iowa as well as developing several new state parks. The lands were purchased from private farmers in an attempt to take misused land out of agriculture and back to natural cover.

Around the same time of the original purchases, the U.S. Forest Service acquired approximately 6,400 acres in Southeastern Iowa. In doing so, the 1964 General Assembly Iowa was able to purchase this land to become part of the state forests. Most of this land was added to Stephen's State Forest except for about 1,500 acres, which was added to Shimek State Forest.

Today, Shimek State Forest contains approximately 9,150 acres of timber. This timber is comprised mostly of oak and hickory. There are areas of open fields that are currently in the process of being converted to native tree species.

There is also approximately 1,000 acres of pine species planted throughout the state forest.

Landscape

The landscape of Shimek and the surrounding area is very diverse. In many parts of the forest you can see the influence of the Des Moines River. Narrow, flat ridges separated

by deeply cut drainages flowing toward the river characterize most of Shimek.

The private ownership around Shimek also shows some of these same characteristics. However, the land uses in these areas tend to cater toward agriculture purposes such as row crop, open pasture, and pastured timber.

Cultural History

There are few records of past uses of the land contained in Shimek State Forest, but the multiple use concept was first recognized in the work plan in 1939. This concept refers to the ability to manage the land for multiple uses such as timber, wildlife, watershed, grazing, and recreation.

Based on the number of areas planted in pines and native hardwoods it appears that the CCC established a base of operations at Shimek. During this time there were appropriated funds designated to purchase land that would become state parks or state forests.

After the CCC program ended, state forest management continued in the form of thinning, pruning, tree planting, tree removal, and even planting crops for game. This continued management was focused on improving the state forest and its facilities.

In the late 1950's through the 1960's, it became evident that recreation was very important and recreation facilities were developed. One high point of increased recreation was the development of access with the construction of roads. In 1956 the

Inmate Labor Program was initiated to help manage the increasing areas of state land. Through the next two decades the program ebbed and flowed depending on the need to fulfill management and developmental goals.

Overall, the original purpose of the area is to serve as an example of forest management to forest visitors. While this is still the main purpose of Shimek, it is recognized that an increasing number of people use the area to recreate and enjoy the outdoors. Campground operations were turned over to the Parks and Recreation Bureau in 1982 in order to standardize the areas with other campgrounds throughout the state.

Presently, forest management activities such as forest stand improvement, tree planting, harvesting, inventorying, and forest health are the top priorities at Shimek. The recreational areas are still managed by the Parks and Recreation Bureau to provide the best possible management for all citizens.

Geology and Soils

The geology and soils of Shimek State Forest were influenced by the Nebraskan and Kansan glaciers. These glaciers left deposits of glacial till that covered exposed limestone and shale. Long after the glacial till had been deposited, layers of windblown material from the Missouri River bottom (loess) covered the landscape.

Today, this windblown material (loess) is found mostly on the ridge tops. The side hills are exposing glacial till because of the constant pounding of the elements. Valleys throughout the area contain mostly alluvial material except where erosion has exposed some of the underlying limestone, sandstone, and shale.

The chart below shows the most common soil types and the unit(s) where they are found:

Soil Type (Symbol)	Management Unit(s)
Douds loam (58)	All
Lindley loam (65)	All
Clinton silt loam (80)	Farmington; Lick Creek
Belinda silt loam (130)	Farmington
Weller silt loam (132)	All
Dickinson fine sandy loam (175)	Lick Creek
Gara loam (179)	Keosauqua
Reedscreek loam (197)	Farmington
Landes sandy loam (208)	Donnellson; Lick Creek
Nodaway silt loam (220)	Keosauqua; Lick Creek
Beckwith silt loam (260)	Farmington; Donnellson; Lick Creek
Appanoose silt loam (261)	Keosauqua
Gosport silty clay loam(313)	Farmington
Keswick loam (425)	All
Gorin silty clay loam(432)	Farmington; Keosauqua
Coppock silt loam (520)	Farmington; Keosauqua
Kniffin loam(531)	Keosauqua
Rathbun silt loam(532)	Keosauqua
Galland loam (594)	Donnellson; Lick Creek
Ashgrove silt loam (795)	Farmington; Keosauqua; Lick Creek
Clinton silt loam (880)	Farmington; Lick Creek

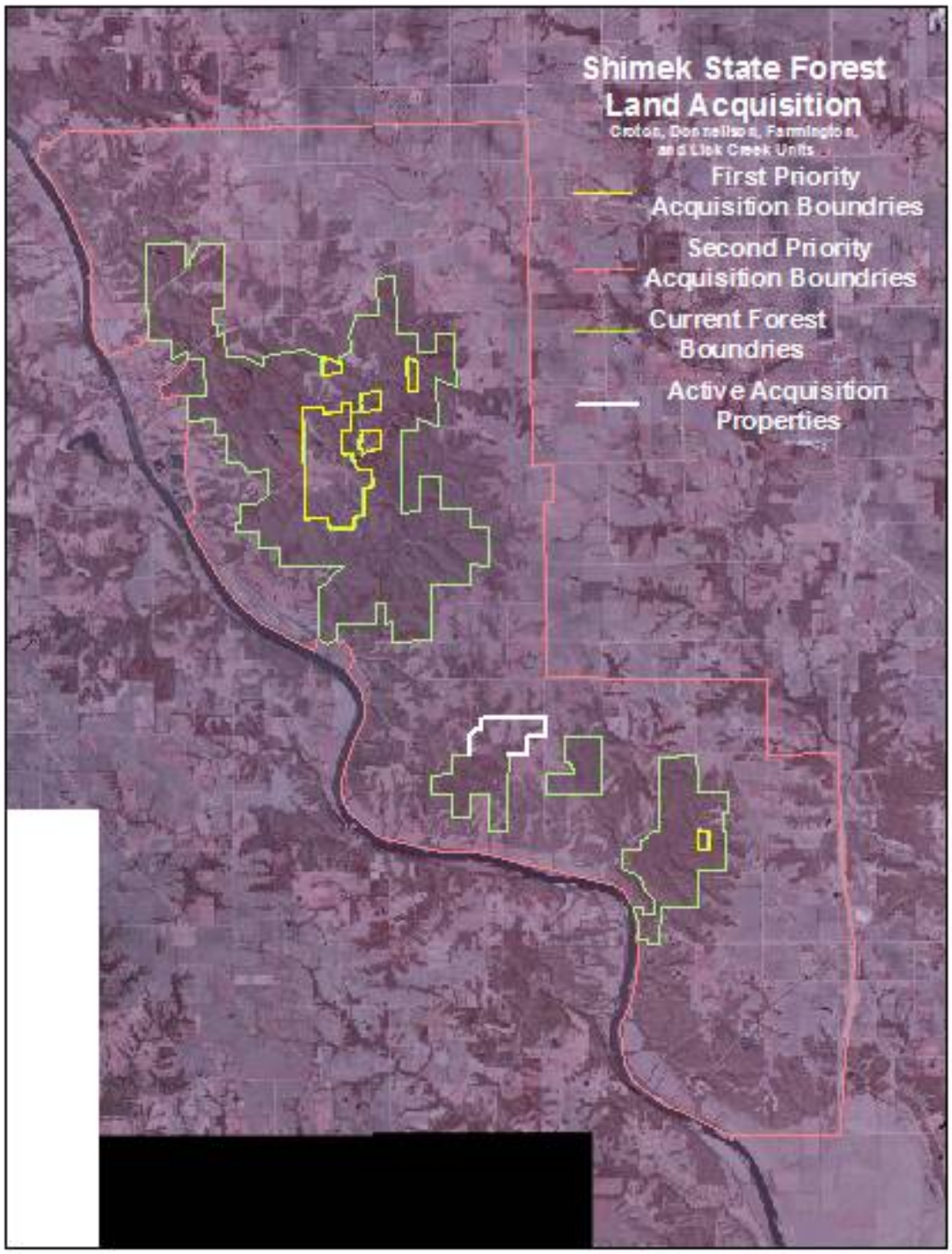
Archeological Sites

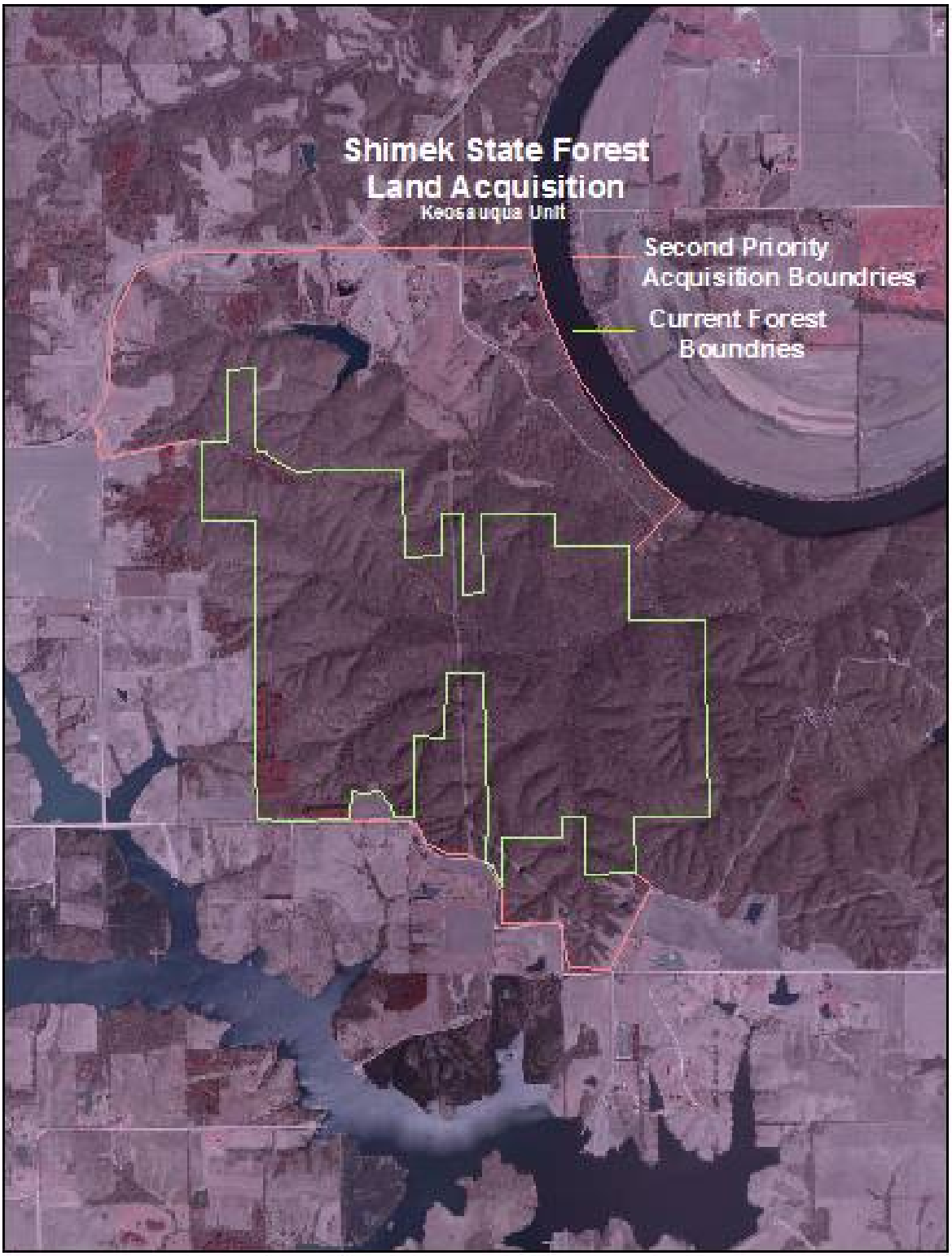
No known archeological sites exist within the forest boundary. It is known, however, that Native Americans used this area for hunting and lodging because of the proximity to

stable water sources. In the event that sites are discovered, they will be protected with the advice of the state archeologist.

Land Acquisition Plans

Iowa has few large blocks of contiguous forests and the species that require this condition. In addition, larger contiguous blocks of forest are more effectively managed for multiple amenities than smaller isolated parcels. Therefore, a goal of Shimek State Forest is to create large blocks of contiguous forest. The areas of most importance are found in the middle and the edges of Farmington, Croton, Donnellson, and Lick Creek Units.


Shimek State Forest
Land Acquisition
Croton, Donnellson, Farmington,
and Link Creek Units
First Priority
Acquisition Boundries
Second Priority
Acquisition Boundries
Current Forest
Boundries
Active Acquisition
Properties


Shimek State Forest
Land Acquisition
Keosauqua Unit
Second Priority
Acquisition Boundries
Current Forest
Boundries

Recent Changes and Trends in Forest Composition

Management of the timber resource has maintained an adequate population of oaks and other desirable hardwoods. The biggest concern is the age of the many stands of Conifers in the forest.

These Conifers are slowly declining and converting to hardwoods. This is a concern along roads for aesthetics reasons but is not a problem when stands are out of view. These stands will be converted to native hardwood species such as oak. This will be done with a combination of pine removal to release natural regenerating hardwoods and understory planting. With careful planning the pines will be replaced with native material that can be more easily managed.

Forest Health

With the value of timber increasing economically as well as aesthetically in Iowa, forest health issues become more important. Shimek State Forest, overall, is in good health at this time. There are some pockets of Oak wilt and Dutch Elm Disease, but they remain manageable and do not pose a huge threat to the forest resource.

There are however, other potential threats to Shimek State Forest. The spread of defoliating/boring insects could threaten our forest very soon. Gypsy Moth and the Emerald Ash Borer are serious threats because of the amount of damage they can cause.

The caterpillar stage of the Gypsy Moth defoliates the tree, forcing it to use up reserve nutrients. Those nutrient reserves help trees fight off damaging insects and disease and produce mast for regeneration and wildlife. The Emerald Ash Borer is another potential threat to Iowa's timber resource. This borer's larva feed on the conductive material of ash trees, which eventually leads to tree mortality. Reports have been shown that there is major defoliation after the first year of infestation with complete mortality within 2-3 years. This is a major concern for Iowa because of the high percentage of ash trees in forested areas and urban areas.

There is another type of forest health issue that does not cause mortality of mature trees. Invasive species are becoming a huge concern on the state forest because of their negative impact on oak regeneration. There are many invasive species in Iowa, but there are a few that are of major concern. Garlic Mustard, Multiflora Rose, Honeysuckle, Buckthorn, and Autumn Olive are the five species that threaten the future health of the state forest. These species grow so densely in the understory that when a tree drops a seed it never has a chance to germinate and become established.

Overall, as more exotic plant species are being transported into Iowa from other places in the country/world we will continue to see an increase in the number of invasive species.

At Shimek State Forest we are always on the lookout for forest health issues that can cause mortality to the forest resource. These invasive insects and plants may or may not be able to be stopped, but our best weapon is the constant monitoring of our forest when or before forest health issues arrive.

Recreation

There are several opportunities for recreation at Shimek State Forest. These include hunting, fishing, picnicking, camping, hiking, horseback riding, snowmobile trails, bicycling, nature study, cross country skiing, and driving for aesthetics. Management activities will promote and compliment other forest uses.

The most popular recreation opportunity is the trail system Shimek State Forest provides. In the Donnellson and Farmington Unit there are 25 miles of well maintained hiking trails. Equestrian users and bicyclists ride on nearly 27 miles of multipurpose trails provided in the Lick Creek Unit. In the Keosauqua Unit there are trails designated for snowmobiling.

Camping is also popular at Shimek's four campgrounds. Bitternut campground is a primitive area containing 8 sites and is located in the Farmington Unit. White Oak is also a primitive campground containing 11 sites and is located in the Donnellson Unit. Upper and Lower Campgrounds are primitive areas containing 37 sites available for equestrian campers using trails. All areas contain fire rings and pit vault latrines. The two equestrian campgrounds also have one water hydrant per campground and a hitching rail at each site.

There are four major ponds on Shimek State Forest and several smaller ponds for fishing activities. The four major ponds are Bitternut, Black Oak, Shagbark, and White Oak. These ponds are managed with guidance from the Fisheries Bureau and contain bluegill, crappie (not stocked), catfish, and bass. Boats with electric motors are allowed in Bitternut and Shagbark ponds only.

The entire state forest is open for hunting with exception to the campgrounds. Shimek is home for a number of species where deer and turkey tend to be the most popular hunted species.

Special considerations such as carrying capacity should be considered with recreation. Carrying capacity is important to determine if the recreation opportunities offered are being over used and thus damaging to the resource. In order for recreation to coincide with our forest management objectives we must perform regular maintenance and supervision of the resource.

Wildlife

Wildlife management is an important goal on the state forests. The DNR Wildlife Bureau is the authority on wildlife management in the state of Iowa, and we depend heavily on their expertise in this area of management. The Iowa Wildlife Action Plan can be viewed online at http://www.iowadnr.gov/wildlife/diversity/plan.html

The forest is the home of the white-tailed deer and turkey, which are the most abundant fauna on the area. Other wildlife include fox, grey squirrel, raccoon, rabbits, woodchuck, muskrat, skunk, coyote, opossum, beaver, and many other smaller animals.

Non-poisonous snakes are most common, but poisonous varieties are known to exist. These poisonous snakes are the rattlesnake and copperhead and have been spotted in the northern part of the Farmington Unit.

A variety of birds are present including those native to the woodland and its edge. The game birds present on the land include pheasant, bobwhite quail, and wild turkey. Bird watchers tend to concentrate toward the Croton Unit for non-game species. The woodcock is a frequent visitor to the forest and some species of migrating waterfowl make occasional use of the ponds. In the 1960's and 1970's there were several attempts to establish ruffed grouse, but there have not been favorable reports for some time.

Forest Units

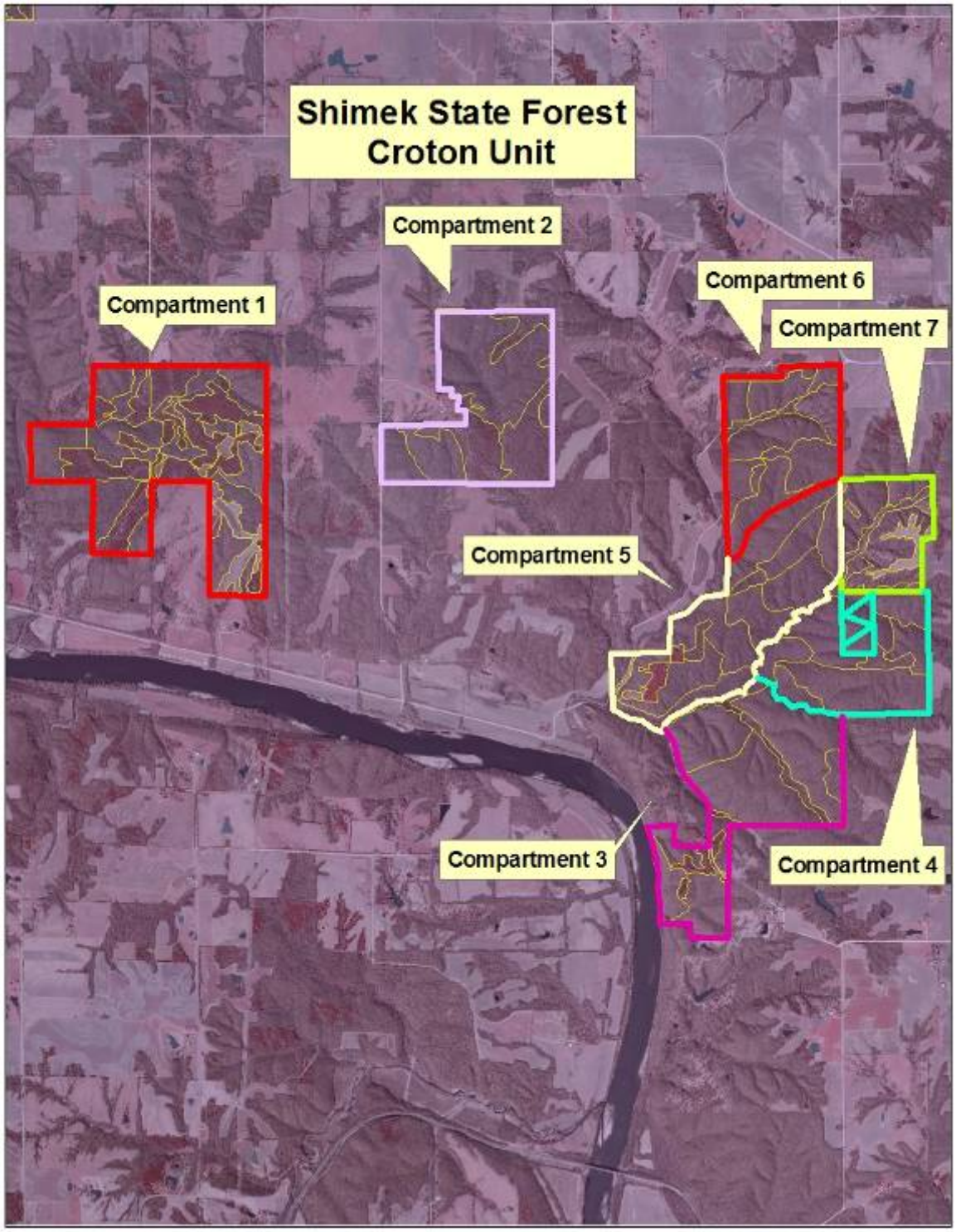
A forest unit is a classification term used to group the forest into working management areas. Shimek State Forest has five of these forest units named after area landmarks. The forest units that make up Shimek are Donnellson, Croton, Farmington, Keosauqua, and Lick Creek Unit. The table below shows the five units and their current acres.

Forest Unit	***Acres***
Croton	1,793
Donnellson	1,278
Farmington	2,138
Keosauqua	926
Lick Creek	2,704
TOTAL	***Approx. 8,839***

These units are further broken up into management compartments, and then divided into stands. It is at the stand level where the most information is held about the forest resource, but this information can be extrapolated to the compartment and unit level. The next several pages will be maps showing each of the five units and their respective compartments and stands.

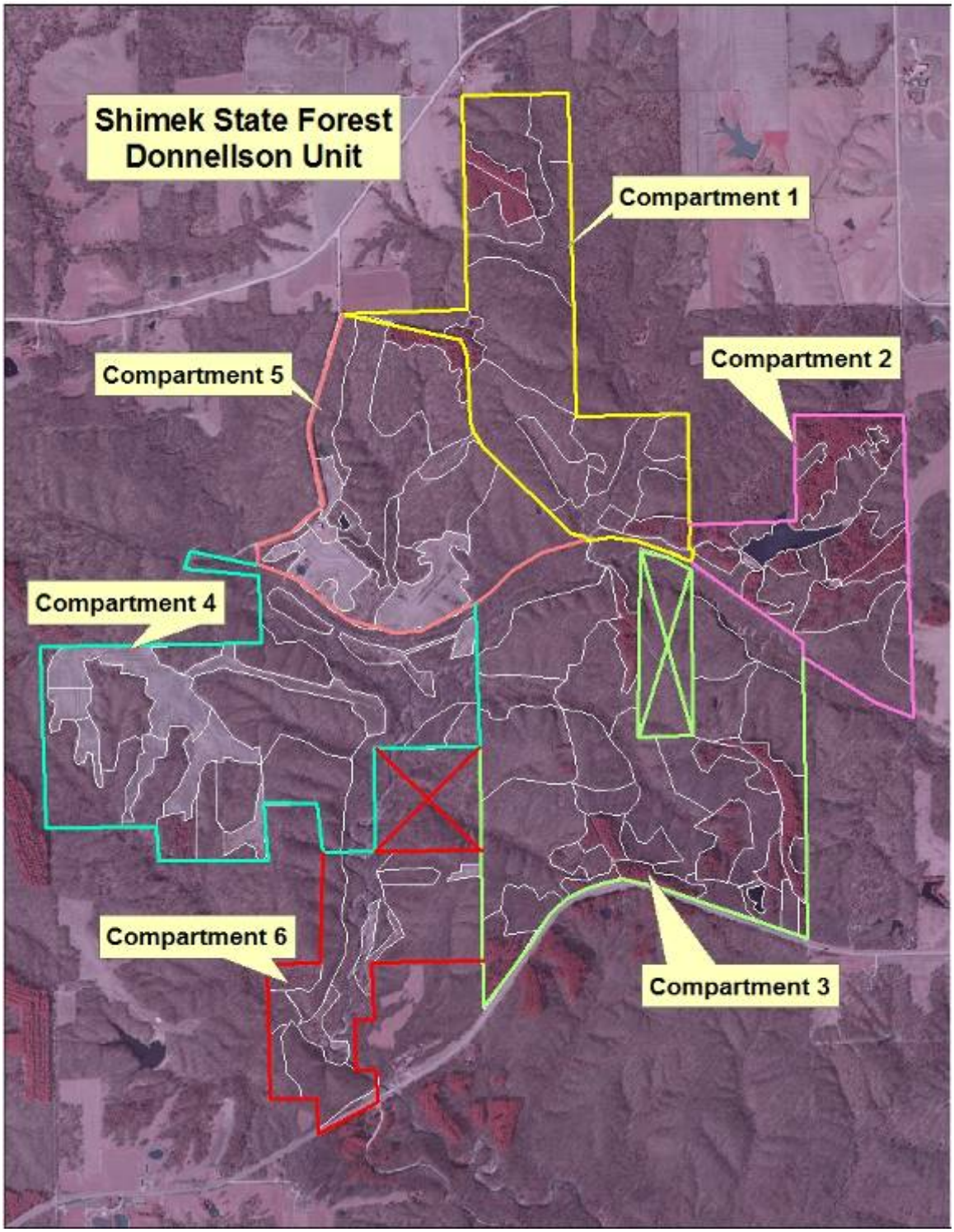
Croton Unit

This map shows the entire Croton Unit of Shimek State Forest. The compartments are labeled and the individual stands are outlined in yellow.



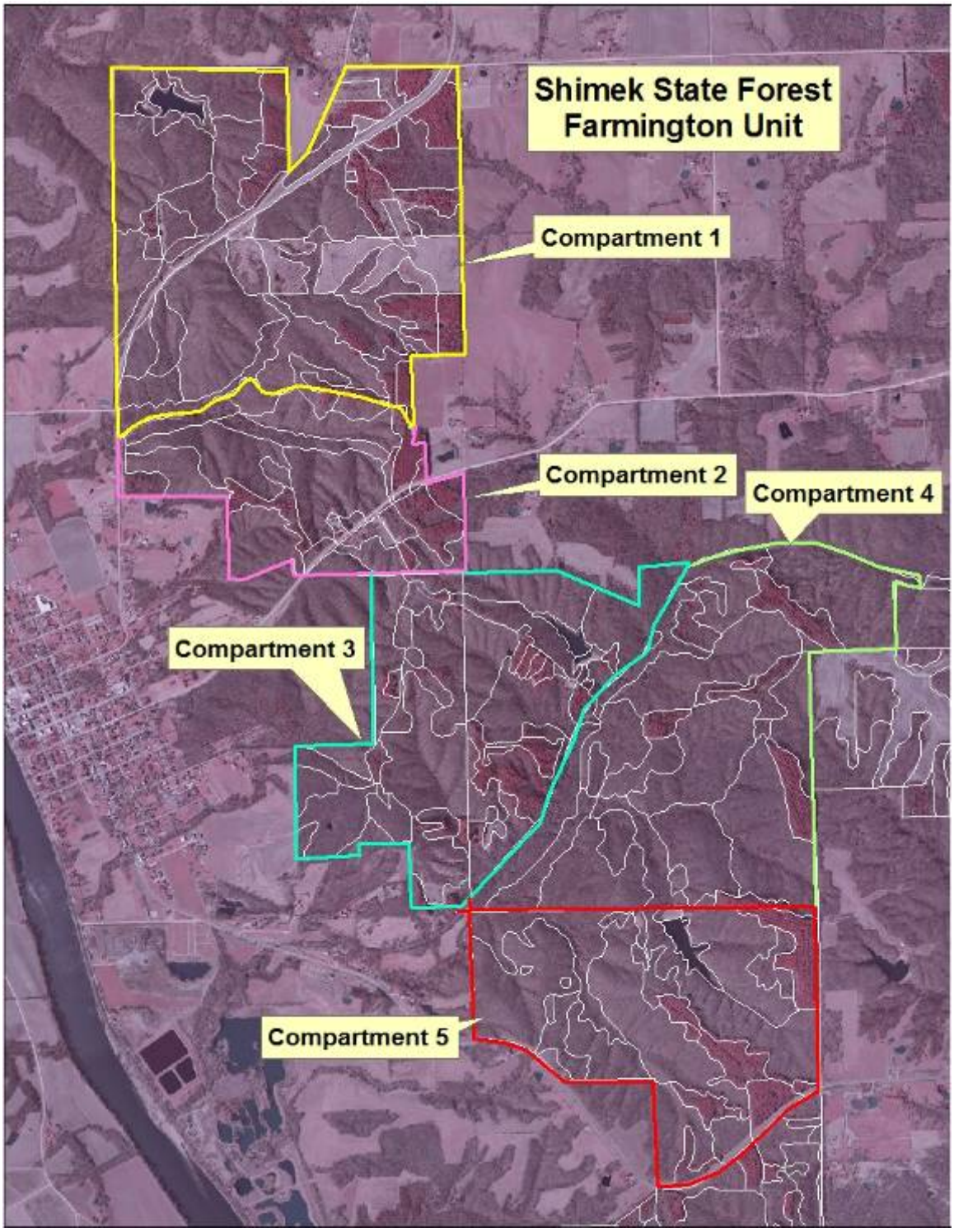
Donnellson Unit

This map shows the entire Donnellson Unit of Shimek State Forest. The compartments are labeled and the individual stands are outlined in white.



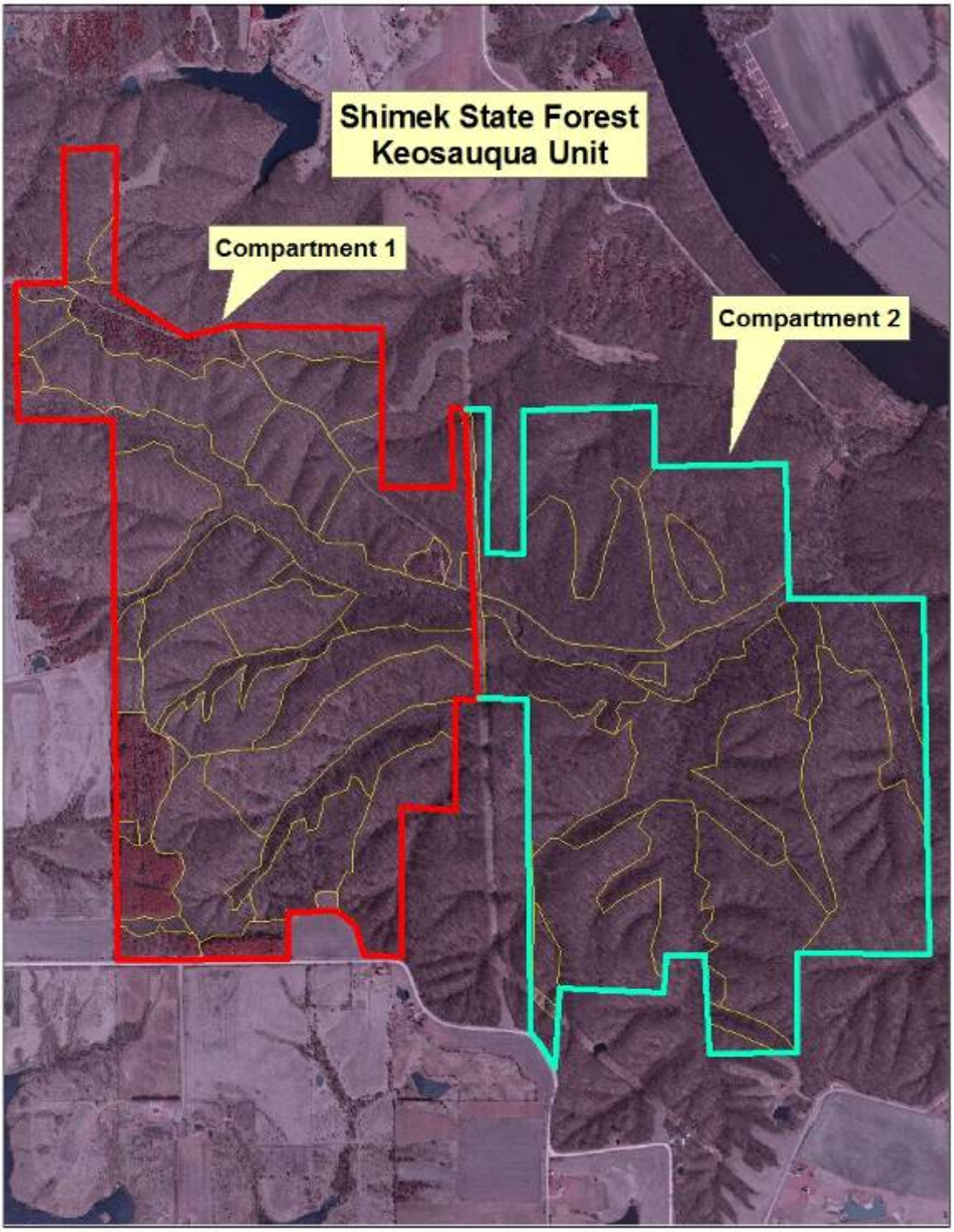
Farmington Unit

This map shows the entire Farmington Unit of Shimek State Forest. The compartments are labeled and the individual stands are outlined in white.



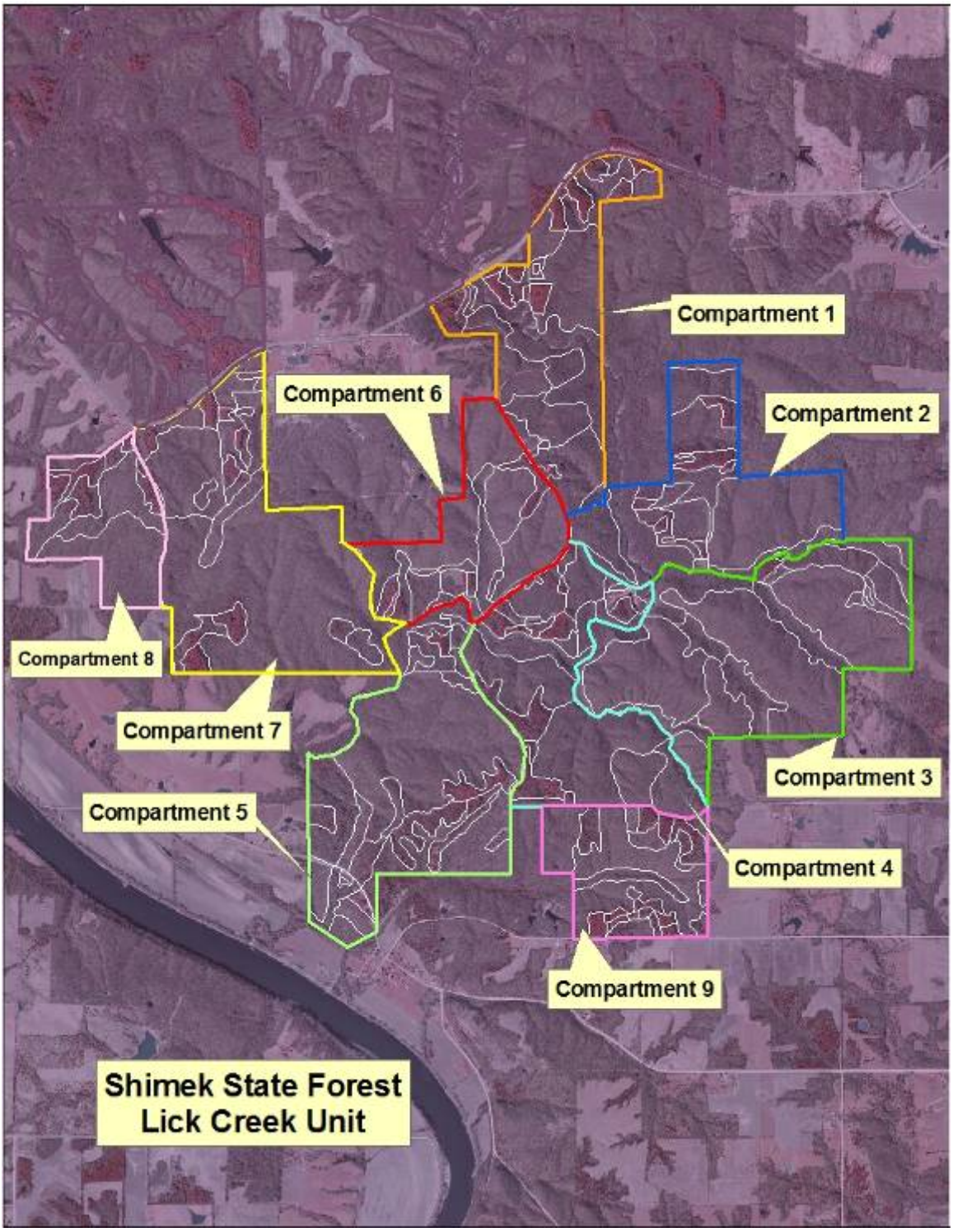
Keosauqua Unit

This map shows the entire Keosauqua Unit of Shimek State Forest. The compartments are labeled and the individual stands are outlined in yellow.



Lick Creek Unit

This map shows the entire Lick Creek Unit of Shimek State Forest. The compartments are labeled and the individual stands are outlined in white.



Forest Management Classes

The forest resources contained in Shimek State Forest are managed based upon the forest cover type, age, and location. Forested areas are managed for sustainability. A sustainable forest is one that can produce positive benefits in perpetuity. In order to achieve sustainability, you need to manage with sustainability as a goal. Forest management activities include forest stand improvement, harvesting, regeneration and general maintenance in recreational areas. These activities produce secondary benefits such as fuel wood, habitat for wildlife, demonstration areas, healthy forests, etc. To better understand how to manage the timber resource contained in Shimek we have broken down the forest into three management classes.

Active Forest Management Areas (approximately 8,130 acres)

This management class is further broken down into even and uneven-aged management activities. Uneven-aged management refers to an area containing several different age classes within the same stand. These areas may be managed unevenly because of site or species characteristics. An area especially suited to this type of management would be a riparian buffer area or a forest stand comprised of shade tolerant hardwoods. Conifer stands not designated as visual corridors or aesthetic areas will receive uneven-aged management until conversion to native hardwoods is complete. Selective harvesting will occur leaving several different age classes available. Forest stand improvement will be used to eradicate undesirable species and increase the health, vigor, and mast production of the stand. Even-aged management refers to management activities used to create a forest stand that grows for a period of time until it reaches a desirable harvest age or size. At this point the harvesting options become shelterwood or clearcut harvesting, depending on the amount of natural regeneration present. If the stand contains a desired amount of regeneration, a clearcut should be implemented. Lack of regeneration would necessitate a shelterwood harvest, weed tree eradication and/or prescribed woodland burn in order to open up the canopy and increase chances for natural regeneration. Once the regeneration has been established the shelterwood trees can be removed. Even-aged management is used to insure that shade intolerant species such as oak will remain as a component of the future forest stand. Forest stand improvement is very necessary to keep the forest system and the individual trees in that system vigorous and healthy. Management activities performed on the forest are very beneficial to many types of wildlife.

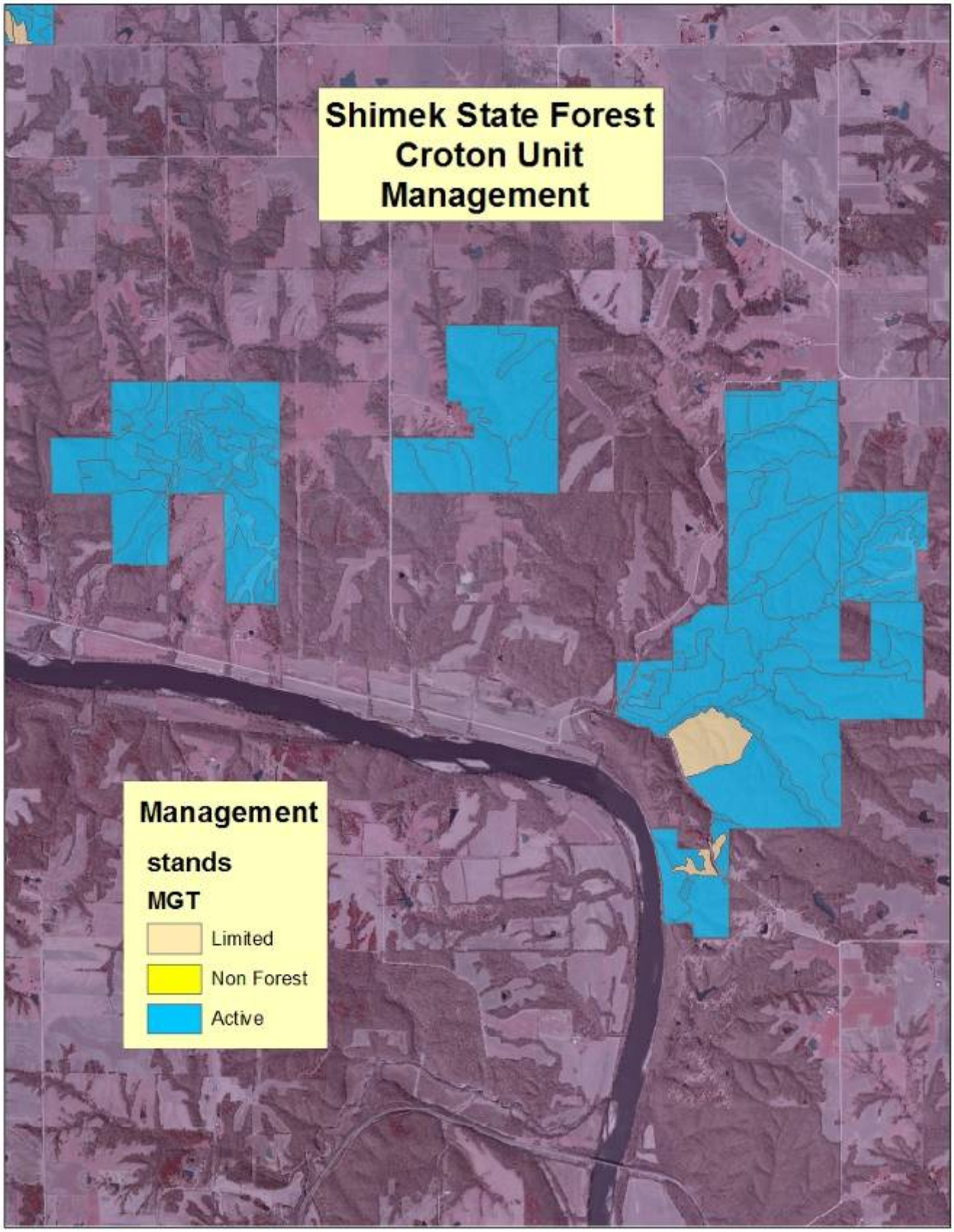
Limited Forest Management Areas (approximately 663 acres)

This management class should be considered light management. Examples of limited management areas are riparian areas, visual corridors, ponds, streams, archeological areas, campgrounds, steep slopes, or unique communities that need special protection. Management activities will take careful planning with water quality and/or public perception in mind. Forest stand improvement will be implemented to sustain health and vigor as well as remove undesirable woody vegetation. Harvesting activities will involve selective tree removal, or in some cases salvage cutting, in order to maintain adequate understory and forest floor vegetative cover. Certain species of wildlife may benefit from the small amount of management that is done.

Non-Forest Areas (approximately 47 acres)

Developed areas, paved roads, agriculture fields, prairie, and savanna are included in this management class. Developed areas and paved roads will only receive maintenance and upkeep in order to keep them functioning properly. Agricultural fields will be utilized to the area's potential until the area is ready to be converted to trees or prairie. In most cases agriculture fields on Shimek will be used for hay which tends to keep undesirable tree and shrubs species from creeping into the fields. Prairie and savanna areas will be managed with prescribed fire and interseeding native vegetation as needed. Some wildlife species may benefit from non-forest areas because it adds some diversity to the landscape.

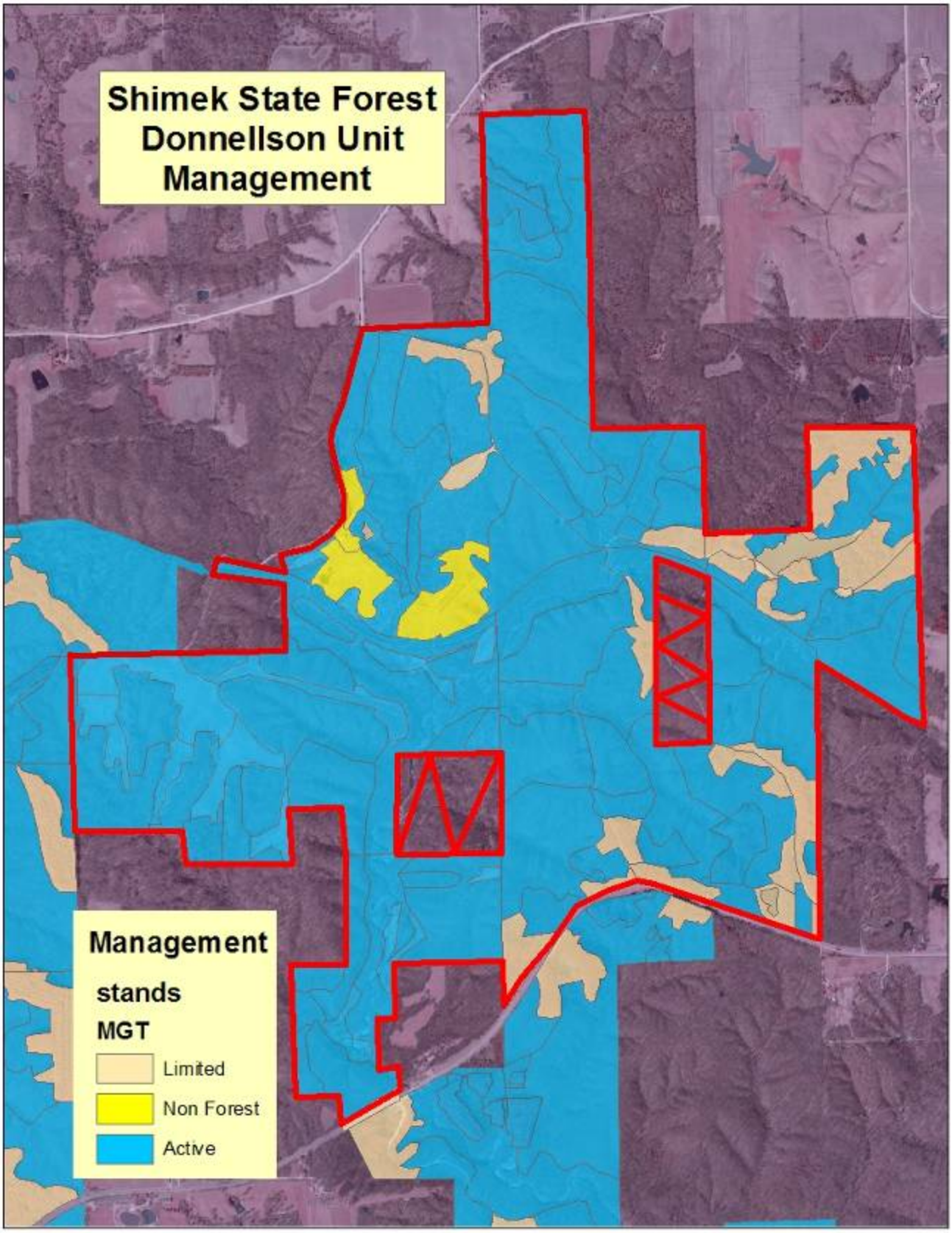
In order to become more familiar with these areas the next few pages show these management classes as they relate to Shimek State Forest’s five units.


Shimek State Forest
Croton Unit
Management
Management
stands
MGT
Limited
Non Forest
Active

Croton Unit

The Croton Unit is 1,793 acres of mostly mixed oak hickory timber with some open prairie areas. There is very little pine in this area and most of the management is even-aged. This unit has a high percentage of the acreage in the oak/hickory and red cedar cover type. Management options for this unit will be mostly forest stand improvement and harvesting activities. The following table shows the Croton Unit broken down into the type of management, the associated acres, and the percentage of management of the whole unit.

Croton Unit		
Management Options	**Acreage**	**%**
Even aged Management	1,706	95
Uneven aged Management	31	2
Riparian	0	
Visual corridors	56	3
Ponds	0	
Campground	0	
Developed	0	
Prairie	0	
Agriculture	0	
	1,793	

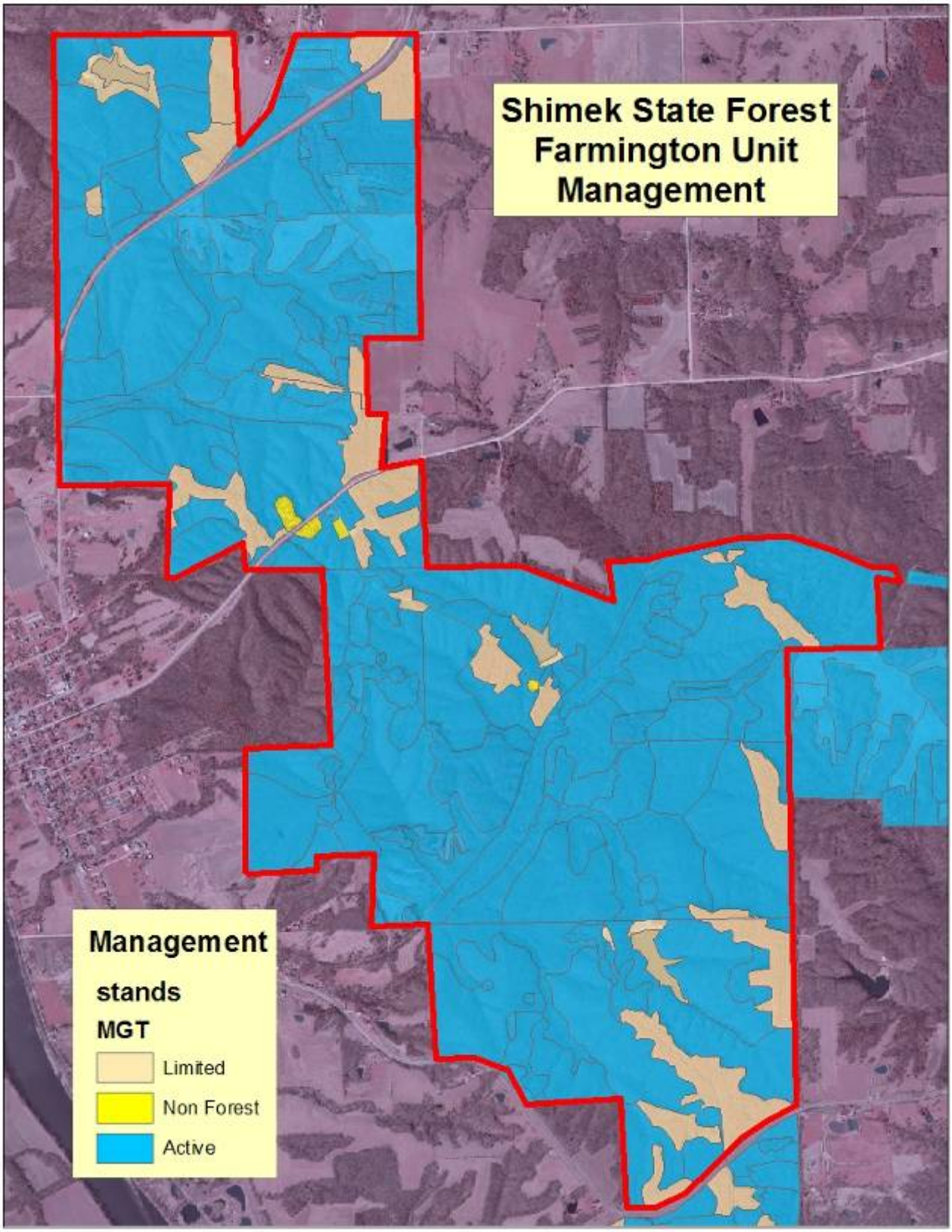

Shimek State Forest
Donnellson Unit
Management
Management
stands
MGT
Limited
Non Forest
Active

Donnellson Unit

The Donnellson unit is 1,278 acres of mostly upland mixed hardwoods. This unit also contains 1 major pond, white oak campground, primitive hike in campground, and a picnic area with interpretive trail.

This unit has a moderate percentage of the acreage in the oak/hickory cover type as well as many scattered pine plantations. Management options for this unit will vary from stand conversion and tree planting to forest stand improvement and harvesting activities. The following table shows the Donnellson Unit broken down into the type of management, the associated acres, and the percentage of management of the whole unit.

Donnellson Unit		
Management Options	**Acreage**	**%**
Even aged Management	936	73
Uneven aged Management	176	14
Riparian	5	NA
Visual corridors	113	9
Ponds	9	
Campground	4	NA
Developed	2	NA
Prairie	33	3
	1,278	

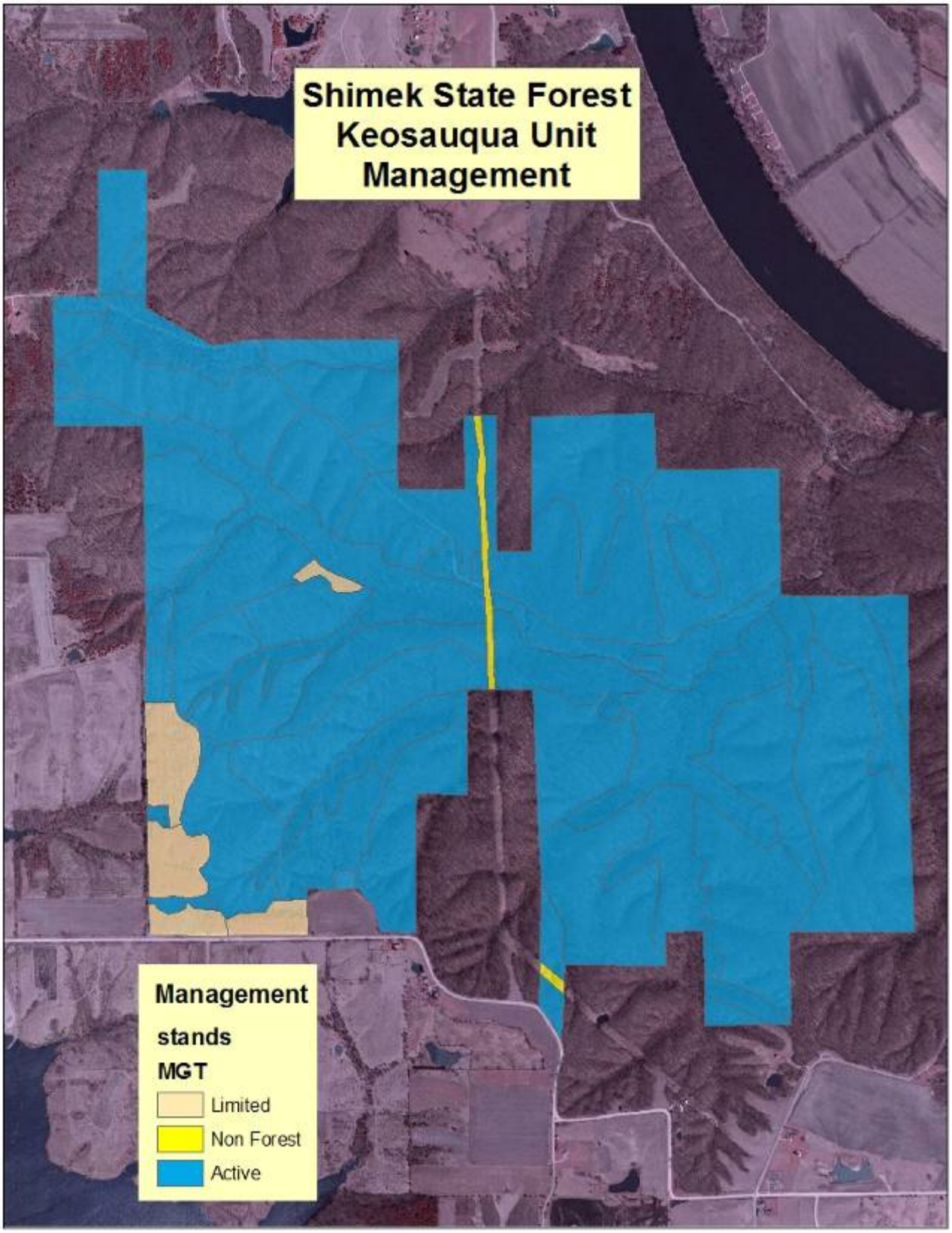

Shimek State Forest
Farmington Unit
Management
Management
stands
MGT
Limited
Non Forest
Active

Farmington Unit

The Farmington unit is 2,138 acres of mostly upland mixed hardwoods. This unit also contains 2 major ponds, bitternut campground, and a picnic area with a view of the lake.

This unit has a moderate percentage of the acreage in the oak/hickory cover type as well as many scattered pine plantations. Management options for this unit will vary from stand conversion, plantation maintenance, and tree planting to forest stand improvement and harvesting activities. The following table shows the Farmington Unit broken down into the type of management, the associated acres, and the percentage of management of the whole unit.

Farmington Unit		
Management Options	**Acreage**	**%**
Even aged Management	1,735	81
Uneven aged Management	150	7
Riparian	12	NA
Visual corridors	216	10
Ponds	16	NA
Campground	3	NA
Developed	5	NA
Prairie	1	NA
	2,138	

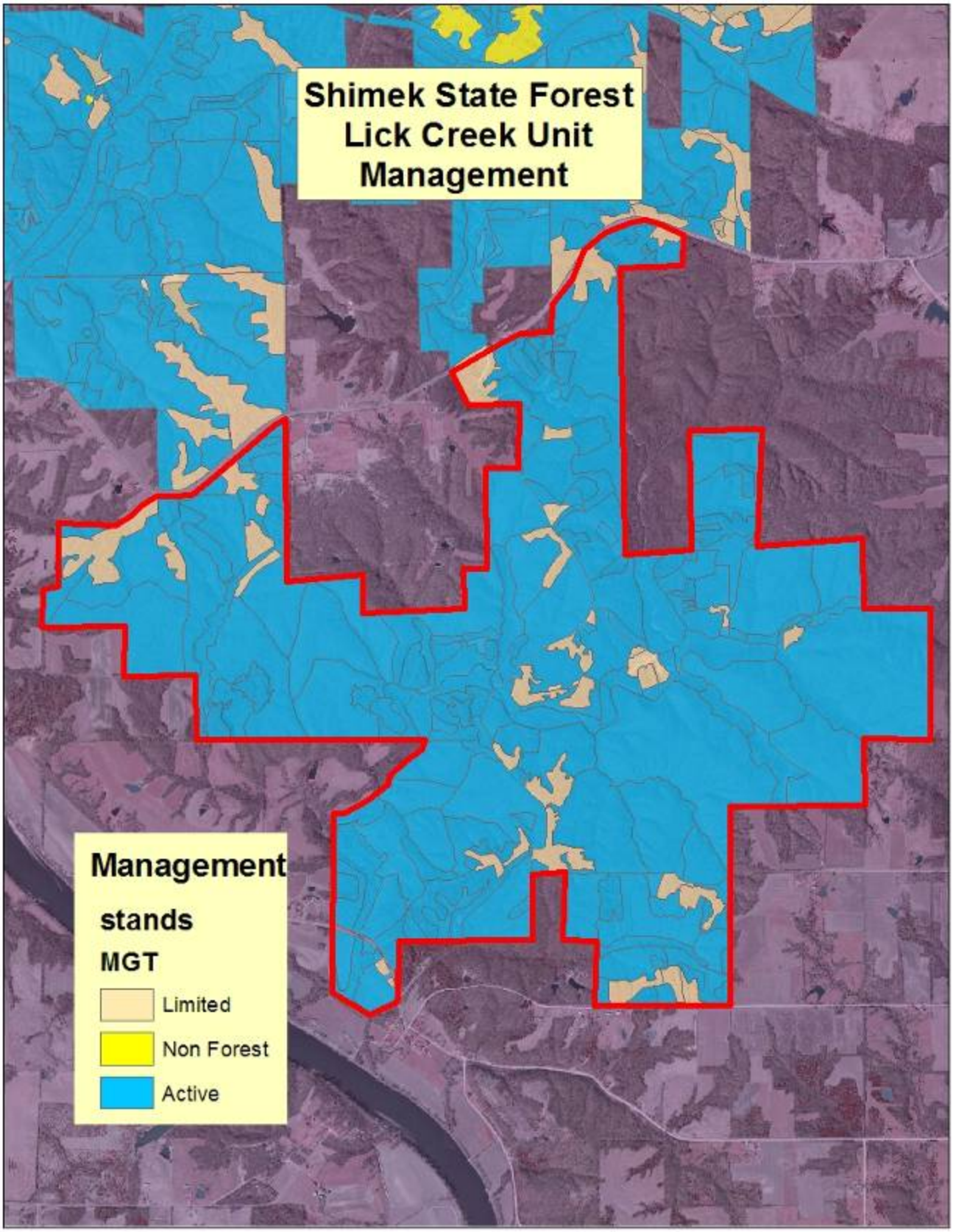

Shimek State Forest
Keosauqua Unit
Management
Management
stands
MGT
Limited
Non Forest
Active

Keosauqua Unit

The Keosauqua unit is 926 acres of mostly upland mixed hardwoods. This unit has several hiking trails in the area as well as snowmobile trails.

This unit has a high percentage of the acreage in the oak/hickory cover type. Management options for this unit will be mostly forest stand improvement and harvesting activities. The following table shows the Keosauqua Unit broken down into the type of management, the associated acres, and the percentage of management of the whole unit.

Keosauqua Unit		
Management Options	**Acreage**	**%**
Even aged Management	777	84
Uneven aged Management	110	12
Visual corridors	33	3
Developed	6	1
	926	


Shimek State Forest
Lick Creek Unit
Management
Management
stands
MGT
Limited
Non Forest
Active

Lick Creek Unit

The Lick Creek unit is 2,704 acres of mostly upland mixed hardwoods. This unit also contains 1 major creek, 2 equestrian campgrounds, and a picnic area with a view of the Lick Creek drainage.

This unit has a moderate percentage of the acreage in the oak/hickory cover type as well as many scattered pine plantations. Management options for this unit will vary from stand conversion, plantation maintenance, and tree planting to forest stand improvement and harvesting activities. The following table shows the Lick Creek Unit broken down into the type of management, the associated acres, and the percentage of management of the whole unit.

Lick Creek Unit		
Management Options	**Acreage**	**%**
Even aged Management	2,199	81
Uneven aged Management	308	11
Visual corridors	181	6
Campground	9	NA
Steep Slopes	8	NA
	2,704	

Allowable Sustainable Harvest

Rotation Age

In order for a forest to be sustainable, rotation ages are established based on the ages various species reach maturity. These rotation ages help roughly determine when a stand is mature enough to start harvesting and begin reforesting for the next generation. Upland hardwoods generally grow slower than bottomland hardwoods; therefore, they will have a longer rotation age than bottomland hardwoods. This will help create a mosaic of different age classes across the forest and provide the diversity to sustain the forest. The table below shows the amount of acres in each rotation age class.

Rotation Age (years)	***Acres***	***Annual Harvest***
80	133.5	1.1 ac
90	401.8	4.5 ac
100	506.1	5.1 ac
110	962.8	8.8 ac
120	5,085.3	42.4 ac
		61.9 ac/year

As you can see by the table, the majority of the acres contained in Shimek will be even-aged management and fall into the 120 year rotation. The table above shows that a rotation of 80 years would be harvested more often than a 120 year rotation age would be harvested. A rotation age of 120 years would indicate that the stand is primarily white oak.

Annual Harvest Goals

Now that this information is present there can be some careful consideration to how much we can cut annually to create sustainable harvests. Based on the most recent inventory, we should harvest and regenerate **61.9 acres per year** at Shimek in order to be fully regulated. All harvesting will be done to meet forest management goals and objectives. In cases where the material to be harvested will generate income, that income will, to the fullest extent possible, be utilized to pay for desired management. In some cases non-merchantable or low value material will need to be harvested or removed to meet management goals. In those cases management will be much more labor intensive and costly. Selective harvesting will be done as needed. These areas are indicated in the Forest Work Plan in the appendix.

Appendix

Appendix A

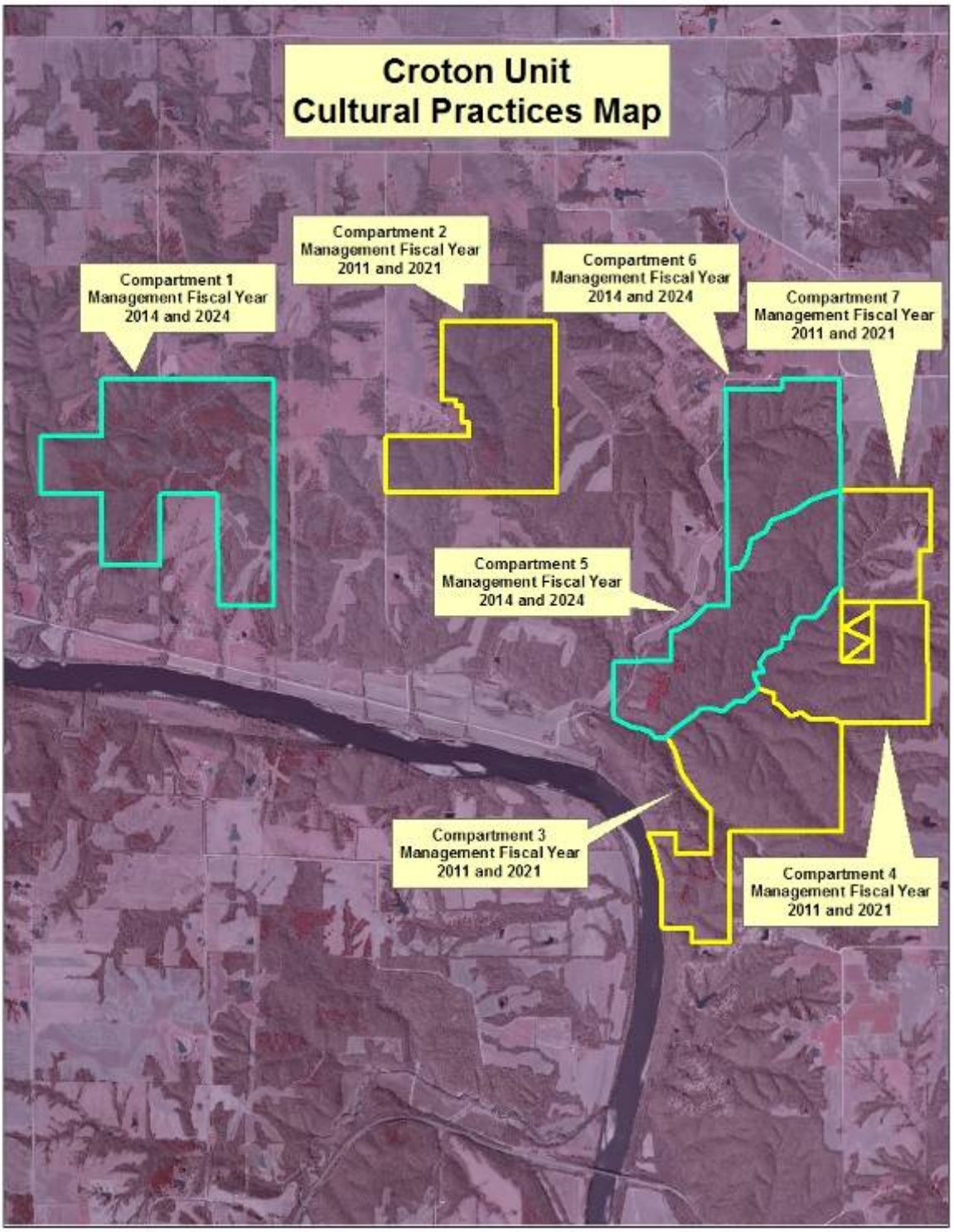
Forest Work Plan

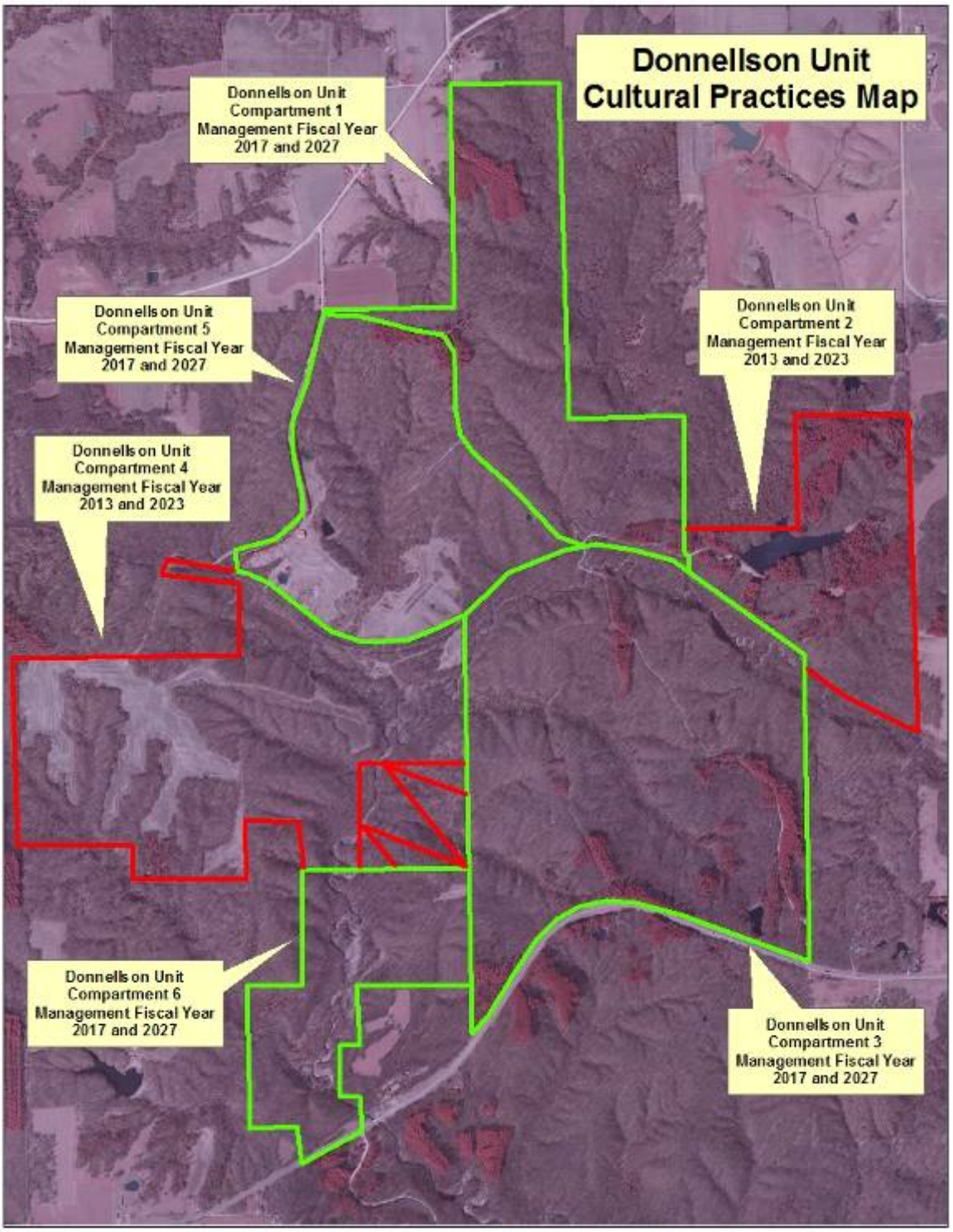
Cultural Practices Schedule

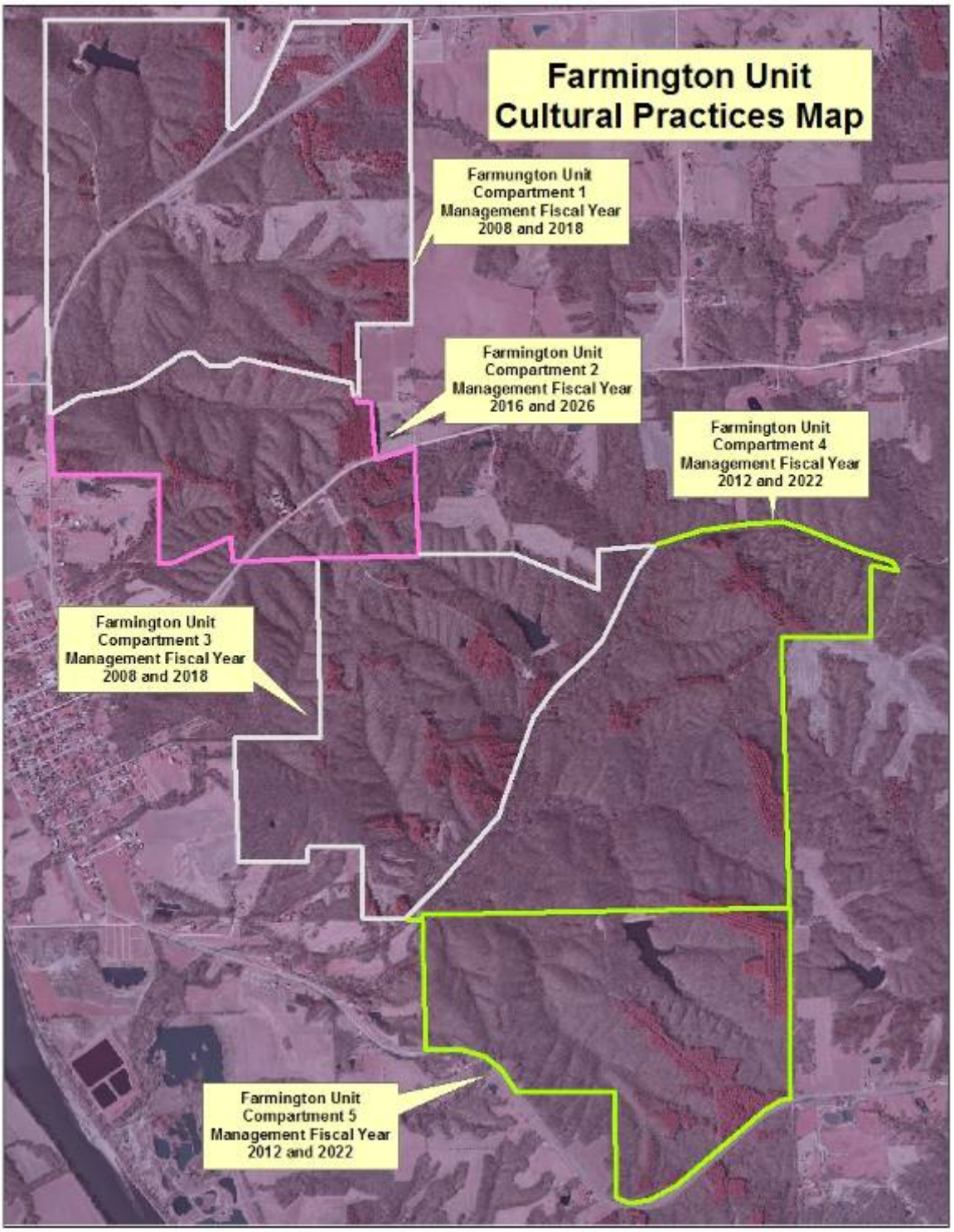
YEAR	AREA	ACRES	Board Foot
2008	Farmington1,3	1004.7	4,336,314
2009	Lick Creek1,2,6	788.9	2,833,189
2010	Keosauqua 1,2	925.7	2,387,603
2011	Croton 2,3,4,7	896.1	3,031,170
2012	Farmington 4,5	873.2	3,628,344
2013	Donnellson 2,4 Lick Creek7,8	997.1	2,820,355
2014	Croton 1,5,6	896.5	3,031,200
2015	Lick Creek 4,5,9	884.5	3,223,975
2016	Farmington 2 Lick Creek 3	714	2,722,789
2017	Donnellson 1,3,5,6	858.4	1,560,765
2018	Farmington1,3	1004.7	TBD
2019	Lick Creek1,2,6	788.9	TBD
2020	Keosauqua 1,2	925.7	TBD
2021	Croton 2,3,4,7	896.1	TBD
2022	Farmington 4,5	873.2	TBD
2023	Donnellson 2,4 Lick Creek7,8	997.1	TBD
2024	Croton 1,5,6	896.5	TBD
2025	Lick Creek 4,5,9	884.5	TBD
2026	Farmington 2 Lick Creek 3	714	TBD
2027	Donnellson 1,3,5,6	858.4	TBD

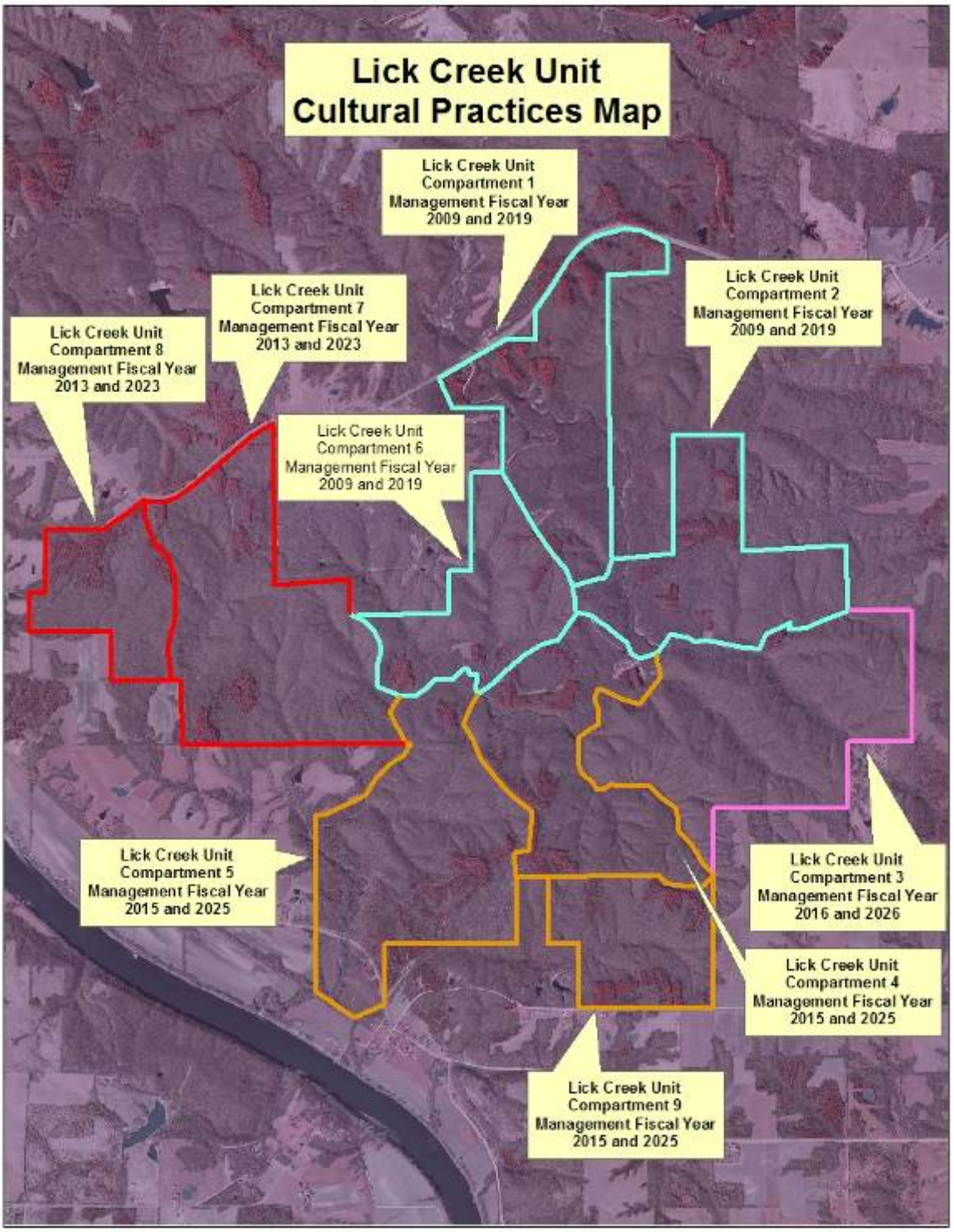
In order for management to be spread over the entire forest, a cultural practices schedule is used. Basically, this schedule delineates a certain number of acres every year on which to focus our management efforts. Because the management area of Shimek is

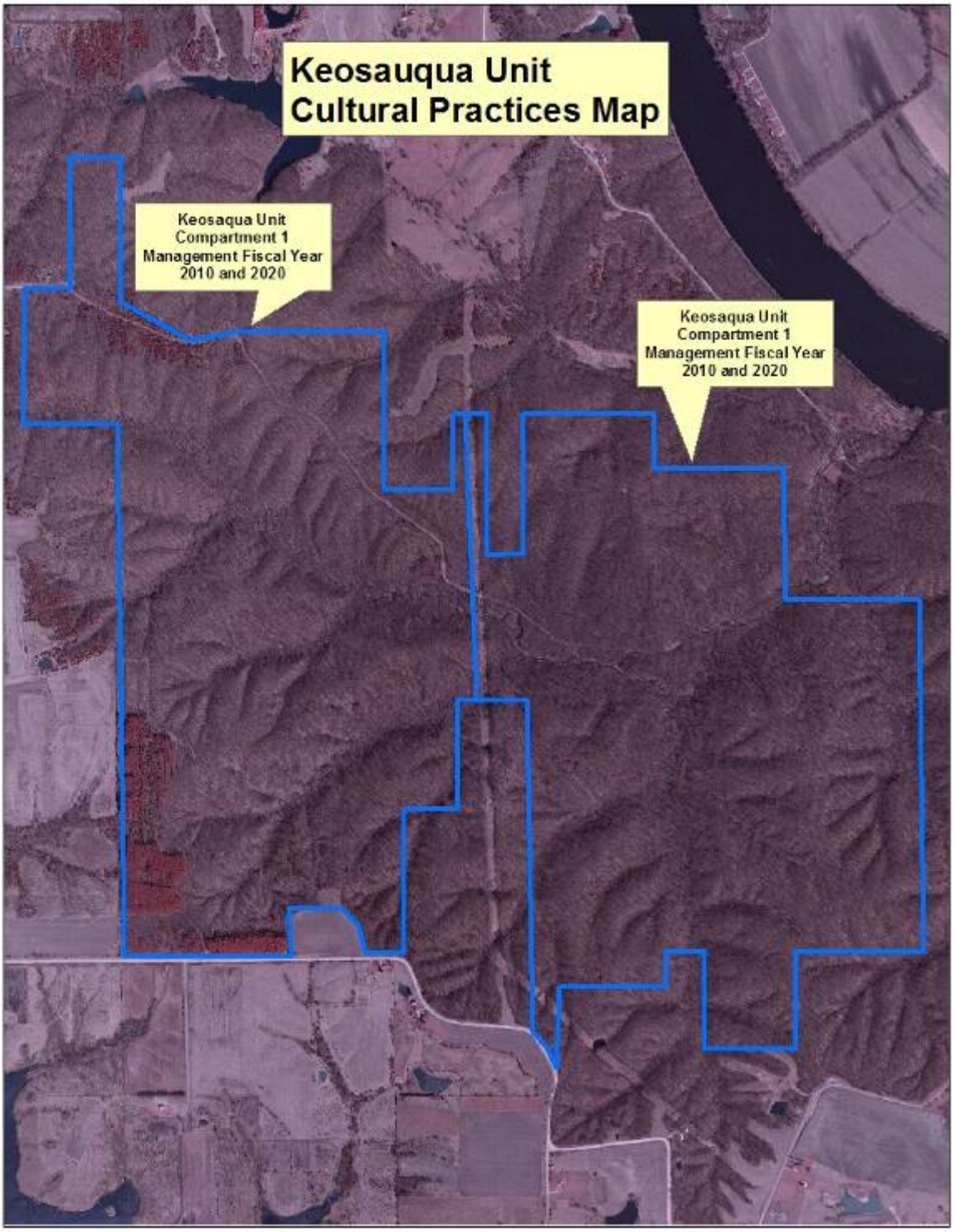
approximately 8,839.1 acres and we would like to revisit all areas of the forest every ten years, we will manage an average of 884 acres every year. The board foot volume totals are based on merchantable trees 12+ inches in diameter. The maps below show the cultural practice areas by year. The cultural practices schedule and maps are very important to help manage the forest on a yearly basis. By targeting a smaller area we can put all resources toward improving a little at a time. This also ensures that every ten years the whole forest has seen some type of management.


Croton Unit
Cultural Practices Map
Compartment 1
Management Fiscal Year
2014 and 2024
Compartment 2
Management Fiscal Year
2011 and 2021
Compartment 6
Management Fiscal Year
2014 and 2024
Compartment 7
Management Fiscal Year
2011 and 2021
Compartment 5
Management Fiscal Year
2014 and 2024
Compartment 3
Management Fiscal Year
2011 and 2021
Compartment 4
Management Fiscal Year
2011 and 2021


Donnellson Unit
Cultural Practices Map
Donnellson Unit
Compartment 1
Management Fiscal Year
2017 and 2027
Donnellson Unit
Compartment 5
Management Fiscal Year
2017 and 2027
Donnellson Unit
Compartment 2
Management Fiscal Year
2013 and 2023
Donnellson Unit
Compartment 4
Management Fiscal Year
2013 and 2023
Donnellson Unit
Compartment 6
Management Fiscal Year
2017 and 2027
Donnellson Unit
Compartment 3
Management Fiscal Year
2017 and 2027


Farmington Unit
Cultural Practices Map
Farmungton Unit
Compartment 1
Management Fiscal Year
2008 and 2018
Farmington Unit
Compartment 2
Management Fiscal Year
2016 and 2026
Farmington Unit
Compartment 4
Management Fiscal Year
2012 and 2022
Farmington Unit
Compartment 3
Management Fiscal Year
2008 and 2018
Farmington Unit
Compartment 5
Management Fiscal Year
2012 and 2022


Lick Creek Unit
Cultural Practices Map
Lick Creek Unit
Compartment 1
Management Fiscal Year
2009 and 2019
Lick Creek Unit
Compartment 2
Management Fiscal Year
2009 and 2019
Lick Creek Unit
Compartment 3
Management Fiscal Year
2016 and 2026
Lick Creek Unit
Compartment 4
Management Fiscal Year
2015 and 2025
Lick Creek Unit
Compartment 5
Management Fiscal Year
2015 and 2025
Lick Creek Unit
Compartment 6
Management Fiscal Year
2009 and 2019
Lick Creek Unit
Compartment 7
Management Fiscal Year
2013 and 2023
Lick Creek Unit
Compartment 8
Management Fiscal Year
2013 and 2023
Lick Creek Unit
Compartment 9
Management Fiscal Year
2015 and 2025


Keosauqua Unit
Cultural Practices Map
Keosaqua Unit
Compartment 1
Management Fiscal Year
2010 and 2020
Keosaqua Unit
Compartment 1
Management Fiscal Year
2010 and 2020

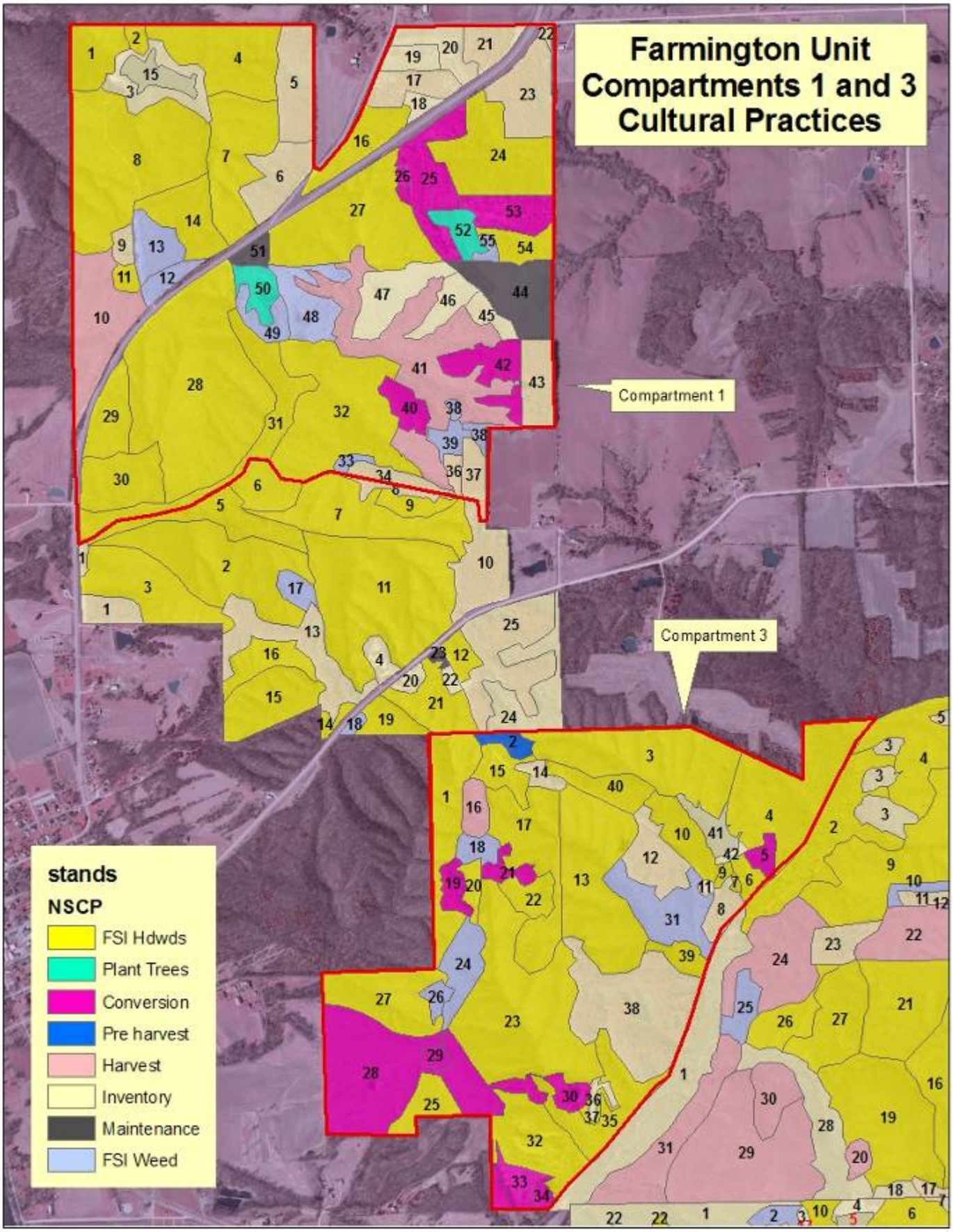
Work Plan Summary for Shimek State Forest

Fiscal Year	Cultural Practice Units and Compartments	Type of Cultural Practice	Total Acres	Cost of Practices	Harvest Acres	Est. $
2008	Farmington 1,3	Crop Tree Release	253	$30,360		
	Farmington 1,3	Stand Conversion	37.4	$14,960		
	Farmington 1,3	Weed Tree Eradication	43	$5,160		
	Farmington 1,3	Plantation Maintenance	33.2	$2,158		
				$52,638		
2009	Lick Creek 1,2,6	Crop Tree Release	158.5	$19,020		
		Selective Mgmt Thin	72.5	$8,700		
		Stand Conversion	1.9	$760		
		Weed Tree Eradication	31.1	$4,976		
		Plantation Maintenance	0.7	$28		
		Shelter Wood Harvest			66.7	$65,400
	Donnellson 4	Pre Harvest Treatment	62.5	$10,000		
	Croton 6	Pre Harvest Treatment	61.1	$8,176		
				$51,660		***$65,400***
2010	Keosauqua 1,2	Crop Tree Release	286	$34,320		
		Selective Mgmt Thin	47.3	$5,676		
		Weed Tree Eradication	25.2	$4,032		
		Post Harvest Treatment	18.3	$2,928		
		Shelter Wood Harvest			64.1	$46,000
	Lick Creek 2,6	Post Harvest Treatment	66.7	$10,672		
	Lick Creek 4,5	Pre Harvest Treatment	64.8	$10,368		
				$67,996		***$46,000***
2011	Croton 2,3,4,7	Crop Tree Release	370.8	$44,472		
		Selective Mgmt Thin	9.2	$1,104		
		Weed Tree Eradication	20.3	$3,248		
		Shelter Wood Harvest			56.9	$42,500
		Tree Planting	13.6	$5,440		
	Lick Creek 3	Pre Harvest Treatment	59.5	$9,520		
				$63,784		***$42,500***
2012	Farmington 4,5	Crop Tree Release	285.5	$34,260		
		Selective Mgmt Thin	21.5	$2,580		
		Stand Conversion	3	$1,200		
		Weed Tree Eradication	66.6	$10,656		
		Shelter Wood Harvest			62.1	$48,600
	Keosauqua 2	Post Harvest Treatment	64.1	$10,256		
	Donnellson 3,5	Pre Harvest Treatment	76.7	$12,272		
				$71,224		***$48,600***

2013	Donnellson 2,4 Lick Creek 7,8	Crop Tree Release	263.6	$31,632		
		Selective Mgmt Thin	35	$4,200		
		Weed Tree Eradication	27.7	$4,571		
		Plantation Maintenance	44.7	$1,788		
		Shelter Wood Harvest			62.5	$64,000
		Tree Planting	36	$14,400		
	Farmington 1,3	Pre Harvest Treatment	64.7	$7,764		
	Farmington 4	Post Harvest Treatment	62.1	$9,936		
	Croton 4	Post Harvest Treatment	56.9	$9,104		
				$83,576		***$64,000***
2014	Croton 1,5,6	Crop Tree Release	205.4	$24,648		
		Selective Mgmt Thin	7.2	$864		
		Weed Tree Eradication	38.8	$6,208		
		Plantation Maintenance	1.4	$56		
		Shelter Wood Harvest			31.5	$20,000
		Clear cut Harvest			19.6	$28,200
		Tree Planting	6.8	$2,720		
	Lick Creek 1,2	Pre Harvest Treatment	100.4	$16,064		
				$50,560		***$48,200***
2015	Lick Creek 4,5,9	Crop Tree Release	223.7	$26,844		
		Selective Mgmt Thin	33	$3,960		
		Weed Tree Eradication	10.1	$1,616		
		Shelter Wood Harvest			64.8	$65,400
	Keosauqua 1	Pre Harvest Treatment	57.6	$9,216		
				$41,636		***$65,400***
2016	Farmington 2 Lick Creek 3	Crop Tree Release	161.5	$19,380		
		Selective Mgmt Thin	24.5	$2,940		
		Weed Tree Eradication	19.9	$3,184		
		Plantation Maintenance	0.7	$28		
		Shelter Wood Harvest			59.5	$75,000
				$25,532		***$75,000***

2017	Donnellson 1,3,5,6	Crop Tree Release	403.6	$48,432		
		Stand Conversion	21.7	$8,680		
		Weed Tree Eradication	12.7	$2,032		
		Plantation Maintenance	1.4	$56		
		Shelter Wood Harvest			76.6	$64,500
		Tree Planting	10.2	$4,080		
	Farmington 4	Pre Harvest Treatment	36.7	$5,872		
				$69,152		***$64,500***
2018	Farmington 1,3	Crop Tree Release	301.1	$36,132		
		Selective Mgmt Thin	1.5	$180		
		Stand Conversion	59.8	$23,920		
		Weed Tree Eradication	49.7	$7,952		
		Shelter Wood Harvest			64.7	$47,000
		Tree Planting	19.6	$7,840		
	Donnellson 4 Lick Creek 7	Pre Harvest Treatment	63.2	$10,112		
				$86,136		***$47,000***
2019	Lick Creek 1,2,6	Crop Tree Release	211.6	$25,392		
		Selective Mgmt Thin	3.3	$396		
		Stand Conversion	10.8	$4,320		
		Pre Harvest Treatment	58.9	$9,424		
		Weed Tree Eradication	3.8	$627		
		Shelter Wood Harvest			74	$58,500
		Selective Harvest			26.4	$18,900
	Croton 1,6	Pre Harvest Treatment	63.9	$10,224		
				$50,383		***$77,400***
2020	Keosauqua 1,2	Crop Tree Release	275	$33,000		
		Selective Mgmt Thin	62.5	$7,500		
		Stand Conversion	2	$800		
		Shelter Wood Harvest			57.6	$56,700
		Tree Planting	0.8	$320		
		Clear cut Harvest			17.4	$10,000
	Lick Creek 4,5	Pre Harvest Treatment	63.6	$10,176		
				$51,796		***$66,700***
2021	Croton 2,3,4,7	Crop Tree Release	231.8	$27,816		
		Weed Tree Eradication	9.8	$1,568		
	Lick Creek 3	Pre Harvest Treatment	50.9	$8,144		
				$37,528		***$0***

2022	Farmington 4,5	Crop Tree Release	180.8	$21,696		
		Weed Tree Eradication	20.7	$3,312		
		Shelter Wood Harvest			36.7	$33,300
	Donnellson 1,6	Pre Harvest Treatment	71.5	$11,440		
				$36,448		***$33,300***
2023	Donnellson 2,4 Lick Creek 7,8	Crop Tree Release	95.2	$11,424		
		Selective Mgmt Thin	61.4	$7,368		
		Stand Conversion	8.7	$3,480		
		Weed Tree Eradication	17.7	$2,832		
		Shelter Wood Harvest			63.2	$57,300
	Farmington 1,3	Pre Harvest Treatment	48.2	$7,712		
				$32,816		***$57,300***
2024	Croton 1,5,6	Crop Tree Release	108.9	$13,068		
		Selective Mgmt Thin	32.1	$3,852		
		Stand Conversion	17.5	$7,000		
		Weed Tree Eradication	47.8	$7,648		
		Tree Planting	26.3	$10,520		
		Shelter Wood Harvest			27.3	$22,000
		Clear cut Harvest			36.6	$41,000
				$42,088		***$63,000***
2025	Lick Creek 4,5,9	Crop Tree Release	123.9	$14,868		
		Selective Mgmt Thin	17.3	$2,076		
		Plantation Maintenance	1.4	$56		
		Weed Tree Eradication	38	$6,080		
		Shelter Wood Harvest			63.6	$53,800
				$23,080		***$53,800***
2026	Farmington 2 Lick Creek 3	Crop Tree Release	38.5	$4,620		
		Weed Tree Eradication	3	$480		
		Shelter Wood Harvest			38.7	$31,300
		Clear cut Harvest			12.2	$26,400
				$5,100		***$57,700***
2027	Donnellson 1,3,5,6	Crop Tree Release	43.6	$5,232		
		Selective Mgmt Thin	27.2	$3,264		
		Pre Harvest Treatment	58.7	$9,392		
		Shelter Wood Harvest			71.5	$53,700
				$17,888		***$53,700***
2028	Farmington 1,3	Shelter Wood Harvest			48.2	$37,000
				$0		***$37,000***


Farmington Unit
Compartments 1 and 3
Cultural Practices
Compartment 1
Compartment 3
stands
NSCP
FSI Hdwds
Plant Trees
Conversion
Pre harvest
Harvest
Inventory
Maintenance
FSI Weed

Farmington Unit Management Prescriptions

Compartment 1

Stand 1: 8.7 acres

Site Description -

Northeast facing slope with a small drainage running through the middle. Borders Bitternut campground.

Woodland Description-

The area is medium sized (12-18" dia.) red, white and black oak, walnut, basswood, and shagbark hickory. The understory is hard maple, ironwood, elm, shagbark hickory, and white oak.

Management Recommendations – Even Age

Crop tree release should be performed in order to manage for desirable oak and walnut (2008).

Stand 2: 1.5 acres

Site Description -

South facing slope bordering bitternut lake.

Woodland Description-

The area is small sized (4-8" dia.) Red, Jack, and White pine. There is oak, ash, elm regenerating under the pines.

Management Recommendations – Uneven Age

Selective management thinning should be done so that sunlight can reach the regenerating hardwood species (2018). This should increase the health of the stand and ensure oak populations.

Stand 3: 9 acres

Site Description -

This area is the buffer around bitternut lake.

Woodland Description-

The area is medium sized (12-18" dia.) red, white and black oak, walnut, and shagbark hickory. The understory is regenerating to white, red, and black oak, shagbark hickory, and elm.

Management Recommendations – Uneven Age

Re evaluation of the stand and inventory should be completed in the future (2018).

Stand 4: 19.9 acres

Site Description -

This stand consists of rolling hills with slopes in all directions. Several drainage areas dot the stand.

Woodland Description-

The area is medium sized (12-16" dia.) red, white, shingle and black oak, and shagbark hickory. Elm, cherry, red cedar, and honey locust are scattered throughout the stand. The understory is mostly elm and ironwood.

Management Recommendations – Even Age

Crop tree release should be performed in order to manage for desirable oak (2008).

Stand 5: 12.1 acres

Site Description -

Upland site along the border of Shimek.

Woodland Description-

The area is medium sized (8-12" dia.) red pine. The understory is ash, elm, and mixed oak species.

Management Recommendations – Uneven Age

This area is a visual corridor and will only be managed on a limited basis. Re evaluation and inventory will be conducted in the future (2018).

Stand 6: 10.1 acres

Site Description -

Upland site along the road.

Woodland Description-

The area is medium sized (8-16" dia.) white pine. The understory is ash, elm, and mixed oak species.

Management Recommendations – Uneven Age

This area is a visual corridor and will only be managed on a limited basis. Re evaluation and inventory will be conducted in the future (2018).

Stand 7: 20.8 acres

Site Description -

This stand consists of a general west facing slope. Several minor drainage areas dot the stand.

Woodland Description-

The area is medium sized (10-16" dia.) red, white, and black oak, and shagbark hickory. Elm, ash, cherry, and honey locust are scattered throughout the stand. The understory is mostly elm and ironwood with some oak regenerating.

Management Recommendations – Even Age

Crop tree release should be performed in order to manage for desirable oak (2008).

Stand 8: 44.1 acres

Site Description -

This stand consists of a west and east facing slope and a ridge top. Several minor drainage areas dot the stand.

Woodland Description-

The area is medium sized (10-16" dia.) red, white, and black oak, and shagbark hickory. Elm, ash, bitternut hickory, and walnut are scattered throughout the stand. The understory is mostly elm and ironwood with some oak regenerating.

Management Recommendations – Even Age

Conduct crop tree release practices in 2018 in order to help open up the stand and encourage the regeneration of oak.

Stand 9: 2.2 acres

Site Description -

Upland site along the bitternut campground road.

Woodland Description-

The area is medium sized (8-16" dia.) white pine. The understory is ash, elm, and mixed oak species.

Management Recommendations – Uneven Age

This area is a somewhat of a visual corridor but should be thinned to encourage desirable species. Thinning will be conducted in the future (2018).

Stand 10: 19.9 acres

Site Description -

This stand consists of a southwest facing slope. Several minor drainage ditches are in the stand.

Woodland Description-

The area is medium sized (8-14" dia.) red, white, and black oak, and shagbark hickory. Elm, ash, hackberry, and walnut are scattered throughout the stand. The understory is mostly ash and mixed oak.

Management Recommendations – Even Age

Shelter wood harvesting should occur in 2018 in order to help open up the stand and encourage the regeneration of oak. Pre harvest treatment should be done in 2013.

Stand 11: 1.9 acres

Site Description -

This stand consists of an upland site.

Woodland Description-

The area is sapling sized (2-6" dia.) ash, elm, and shagbark hickory. White and red oak and walnut are scattered throughout the stand.

Management Recommendations – Even Age

Crop tree release on the oaks should occur in 2018 in order to help open up the stand and cater to the oak component.

Stand 12: 3.3 acres

Site Description -

This stand consists of an upland site that slopes slightly to the east.

Woodland Description-

The area is medium sized (8-14" dia.) black and honey locust, elm and cedar. Very little oak or desirable species are scattered throughout the stand. The understory is mostly elm and locust.

Management Recommendations – Even Age

Girdle most of the undesirable species to make room for understory planting of oak species (2018).

Stand 13: 7 acres

Site Description -

This stand consists of an upland site that slopes slightly to the east.

Woodland Description-

The area is medium sized (8-14" dia.) black and honey locust, elm and cherry. Cedar, hickory, and ash are scattered throughout the stand. The understory is mostly elm, ash, and locust.

Management Recommendations – Even Age

Girdle most of the undesirable species to make room for understory planting of oak species (2018).

Stand 14: 11.5 acres

Site Description -

This stand consists of an east facing slope.

Woodland Description-

The area is medium sized (12-18" dia.) red, white, and black oak. Elm, ash, and cedar are scattered throughout the stand. The understory is mostly ash and mixed oak.

Management Recommendations – Even Age

Crop tree release should be done in 2008 in order to cater toward some of the oak species.

Stand 15: 4.8 acres

Site Description -

Bitternut lake.

Management Recommendations – Even Age

Continue to work with fisheries to have best possible recreation and water quality.

Stand 16: 9.2 acres

Site Description -

This stand is upland with a small drainage ditch running through it.

Woodland Description-

The area is medium sized (8-16" dia.) shagbark and bitternut hickory. Walnut white and black oak are scattered throughout the stand. The under story is mostly hickory elm, ash and mixed oak.

Management Recommendations – Even Age

Crop tree release should be done in 2018 in order to maximize the growth of the oak and walnut.

Stand 17: 7.2 acres

Site Description -

This is an up land site along Harmony Black Top.

Woodland Description-

The area is small sized (6-10" dia.) white pine. Honey locust and silver maple can be seen scattered throughout the stand. The under story is autumn olive.

Management Recommendations – Uneven Age

Re-inventory in 2018.

Stand 18: 1.8 acres

Site Description –

This is an up land site along Harmony Black Top.

Woodland Description-

The area is small sized (2-8" dia.) red oak, cherry and river birch. Swamp white oak and cedar are scattered throughout the stand.

Management Recommendations – Even Age

Re-inventory in 2018.

Stand 19: 4.0 acres

Site Description -

Stand 19 is an upland site with little slope.

Woodland Description-

Small (4-8 inch) Hard Maple and Ash dominate the stand. Mixed oaks can be found scattered throughout. Autumn Olive makes up the understory.

Management Recommendations – Even Age

Re-inventory in 2018.

Stand 20: 6.3 acres

Site Description -

Stand 20 is positioned on an upland site with little slope.

Woodland Description-

Small (6-10 inch) Red Oak, Honey Locust, Ash and Silver Maple dominate site. Cherry is scattered throughout.

Management Recommendations – Even Age

Re-inventory in 2018.

Stand 21: 5.7 acres

Site Description -

The stand is located on the upland along the Harmony Blacktop.

Woodland Description-

Small (4-8 inch) White Pines are the dominant canopy species. Elm and Swamp White Oak are scattered throughout the stand. Elm and Autumn Olive are the understory species.

Management Recommendations – Uneven Age

Re-inventory in 2018.

Stand 22: 0.7 acres

Site Description -

Stand 22 is an upland site with little slope.

Woodland Description-

Mixed hickory, and mixed oak of medium size (8-16 inch) dominate the canopy. Ash and cherry are scattered throughout the stand. Elm, cherry, hackberry, and mixed oak make up the understory.

Management Recommendations – Even Age

Conduct another inventory in 2018.

Stand 23: 12.8 acres

Site Description -

Stand 23 is an upland site with little slope.

Woodland Description-

Red and white pine of medium size (6-18 inch) dominate the stand. Scattered throughout the stand are ash and cherry. Honey locust, Shingle oak, and Red oak are widely scattered.

Management Recommendations – Uneven Age

Re-inventory in 2018.

Stand 24: 22.3 acres

Site Description -

The site is an upland site on two sides of a drainage.

Woodland Description-

The stand is dominated by medium-sized (8-16 inch) Ash, elm, Osage orange, cherry, shingle oak, eastern red cedar, white oak, and bitternut hickory. Scattered red oak, shagbark hickory, and black oak are found within the stand. The understory is prickly ash, multi-flora rose, ash, and mixed hickory.

Management Recommendations – Even Age

Complete weed tree eradication on eastern red cedar and other undesirable species, and conduct crop tree release on Oaks in 2008 to aid in regeneration. Re-inventory in 2018.

Stand 25: 14.8 acres

Site Description -

Stand 25 is located on the upland adjacent to a hiking trail.

Woodland Description-

White and red pine dominate the canopy and are of medium size (4-16 inch). Scattered elm and ash are also found in the stand.

Management Recommendations – Even Age

Remove pines and other undesirable species within 100 yards of hiking trail in 2008. Re-inventory in 2018.

Stand 26: 0.8 acres

Site Description -

The stand is located along a hiking trail on the upland.

Woodland Description-

Small to medium-sized (2-16 inch) hybrid poplar compose the stand. There are some mixed hardwoods present. The understory is hybrid poplar.

Management Recommendations – Even Age

Clear poplars in 2018 and attempt to establish oaks.

Stand 27: 29.5 acres

Site Description -

Stand 27 is primarily an upland site with a drainage running through the center.

Woodland Description-

White oak, black oak, ash, and shagbark hickory of medium size (8-18 inch) dominate the stand. Mockernut hickory, hackberry, and honey locust are found scattered throughout. The understory is white oak, black oak, prickly ash, and mixed hickory.

Management Recommendations – Even Age

Complete a crop tree release for desired oak species in 2008. Re-inventory in 2018. Pre harvest treatment should be done in 2023 and plan for a shelterwood in 2028.

Stand 28: 64.1 acres

Site Description -

This stand consists of a south facing slope with a ridge top and slopes heading east and west.

Woodland Description-

The area is medium sized (12-18" dia.) red, white, and black oak, and shagbark hickory. Some walnut is scattered throughout the stand. The understory is mostly hickory and mixed oak.

Management Recommendations – Even Age

Crop tree release should be done in 2008 in order to maximize the growth of the oak and hickory.

Stand 29: 9 acres

Site Description -

This stand consists of a south to south east facing slope.

Woodland Description-

The area is medium sized (12-18" dia.) red, white, and black oak. Elm, ash, and hickory are scattered throughout the stand. The understory is mostly ash, elm, and mixed oak.

Management Recommendations – Even Age

Crop tree release should be done in 2008 in order to maximize the growth of the oak and hickory.

Stand 30: 12.6 acres

Site Description -

This stand consists of a south facing slope. Old strip mining area close to Farmington.

Woodland Description-

The area is medium sized (12-18" dia.) red oak and black locust. White and black oak, honey locust, and hickory are scattered throughout the stand. The understory is mostly hickory, locust, and mixed oak.

Management Recommendations – Even Age

Crop tree release should be done in 2008 with special emphasis put on managing towards oak. Weed tree should also be done to rid site of undesirable species.

Stand 31: 18.1 acres

Site Description -

This stand is bottomland.

Woodland Description-

The area is medium sized (8-16" dia.) red, bur, and swamp white oak, honey locust, ash, hackberry and ash. Black Walnut and cottonwood are scattered throughout the stand. The under story is mostly mixed oak, elm and ash.

Management Recommendations – Even Age

Crop tree release should be done in 2008 with special emphasis put on managing towards oak and black walnut. Weed tree should also be done to rid site of undesirable species.

Stand 32: 36.6 acres

Site Description -

This stand consists of a westerly facing slope. Several minor drainage ditches are in the stand.

Woodland Description-

The area is medium sized (12-20" dia.) red, black, white oak, majority with scattered black walnut, swamp white oak and hard maple occurring in the stand. The under story is mostly mixed oak and hickory.

Management Recommendations – Even Age

Crop tree release should be done in 2008 with special emphasis put on managing towards oak and black walnut.

Stand 33: 1.2 acres

Site Description -

This stand consists of an upland site

Woodland Description-

The area is medium sized (8-14" dia.) majority being elm, black locust honey locust and a scattering of red oak. The under story is elm locust and red oak.

Management Recommendations – Even Age

Weed tree eradication on all undesirable species in 2008 and wood to be used as firewood. Re-inventory stand in 2018.

Stand 34: 3.5 acres

Site Description -

This stand consists of upland and it is located along Coal Mine Hollow Road.

Woodland Description-

The area is medium sized (8-14" dia.) majority being Virginia pine with scattered saplings of hickory, red and white oak. The under story is red and white oak, along with hickory.

Management Recommendations – Even Age

Continue to remove dying and dead pines and re-inventory stand in 2018.

Stand 35: No Stand

Stand 36: 1.6 acres

Site Description -

This stand consists of an upland that is located along a hiking trail.

Woodland Description-

The area is medium sized (8-16" dia.) majority being white pine. The under story consists of elm, ash and mixed oak.

Management Recommendations – Even Age

Re-inventory stand in 2018.

Stand 37: 4.4 acres

Site Description -

This stand consists of an upland that is located along Coal Mine Hollow Road and a hiking trail.

Woodland Description-

The area is medium sized (8-14" dia.) majority species being red pine. The under story is sparse because of the very thick canopy.

Management Recommendations – Even Age

This stand will need to be re-inventoried in 2018.

Stand 38: 2 acres

Site Description -

This stand consists of a slight northeast slope.

Woodland Description-

The area is medium sized (8-16" dia.) majority species being white pine with black locust and red oak scattered through out the site. The under story is red oak and hickory.

Management Recommendations – Even Age

This stand will need to have the white pine and black locust thinned out in 2008 to encourage the red oak regeneration. It will be re-inventoried in 2018.

Stand 39: 2.8 acres

Site Description -

This stand consists of upland

Woodland Description-

The area is small - medium sized (6-16" dia.) majority species being black locust, ash and elm. With red oak, cherry and honey locust scattered throughout. The under story is red oak, ash, elm and cherry.

Management Recommendations – Even Age

Weed tree eradication will need to be done in 2008 to manage oak regeneration with the felled trees to be used for firewood.

Stand 40: 4.6 acres

Site Description -

This stand consists of an upland being surrounded by hardwoods.

Woodland Description-

The area is medium sized (8-16" dia.) majority species being red pine. The density is not suitable for regeneration.

Management Recommendations – Even Age

Clear cut pines in 2008 in order to open up canopy. Then to follow up with planting oak seedlings to the site.

Stand 41: 40.8 acres

Site Description -

This stand slopes which follows a minor drainage ditch but it should not hinder management activities.

Woodland Description-

The area is medium sized (10-20" dia.) with the majority species being hickory, white, red and black oak. It is scattered with black walnut, swamp white oak, and shingle oak. The under story is mixed oak, hickory and elm.

Management Recommendations – Even Age

Crop tree release for the management of the oaks in 2008. Shelter wood harvest in 2018 to increase oak regeneration. Pre harvest treatment should be done in 2013.

Stand 42: 9.5 acres

Site Description -

This stand consists of an upland that is located along a hiking trail.

Woodland Description-

The area is medium sized (8-16" dia.) majority species being red pine. The under story consists of hackberry, ash, cherry and red and black oak.

Management Recommendations – Even Age

This area will be heavily thinned in 2008 to manage for regenerating the hardwoods. The buffer will be left along the trail for visual qualities. Understory planting of hardwoods if necessary.

Stand 43: 8 acres

Site Description -

This stand consists of an upland that is located along a hiking trail.

Woodland Description-

The area is medium sized (8-18" dia.) majority species being white pine. The under story is hickory, cherry and scattered with red oak.

Management Recommendations – Even Age

This stand will need to be re-inventoried in 2018.

Stand 44: 14.8 acres

Site Description -

This stand consists of upland with gentle slopes.

Woodland Description-

The area is small sized (2-4" dia.) majority species being red, white and black oak, ash, hickory and cherry.

Management Recommendations – Even Age

Continued maintenance when time is available through 2018. Maintenance will include spraying, mowing, removing undesirables and replanting desired species.

Stand 45: 3.1 acres

Site Description -

This stand consists of upland.

Woodland Description-

The area is sapling sized (2-4" dia.) tree planting of white pine.

Management Recommendations – Even Age

Remove undesirables in 2008. This stand will need to be re-inventoried in 2018.

Stand 46: 5 acres

Site Description -

This stand consists of an upland that is located between two drainages.

Woodland Description-

The area is a tree planting of small sized (2-4" dia.) majority species being a mix of hardwoods.

Management Recommendations – Even Age

This stand will need to be re-inventoried in 2018. Until then continued maintenance as defined above and removing undesirables in 2008.

Stand 47: 10.8 acres

Site Description -

This stand consists of an upland that slopes to the west on the west part of the stand.

Woodland Description-

The area is a tree planting of small sized (2-4" dia.) majority species being a mix of hardwoods.

Management Recommendations – Even Age

This stand will need to be re-inventoried in 2018. Until then continued maintenance as defined above and removing undesirables in 2008.

Stand 48: 10.3 acres

Site Description -

This stand consists of a slightly sloping area to the south east.

Woodland Description-

The area is a tree planting of small sized (2-4" dia.) majority species being a mix of hardwoods. Scattered honey locust is starting to invade the area.

Management Recommendations – Even Age

This stand will need to be re-inventoried in 2018. Until then continued maintenance as defined above and removing undesirables in 2008.

Stand 49: 4.2 acres

Site Description -

This site surrounds a drainage ditch that runs by an open area.

Woodland Description-

The area is small sized (4-14" dia.) honey locust, elm and shingle oak. White oak and cedar are scattered through out. The under story is elm and shingle oak.

Management Recommendations – Even Age

Will be managed for the desirable species such as oak and weed tree eradication will be done by 2018.

Stand 50: 4.9 acres

Site Description -

This stand is an up land site next to a parking lot.

Woodland Description-

Open field area with some scattered mixed hardwoods. It contains an abandoned pond.

Management Recommendations – Even Age

Revitalize the pond to recreate habitat for fish and recreational fishing. Open area to be replanted in 2018.

Stand 51: 2.6 acres

Site Description -

Upland site that sits next to a county road.

Woodland Description-

Tree planting of small sized (2-4" dia.) mixed hardwoods. Some larger oaks and hickories are scattered throughout. Invasive autumn olives and honey locust along the road.

Management Recommendations – Even Age

Continued maintenance of tree plantings as defined above and removing undesirables and invasive in 2008.

Stand 52: 4.4 acres

Site Description -

This stand consists of an up land.

Woodland Description-

This is an open area with some hardwood encroaching and pines on outer edge.

Management Recommendations – Even Age

This stand will be planted with native hardwoods in 2018.

Stand 53: 8.5 acres

Site Description -

This stand is an up land.

Woodland Description-

The area is medium sized (10-18" dia.) white and red pine. Cedar, shingle oak, cherry and honey locust are scattered throughout. The under story is autumn olive and shingle oak.

Management Recommendations – Even Age

This stand will be completely eradicated of all the pines to help establish the oak species in 2008.

Stand 54: 5.2 acres

Site Description -

This stand consists of a north facing slope.

Woodland Description-

The area is medium sized (6-10" dia.) elm, ash, cherry, shingle oak shag bark and bitternut hickory. Scattered are white oak and hackberry in the area. The under story is prickly ash, multi flora rose, elm, white oak and hickory.

Management Recommendations – Even Age

The primary focus will be on the oaks by performing crop tree release in 2008 to help establish regeneration. Shelter wood harvest will be performed in 2018.

Stand 55: 1.3 acres

Site Description -

This stand is an upland which slopes slightly to the east.

Woodland Description-

The area is small sized (2-10" dia.) white pine, elm, ash, cherry, shingle oak. Scattered shingle oak is in the area.

Management Recommendations – Even Age

Desirable species will be crop tree released in 2008. An under story planting in 2008 of desirable species will be performed. This will be re-inventoried in 2018.

Farmington Unit Management Prescriptions

Compartment 3

Stand 1: 17 acres

Site Description -

This stand is an upland which follows along a drainage ditch.

Woodland Description-

The area is medium sized (10-18" dia.) white and black oak. Scattered through out is red oak, ash, elm, bitternut and shagbark hickory. The under story is mixed oak, elm and prickly ash.

Management Recommendations – Even Age

Desirable species will be crop tree released in 2018 for the oak species and the occasional walnut.

Stand 2: 2.6 acres

Site Description -

This stand is an upland which follows along Black Oak Road.

Woodland Description-

The area is medium sized (10-18" dia.) shagbark hickory, white, red and black oak. Scattered throughout is, ash. The under story is hickory and ironwood.

Management Recommendations – Even Age

This site will be pre-harvest treated in 2023 and shelter wood harvested in 2028.

Stand 3: 30.4 acres

Site Description -

This stand is a southerly facing slope which is next to Black Oak Lake.

Woodland Description-

The area is medium sized (8-14" dia.) white, red and black oak. Scattered through out is red oak, ash, elm, bitternut and shagbark hickory. The under story is mixed oak, elm, hickory and prickly ash.

Management Recommendations – Even Age

Desirable species will be crop tree released in 2018 for the oak species.

Stand 4: 29.5 acres

Site Description -

This stand is an upland slightly facing the east.

Woodland Description-

The area is medium sized (10-18" dia.) shag hickory, white and swamp white oak. Scattered through out is shag hickory, black and shingle oak.. The under story is mixed oak, elm, and hickory.

Management Recommendations – Even Age

Management of the oaks will be performed by a crop tree release in 2018.

Stand 5: 2.4 acres

Site Description -

This stand is a bottomland below Black Oak Lake.

Woodland Description-

The area is small sized (6-10" dia.) jack pine. Ash, elm and hickory encroaching. The under story is too dense for regeneration.

Management Recommendations – Even Age

Removal of the pine will allow for hardwood regeneration in 2018.

Stand 6: 2.6 acres

Site Description -

This stand is a bottomland below Black Oak Lake.

Woodland Description-

The area is medium sized (10-20" dia.) shingle and black oak. Scattered elm, cherry, river birch, Osage orange and hickory through out. The under story is mixed oak, elm, hickory and cherry.

Management Recommendations – Even Age

Desirable species will be crop tree released in 2018 for the oak species.

Stand 7: 0.4 acres

Site Description -

This stand is upland by a trail.

Woodland Description-

The area is medium sized (8-20" dia.) shingle oak and table mountain pine. Scattered elm and cherry through out.

Management Recommendations – Even Age

Desirable species will be crop tree released in 2018.

Stand 8: 4.1 acres

Site Description -

This stand is an upland by a trail south of Black Oak Lake.

Woodland Description-

The area is medium sized (10-18" dia.) short leaf pine. Scattered through out are red pine, cherry and black oak. The under story is oak and hickory.

Management Recommendations – Uneven Age

This stand will be managed for aesthetics and will be re-inventoried in 2018.

Stand 9: 0.8 acres

Site Description -

This stand is upland by Black Oak Lake.

Woodland Description-

The area is medium sized (12-20" dia.) shingle, red and black oak. Scattered elm, ash, and white oak through out. The under story is mixed oak, elm, and ash.

Management Recommendations – Even Age

Desirable species will be crop tree released in 2018.

Stand 10: 8.4 acres

Site Description -

This stand is a north east slope towards Black Oak Lake.

Woodland Description-

The area is medium sized (10-18" dia.) shag bark hickory, white, red and shingle oak. Scattered through out is cherry, shag hickory, black oak and ash. The under story is hickory, ironwood, white and red oak.

Management Recommendations – Even Age

Will be crop tree released in 2018 for managing oak species.

Stand 11: 0.6 acres

Site Description -

This is an upland site with a turn around area and a picnic area.

Management Recommendations

Continue maintenance of this area.

Stand 12: 9.5 acres

Site Description -

This stand is upland along Black Oak Lake Road.

Woodland Description-

The area is medium sized (8-16" dia.) red, white and jack pine. Scattered elm and black oak through out.

Management Recommendations – Uneven Age

Maintain and re-inventory in 2018.

Stand 13: 32.1 acres

Site Description -

This stand is upland with minor drainage ditches heading Southeast.

Woodland Description-

The area is medium sized (8-14" dia.) red, white, and black oak. Scattered elm, shagbark hickory, ash, and cherry.

Management Recommendations – Even Age

Crop Tree Release with special emphasis on oak in 2018.

Stand 14: 2.4 acres

Site Description -

This stand is upland along Black Oak Lake Road.

Woodland Description-

The area is medium sized (8-14" dia.)shortleaf pine. Scattered elm and red oak through out. Understory consists of white oak and elm

Management Recommendations – Uneven Age

Maintain and re-inventory in 2018.

Stand 15: 9.5 acres

Site Description -

This stand is upland along Black Oak Lake Road.

Woodland Description-

The area is small sized (4-8" dia.) red, white and black oak. Scattered elm, cedar and cherry through out.

Management Recommendations –Even Age

Crop Tree Release with special emphasis on oak in 2008.

Stand 16: 4 acres

Site Description -

This stand is upland along with a north facing slope.

Woodland Description-

The area is medium sized (10-22" dia.) red, white, and black oak, elm, and cherry scattered through. Mixed oak, cherry and elm in the understory.

Management Recommendations – Even Age

Shelterwood harvest in 2018 to manage for oak regeneration. Pre harvest treatment should be done in 2013.

Stand 17: 21.5 acres

Site Description -

This stand is upland with a drainage ditch running up the middle.

Woodland Description-

The area is medium sized (8-22" dia.) red, white black oak and shagbark with elm cherry black locust and honey locust Scattered through out. Understory is mixed oak, hickory, prickly ash, and ironwood.

Management Recommendations –Even Age

Conduct crop tree release practices in 2018 to ensure naturally regenerating oak populations.

Stand 18: 3.1 acres

Site Description -

This stand is upland along Black Oak Lake Trail.

Woodland Description-

The area is small sized (6-10" dia.) elm, black locust, and ash. White and red oak and cherry scattered through out.

Management Recommendations –Even Age

Release any oak and weed tree eradication on any undesirable's species in 2018 with under story planting if necessary.

Stand 19: 3.4 acres

Site Description -

This stand is upland with a slight north slope.

Woodland Description-

The area is medium sized (10-20" dia.) white pine. Elm, black locust, black oak and cherry scattered through out. Under story is ash and elm

Management Recommendations –Even Age

Cut pines to manage for the native hardwoods in 2018. Under story planting if necessary.

Stand 20: 2.6 acres

Site Description -

This stand is upland along the trail.

Woodland Description-

The area is small sized (4-8" dia.) swamp white, red, and white oak and shagbark hickory scattered through out.

Management Recommendations –Even Age

Crop tree release on all oak and weed tree eradication on locust in 2018.

Stand 21: 2.9 acres

Site Description -

This stand is upland along the trail.

Woodland Description-

The area is medium sized (10-20" dia.) white pine. Elm and black locust scattered through out.

Management Recommendations –Even Age

Remove pines to allow for native hardwoods to regenerate and under story planting of oak if necessary in 2018.

Stand 22: 4.8 acres

Site Description -

This stand is upland along the trail.

Woodland Description-

The area is small sized (6-12" dia.) black locust, elm, and ash. White and red oak scattered through out.

Management Recommendations –Even Age

Crop tree release on all oak and weed tree eradication on undesirables and plant oak in 2018.

Stand 23: 46.2 acres

Site Description -

This stand is a general south slope with a drainage ditch running through it..

Woodland Description-

The area is medium sized (10-20" dia.) white, red, and black oak. Ash, hickory, and elm scattered through out. Under story is prickly ash, hickory and mixed oak

Management Recommendations –Even Age

Conduct crop tree release practices in 2018 to facilitate natural oak regeneration.

Stand 24: 7.9 acres

Site Description -

This stand is upland along the trail.

Woodland Description-

The area is medium sized (8-14" dia.) shagbark hickory ash, elm and black oak. Cherry, shingle oak, and red pine scattered through out. Under story is hickory, ash, elm and cherry.

Management Recommendations –Even Age

Weed tree eradication on all undesirables in 2018.

Stand 25: 5.9 acres

Site Description -

This site is an upland positioned between two drainages.

Woodland Description-

Medium-sized (10-20 inch) white oak, red oak, and black oak dominate the canopy. Bitternut hickory, elm, and cherry are scattered throughout the stand. The understory is hickory, elm, and mixed oak.

Management Recommendations –Even Age

Complete a crop tree release in 2008 to manage for oak regeneration.

Stand 26: 2.0 acres

Site Description -

This stand is positioned along a trail on the upland.

Woodland Description-

Small (6-10 inch) eastern red cedar, and ash trees dominate the stand. Scattered white oak, red oak, and cherry are found throughout the stand. The understory is ironwood, and prickly ash.

Management Recommendations –Even Age

Conduct crop tree release practices on any oak species present and eradicate all weed trees of undesirable species in 2018.

Stand 27: 16.1 acres

Site Description -

This stand is located on an upland site with a ditch providing drainage through its middle.

Woodland Description-

Ash, white oak, black oak, and cherry of medium size (8-20 inch) dominate the stand. Red oak, elm, shingle oak can be found scattered throughout. The understory is composed of ironwood, ash, elm, and mixed oak.

Management Recommendations –Even Age

Conduct a Shelterwood harvest in 2028 to manage for oak regeneration. Pre harvest treatment will be done in 2023.

Stand 28: 37.7 acres

Site Description -

This stand is positioned on the upland with a slight west aspect.

Woodland Description-

Black locust, ash, and elm of medium size (6-16 inch) dominate the stand. Honey locust and Osage orange are scattered throughout. The understory is mainly mixed oak and multi-flora rose.

Management Recommendations –Even Age

Continue firewood contracts to clear black locust, elm, and ash.

Stand 29: 0.8 acres

Site Description -

This site is upland along a trail.

Woodland Description-

The area is medium sized (8-12) ash and elm. Understory contains some oak.

Management Recommendations – Even Age

Continue firewood contracts to clear elm, and ash.

Stand 30: 5.2 acres

Site Description -

This stand is on a mid-slope. Half of the stand has an east aspect and half has a west aspect.

Woodland Description-

Medium-sized (10-18 inch) white pine dominates the canopy. White oak and ironwood are scattered throughout.

Management Recommendations –Even Age

Remove pines in 2018 to allow natural hardwoods to establish. Under planting may need to done.

Stand 31: 14.0 acres

Site Description -

This is a bottomland site with a west aspect.

Woodland Description-

Swamp white oak, shingle oak, and cherry of medium size (8-14 inch) dominate the stand. Scattered elm, hackberry, white oak, shagbark hickory, and honey locust are present. The understory is ironwood.

Management Recommendations –Even Age

Complete a crop tree release on oak in 2018 and weed tree eradication on honey locust.

Stand 32: 16.2 acres

Site Description -

Stand 32 is located mid-slope and exhibits a southeast aspect.

Woodland Description-

Small (4-12 inch) swamp white oak, shingle oak, black oak, red oak, cherry, bitternut hickory, and shagbark hickory are the dominate trees. Walnut, black locust, honey locust, elm, and eastern red cedar are scattered throughout in small numbers.

Management Recommendations –Even Age

Complete crop tree release on oak and walnut in 2018 to allow for their natural regeneration.

Stand 33: 4.3 acres

Site Description -

This stand is positioned on a slope with a south aspect.

Woodland Description-

The stand is mostly and open field with some scattered pines and mixed hardwoods.

Management Recommendations –Even Age

Remove undesirable species and plant native hardwoods in 2018.

Stand 34: 3.1 acres

Site Description -

Stand 34 for is positioned on the toe of a south facing slope.

Woodland Description-

Medium-sized (10-16 inch) white pine dominate the stand. Scattered elm, ash, and mixed oak are also present.

Management Recommendations –Even Age

Remove pines in 2018 to allow natural hardwoods to establish. Under planting may need to done.

Stand 35: 13.9 acres

Site Description -

This stand is located on the bottomland.

Woodland Description-

Swamp white oak, white oak, and black oak of medium size (12-20 inch) dominate the stand. Scattered shingle oak, cherry, shagbark hickory, and elm are found throughout. The understory is elm, mixed oak, ironwood, and prickly ash.

Management Recommendations –Even Age

Conduct crop tree release practices in 2008 to facilitate natural oak regeneration.

Stand 36: 1.4 acres

Site Description -

This stand is located on an upland site.

Woodland Description-

Tree planting of mixed oaks.

Management Recommendations –Even Age

Continue tree planting maintenance as needed.

Stand 37: 1.1 acres

Site Description -

Stand 37 is an upland site.

Woodland Description-

Small (4-8 inch) black oak, shingle oak, and cherry dominate the stand. White oak, walnut, and honey locust are scattered throughout.

Management Recommendations –Even Age

Complete crop tree release practices on any oak species in 2018.

Stand 38: 32.4 acres

Site Description -

This stand is positioned on the upland with drainages running through it.

Woodland Description-

Medium-sized (8-16 inch) white pine and red pine dominate the stand. White oak, red oak, ash, cherry, and shagbark hickory are encroaching heavily. The understory is mixed oak, elm, cherry, and hickory.

Management Recommendations –Uneven Age

Continue maintaining for pine health. Re-inventory in 2018.

Stand 39: 3.6 acres

Site Description -

This stand is located on a northeast facing slope.

Woodland Description-

Cherry, shingle oak, and swamp white oak of medium size (8-16 inch) are the dominant trees. Shagbark hickory is found scattered. The understory is ironwood, autumn olive, and multi-flora rose.

Management Recommendations –Even Age

Complete crop tree release for desirable species in 2018.

Stand 40: 6.9 acres

Site Description -

This stand is located on a northeast facing slope.

Woodland Description-

Medium-sized (8-18 inch) white pine, shagbark hickory, and white oak dominate the canopy. Ash, cherry, black oak, and honey locust are scattered throughout. The understory is hickory, ironwood, mixed oak, and white pine.

Management Recommendations –Even Age

Complete crop tree release for desirable species and remove honey locust in 2018.

Stand 41: acres

Site Description -

This site is Black Oak Lake.

Woodland Description-

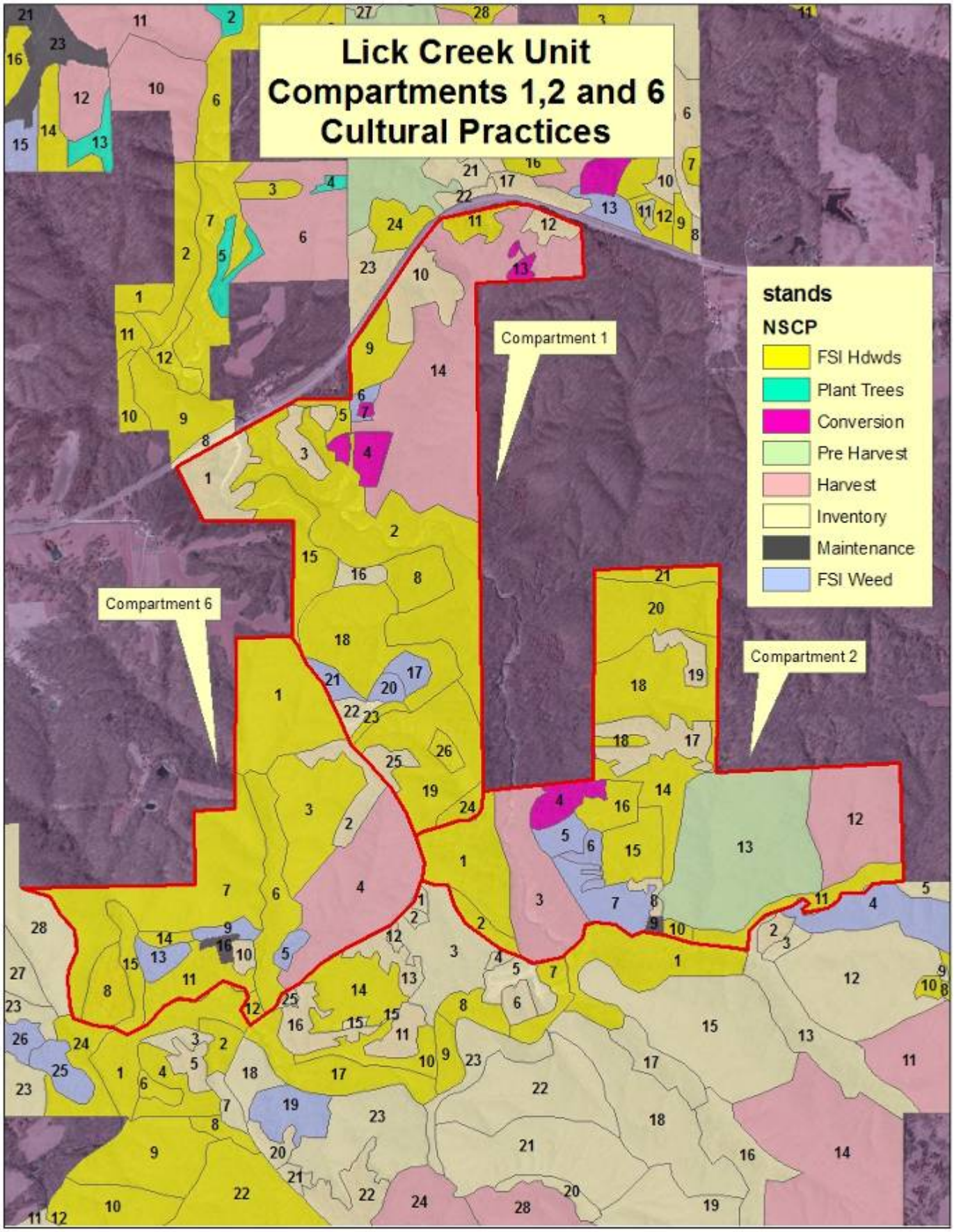
There is no woodland present.

Management Recommendations –

Continue to work with Fisheries to manage this resource.

Work Plan Summary for Farmington Unit Compartments 1 and 3

Fiscal Year	Unit	Comp	Stand(s)	Management Activity	Acres	Cost	Est. Board Foot	Revenue
2008	Farmington	1	1,4,7,14,16,24 27,31,32,41,54	Crop Tree Release	222.6	$26,712		
	Farmington	1	25,42,53,40	Stand Conversion	37.4	$14,960		
	Farmington	1	24,33,38,39,45 48,55	Weed Tree Eradication	43	$5,160		
	Farmington	1	44,46,47,51	Tree Planting Maintenance	33.2	$2,158		
	Farmington	3	15,37,25,35	Crop Tree Release	30.4	$3,648		
2013	Farmington	1,3	10,41,16	Pre harvest treatment	64.7	$7,764		
2018	Farmington	1	8,11	Crop Tree Release	46	$5,520		
	Farmington	1	12,13,26,49	Weed Tree Eradication	15.3	$2,448.00		
	Farmington	1	2	Selective Mgmt Thin	1.5	$180		
	Farmington	1	10,41	Shelter Wood Harvest	60.7		143,000	$43,000
	Farmington	1	12,13,50,52	Tree Planting	19.6	$7,840		
	Farmington	3	1,3,4,6,7,9,10, 13 17,20,22,23,26 ,27 31,32,39,40	Crop Tree Release	255.1	$30,612		
	Farmington	3	5,19,21,28,29, 30 33,34	Stand Conversion	59.8	$23,920		
	Farmington	3	18,20,22,24,26 ,31	Weed Tree Eradication	34.4	$5,504		
	Farmington	3	16	Shelter Wood Harvest	4		13,000	$4,000
	Farmington	1,3	ALL STANDS	Re-inventory	1,004 .7			
2023	Farmington	1,3	27,2,27	Pre harvest treatment	48.2	$7,712		
2028	Farmington	1	27	Shelter Wood Harvest	29.5		71,000	$22,000
	Farmington	3	2,27	Shelter Wood Harvest	18.7		49,000	$15,000


Lick Creek Unit
Compartments 1,2 and 6
Cultural Practices
stands
NSCP
FSI Hdwds
Plant Trees
Conversion
Pre Harvest
Harvest
Inventory
Maintenance
FSI Weed
Compartment 1
Compartment 2
Compartment 6

Lick Creek Unit Management Prescriptions

Compartment 1

Stand 1: 13.3 acres

Site Description -

This stand consists of an upland forest near the entrance to the Lick Creek unit.

Woodland Description-

The area is of medium sized (6-20" dia.) with the majority species being White Pine and Red Pine. Scattered Cottonwood, Elm, and Swamp White Oak are in the area, with an understory of Elm and Ash.

Management Recommendations – Uneven Age

This stand will need to be re-inventoried in 2019.

Stand 2: 59.8 acres

Site Description -

This stand consists of a bottomland forest that follows the Lick Creek.

Woodland Description-

The area is of medium sized (8-20" dia.) with the majority species being Black Walnut, Elm, and Swamp White Oak. Scattered Cottonwood, Silver Maple, Birch, Hackberry, Honey Locust, Cherry, Ash, and Bitternut Hickory are in the area, with an understory of Elm, Multiflora Rose, Ash, and some mixed oak.

Management Recommendations – Uneven Age

Selective management thinning should be performed on the Walnuts and Swamp White Oak in 2009. There should also be a selective harvest done in 2019.

Stand 3: 6.4 acres

Site Description -

This stand consists of an upland forest on the East side of Lick Creek.

Woodland Description-

The area is of medium sized (6-20" dia.) with the majority species being White Pine and Red Pine. Some mixed oak and, Elm, and Ash are in the understory.

Management Recommendations – Uneven Age

This stand will need to be re-inventoried in 2019.

Stand 4: 6.2 acres

Site Description -

This stand consists of an upland forest on the East side of Lick Creek.

Woodland Description-

The area is of medium sized (8-18" dia.) with the majority species being White Pine and Red Pine. Some mixed oak, Elm, and Ash are in the understory.

Management Recommendations – Even Age

Thinning of the pines should be done to allow regeneration of the native hardwoods in 2019. Understory planting may be done if necessary.

Stand 5: 2.8 acres

Site Description -

This stand consists of an upland forest on the property boundary of Shimek State Forest.

Woodland Description-

The area is of medium sized (10-20" dia.) with the majority species being White Oak, Red Oak, Bitternut Hickory, and Cherry. Scattered Shingle Oak, Black Walnut, Basswood, and Elm are found on the site, and Elm, Ironwood and Hickory are in the understory.

Management Recommendations – Even Age

Crop Tree Release will be done on desirable species in 2009 focusing on oak.

Stand 6: 1.6 acres

Site Description -

This stand consists of an upland forest surrounding pines on 3 sides.

Woodland Description-

The area is of small sized (8-12" dia.) with the majority species being Black Locust and Elm. Some Red Oak and Cherry are widely scattered with Multiflora Rose, Red Oak, and hickory in the understory.

Management Recommendations – Even Age

Weed Tree Eradication will be done on the Black Locust and Elm to allow the Red Oak to grow in 2019. Understory can be planted if necessary.

Stand 7: .6 acres

Site Description -

This stand consists of an upland forest.

Woodland Description-

The area is of medium sized (6-16" dia.) with the majority species being Loblolly Pine and Slash Pine. Some Black oak and Elm are in the understory.

Management Recommendations –Even Age

The Pines are very unhealthy. A removal of the pines and management for regeneration of the native hardwoods will be done in 2019.

Stand 8: 9.3 acres

Site Description -

This stand consists of a slight East facing slope.

Woodland Description-

The area is of medium sized (8-14" dia.) with the majority species being Elm, Cherry, and Black Locust. Some White Oak, Red Oak, Black Oak, Black Walnut, and Hickory are scattered though out the stand, and there is a hickory, mixed oak, and ash understory.

Management Recommendations –Even Age

Crop Tree Release will be done in 2009 with an emphasis given to oak and walnut.

Stand 9: 8.8 acres

Site Description -

This stand consists of a slight South Eastern facing slope forest along Highway 2.

Woodland Description-

The area is of medium sized (8-14" dia.) with the majority species being White Oak, Red Oak, and Black Oak. Scattered in the stand are Cherry and Black Walnut, with hickory, mixed oak, and Ash in the understory.

Management Recommendations – Even Age

Crop Tree Release will be done on the oaks in 2009.

Stand 10: 12.1 acres

Site Description -

This stand consists of an upland forest along Highway 2.

Woodland Description-

The area is of medium sized (6-16" dia.) with the majority of the trees being Red Pine. Some Red Oak, Black Oak, White Oak, Cherry, Elm, and Ash are in the understory.

Management Recommendations – Uneven Age

Continue to maintain this stand for aesthetics and re-inventory in 2019.

Stand 11: 4.8 acres

Site Description -

This stand consists of an upland forest along Highway 2.

Woodland Description-

The area is of medium sized (4-16" dia.) with the majority species being White Pine, Red Pine, Black Oak, and Shingle Oak. Scattered throughout the stand are Honey Locust, Elm, Hackberry, and Black Walnut, with White Oak, Black Oak, Ironwood, Elm, Ash, and Multiflora Rose in the understory.

Management Recommendations – Even Age

Crop Tree Release will be done on this stand in 2019 with an emphasis on Oak and Walnut.

Stand 12: 3.5 acres

Site Description -

This stand consists of an upland forest along side Highway 2.

Woodland Description-

The area is of medium sized (6-16" dia.) species consisting of Red Pine. Scattered throughout the stand are Cherry, Shingle Oak, White Oak, and Honey Locust, with Ash, oak, Elm, and Ironwood in the understory.

Management Recommendations – Uneven Age

Maintain aesthetic qualities and re-inventory in 2019.

Stand 13: 1.9 acres

Site Description -

This stand consists of an upland forest.

Woodland Description-

The area is of medium sized (4-14" dia.) species consisting of Red Pine. Scattered throughout the stand are Red Oaks and Black Oaks, with Ash, oak, Elm, and Ironwood in the understory.

Management Recommendations – Even Age

Remove pines in 2009 to allow oaks to regenerate, understory planting may be needed.

Stand 14: 74 acres

Site Description -

This stand consists of a large drainage area with multiple slopes.

Woodland Description-

The area is of medium sized (4-18" dia.) species consisting of White Oak, Red oak, and Shagbark Hickory. Scattered throughout the stand are Elm, Swamp White Oak, Cherry Bitternut Hickory, and Ash with Hackberry, Black Walnut, and Swamp White Oak in the ditch. There is an Ironwood, hickory, and mixed oak understory.

Management Recommendations – Even Age

A shelterwood harvest will be done in 2019 in order to encourage oak regeneration. Pre harvest treatment should be done in 2014.

Stand 15: 26.6 acres

Site Description -

This stand consists mostly of an east facing slope along the Lick Creek unit road.

Woodland Description-

The area is of medium sized (10-18" dia.) species consisting of White Oak and Red Oak. Scattered throughout the stand are Ash, Black Walnut, and Black Oaks, with mixed oak, hickory, and ash in the understory.

Management Recommendations – Even Age

Crop tree release will be done in 2019 in order to manage for oak.

Stand 16: 2.8 acres

Site Description -

This stand consists of an extreme North facing slope forest.

Woodland Description-

The area is of medium sized (10-18" dia.) species consisting of White Oak and Red Oak. Scattered throughout the stand are Black Oaks, Hickory, and Elm, with elm and mixed oak in the understory.

Management Recommendations – Uneven Age

Management in this stand will be for health reasons only. Re-inventory in 2019.

Stand 17: 3.5 acres

Site Description -

This stand consists of an upland forest with a slight North East Slope.

Woodland Description-

The area is of small to medium sized (6-14" dia.) species consisting of Black Locust, Elm, and Cherry. Scattered throughout the stand are White Oak, Black Oak, Ash, and Bitternut Hickory with Ash, oak, and hickory in the understory.

Management Recommendations – Even Age

Weed tree elimination will be done 2009 to allow the oaks to be released.

Stand 18: 26.6 acres

Site Description -

This stand consists of timber on a mostly western slope around a drainage ditch.

Woodland Description-

The area is of medium sized (12-18" dia.) species consisting of Black Oak, Red oak, White Oak, and Shagbark Hickory. Scattered throughout the stand are Shingle Oak, Elm, Black Walnut, and Cherry with Ash, oak, and hickory in the understory.

Management Recommendations – Even Age

Crop Tree Release will be done on the Oak and Black Walnut in 2019.

Stand 19: 27.5 acres

Site Description -

This stand consists of timber on a South East slope following a drainage ditch.

Woodland Description-

The area is of medium sized (10-20" dia.) species consisting of White Oak, Red Oak, and Black Oak. Scattered throughout the stand are Shagbark Hickory, Elm and Cherry with hickory, oak, Elm, and Ironwood in the understory.

Management Recommendations – Even Age

Crop tree release will be done in 2019 in order to manage for oak.

Stand 20: 2.5 acres

Site Description -

This stand consists of an upland forest East of the upper campground.

Woodland Description-

The area is of small sized (4-8" dia.) species consisting of Black Locust. The understory consists of Multiflora Rose, Blackberry, oak, and hickory.

Management Recommendations – Even Age

Weed Tree Elimination will be done in 2009 in order to remove the undesirable and release the oak.

Stand 21: 3.1 acres

Site Description -

This stand has a slight East slope along Lick Creek Road.

Woodland Description-

The area is of small sized (6-10" dia.) species consisting of Black Locust and Elm. The understory consists of oak and Elm.

Management Recommendations – Even Age

Weed Tree Elimination will be done in 2009 in order to remove the undesirable and release the oak.

Stand 22: 2.9 acres

Site Description -

Upper Campground

Woodland Description-

None

Management Recommendations – Even Age

Manage for best possible recreation.

Stand 23: 1.8 acres

Site Description -

This stand consists of timber on a slight South Eastern slope next to the upper campground.

Woodland Description-

The area is of small to medium sized (6-12" dia.) species consisting of Black Locust and Ash. Scattered throughout the stand are Elm, Black Oak, and Shagbark Hickory. The understory consists of Ash, oak, and hickory.

Management Recommendations – Even Age

Crop Tree Release will be done in order to release the oak in 2019.

Stand 24: 3 acres

Site Description -

This stand consists of timber on a South West slope by the drainage.

Woodland Description-

The area is of medium sized (8-14" dia.) species consisting of White Oak, Red Oak, and Sugar Maple. Scattered throughout the stand are Shagbark Hickory, Cherry, and Black Walnut. The understory consists of maple, oak, and Ironwood.

Management Recommendations – Even Age

Crop Tree Release will be done on the oaks and walnut to help eradicate the maple in 2009.

Stand 25: 3.5 acres

Site Description -

This stand consists of an upland forest along Lick Creek Road.

Woodland Description-

The area is of small sized (6-14" dia.) species consisting Red Pine. The understory consists of Hickory, Ash, Oak, and Cherry.

Management Recommendations – Uneven Age

Continue to manage for aesthetes and re-inventory in 2019.

Stand 26: 2.5 acres

Site Description -

This stand consists of timber on a South West slope.

Woodland Description-

The area is of small sized (6-10" dia.) species consisting of White Oak and Red Oak. Scattered throughout the stand are Shagbark Hickory and Cherry. The understory consists of hickory, and a lot of oak regeneration.

Management Recommendations – Even Age

Crop Tree Release will be done for the oaks to maximize growth in 2019.

Lick Creek Unit Management Prescriptions

Compartment 2

Stand 1: 20.8 acres

Site Description -

This stand consists of an east-facing slope along Lick Creek Road.

Woodland Description-

Medium sized (8-14 inch) White Oak, Red Oak, and Shagbark Hickory dominate the stand. Ash and Cherry are scattered throughout. The understory is mainly ash, elm maple, basswood, and ironwood.

Management Recommendations –Even Age

Complete crop tree release on desirable species in 2009.

Stand 2: 3.8 acres

Site Description -

This stand sits on a north east facing slope.

Woodland Description-

Red and Black Oak, Elm, and Black Locust of medium size (10-20 inch) dominate this stand. Cherry and Honey Locust are scattered with in this stand. Elm, mixed Oak, Ash, and Cherry compose the understory.

Management Recommendations – Even Age

Complete crop tree release on oaks in 2009.

Stand 3: 26.4 acres

Site Description -

This is a bottomland area creating a buffer to Lick Creek.

Woodland Description-

Medium-sized (10-20 inch) Walnut, Elm, Honey Locust, and Swamp White Oak dominate the stand with River Birch being scattered throughout. The understory is composed of mixed Oaks, Elm, and Ribes. There is a small patch of Tulip Poplar in the North part of the stand.

Management Recommendations – Uneven Age

Selective management thinning has been completed and a selective harvest should be completed for Walnut in 2019. Pre harvest treatment should be done in 2014.

Stand 4: 6.5 acres

Site Description -

The area this stand sits on is an upland site with a slight West aspect.

Woodland Description-

Red Pine and Scotch Pine of Medium size (6-16 inch) dominate the site. Ash, Honey Locust, Walnut, River Birch, White Oak, and Red Oak are scattered throughout the site. The understory is mixed oak, elm, hackberry, and Ironwood.

Management Recommendations – Even Age

In 2019 pines should be removed to allow oaks and other desirable native hardwoods to reclaim the site.

Stand 5: 4.4 acres

Site Description -

This stand is an upland site positioned along a trail.

Woodland Description-

Medium-sized (8-14 inch) Red Pine and Honey Locust are the dominate species. Swamp White Oak, and Shingle Oak are scattered throughout with an occasional Walnut. The understory is multi-flora rose and dogwood.

Management Recommendations – Even Age

Weed Tree Eradication should be performed on the site to release the oaks and walnuts in 2009.

Stand 6: 3.3 acres

Site Description -

The site is an upland area with a slight South West aspect.

Woodland Description-

The dominate species are Virginia and Red Pines of medium size (8-20 inch). Shingle Oak, Red Oak, Eastern Red Cedar, and Bur Oak are scattered throughout the stand. The understory is composed of mixed oak, mixed hickory, Ironwood, and ash.

Management Recommendations – Uneven Age

Selective management thinning should be implemented in 2019 to manage for Oaks.

Stand 7: 10.7 acres

Site Description -

The stand is an upland area with a West South-West aspect.

Woodland Description-

Medium-sized (10-18 inch) Black Locust, and Elm dominate the stand. Walnut and Cherry are scattered throughout the stand. The understory is primarily composed of mixed oak and ash.

Management Recommendations – Even Age

To aid Oak establishment Weed Tree Eradication should be completed in 2009.

Stand 8: 1.8 acres

Site Description -

The stand is an upland with a slight southern aspect.

Woodland Description-

White Pines of medium size (6-18 inch) dominate the stand. Shingle Oak, White Oak, Bitternut Hickory, Honey Locust, Cherry, and Cottonwood are scattered throughout. Ironwood, Ash, and mixed hickory compose the understory.

Management Recommendations – Uneven Age

Continue to manage for aesthetics and re-inventory in 2019.

Stand 9: 0.7 acres

Site Description -

The stand is positioned in the bottomland along a trail.

Woodland Description-

The stand is a young tree planting of walnuts as part of a progeny test for superior walnuts.

Management Recommendations – Even Age

Continue to maintaining the tree planting to provide for best test results. Inventory the stand in 2019.

Stand 10: 1.4 acres

Site Description -

This stand is located along a bottomland trail.

Woodland Description-

The dominant species is small (2-8 inch) Red Pine. Mixed Oak, Cherry, Walnut, and Elm are scattered within this stand. The understory is Cherry, Elm, and mixed Oak.

Management Recommendations –Even Age

Complete Crop Tree Release in 2009 to manage for Oak and Walnut.

Stand 11: 9.6 acres

Site Description -

Stand 11 is located on the bottomland.

Woodland Description-

Medium-sized (6-14 inch) Walnut and Elm dominate the stand. Honey and Black Locust, mixed Oak, and Cherry are found scattered in the stand. The understory is multi-flora rose, dogwood, elm and red oak.

Management Recommendations – Even Age

Complete Crop Tree Release in 2009 to manage for oak and walnut.

Stand 12: 28.0 acres

Site Description -

The stand is located on an upland site with a slight South aspect.

Woodland Description-

White, Red, and Black Oak of Medium size (12-22 inch) dominate the stand. Ash and the occasional Walnut are scattered throughout the stand. The understory is mixed hickory, elm, and ironwood.

Management Recommendations – Even Age

A Shelterwood harvest should be completed in 2009 to manage for oak regeneration. Post harvest treatment should be done in 2010.

Stand 13: 58.9 acres

Site Description -

The stand is located on an upland site with a slight South aspect.

Woodland Description-

White, Red, and Black Oak of Medium size (12-22 inch) dominate the stand. Ash and the occasional Walnut are scattered throughout the stand. The understory is mixed hickory, elm, and ironwood.

Management Recommendations – Even Age

Pre-harvest treatment should be completed in 2019 in order to help plan for shelterwood harvesting.

Stand 14: 13.6 acres

Site Description -

The stand is located along a trail in the upland.

Woodland Description-

Black Oak and Cherry of medium size (8-14 inch) are the dominate species. Ash and the occasional walnut are scattered throughout the stand. The understory is composed of Ash, Ironwood, and Elm.

Management Recommendations – Even Age

A Crop Tree Release should be completed in 2019 to manage for Oak and Walnut regeneration.

Stand 15: 10.9 acres

Site Description -

The stand is positioned on the upland with a west aspect.

Woodland Description-

Small to Medium-sized (4-12 inch) Swamp White Oak, Walnut, and Elm are the dominant trees. Bitternut and Shagbark Hickory, Black Oak, Honey Locust, Ash, and Cherry are scattered. The understory is Ash, mixed Oak, and mixed Hickory.

Management Recommendations –Even Age

Complete a Crop Tree Release in 2009 to allow for oak and walnut regeneration.

Stand 16: 6.8 acres

Site Description -

Stand 16 is an upland site with a slightly west facing slope.

Woodland Description-

Elm, Black Oak, and Shingle Oak of medium size (8-14 inch) dominate the stand. Shagbark Hickory, Cherry, Swamp White Oak, Honey Locust, and Walnut are scattered. The Understory is composed of Ironwood, Ash, and mixed Hickory.

Management Recommendations – Even Age

Crop Tree Release should be performed in 2009 to facilitate oak and walnut regeneration.

Stand 17: 12.5 acres

Site Description -

The stand is positioned on a flat upland site.

Woodland Description-

Red, White, and Jack Pine of medium size (8-16 inch) dominate the stand. The understory is mixed hickory, mixed oak, and ash.

Management Recommendations – Uneven Age

Re-inventory in 2019.

Stand 18: 26.2 acres

Site Description -

This stand is primarily upland with a ditch running through the middle of it..

Woodland Description-

The dominant species are Shagbark Hickory, and Black and Red Oak of medium size (10-16 inch). Ash, Elm, and Cherry are scattered throughout the stand. The understory is primarily Ironwood, and mixed Oak and Hickory.

Management Recommendations – Even Age

Crop Tree Release should be conducted in 2019 to manage for oak regeneration.

Stand 19: 4.3 acres

Site Description -

Stand 19 is an upland site with very little slope.

Woodland Description-

Red Pine of medium size (8-12 inch) dominate the canopy. Shingle Oak are found scattered throughout. Ironwood, ash, and cherry are the understory species.

Management Recommendations – Uneven Age

Re-inventory in 2019.

Stand 20: 21.4 acres

Site Description -

Stand 20 is positioned on a north facing slope.

Woodland Description-

Small (4-10 inch) Black Oak, Red Oak, and Elm are the dominant species. Ash, mixed hickory, Sugar Maple, Basswood, and Black Locust can be found scattered throughout the stand. Ironwood is the understory species.

Management Recommendations –Even Age

Complete crop tree release in 2019 to manage for Oak regeneration. Eradicate the maple at that time to open canopy for oaks.

Stand 21: 5.3 acres

Site Description -

Stand 21 is a bottomland site.

Woodland Description-

Walnut, and White Oak are densely populated and are of medium size (10-18 inches). Ash, Honey Locust, and Red Oak are scattered with in the stand. Ironwood and Elm compose the understory.

Management Recommendations –Even Age

Complete crop tree release on oak and walnut in 2019 to aid in the regeneration of these species.

Lick Creek Unit Management Prescriptions

Compartment 6

Stand 1: 32.1 acres

Site Description -

The stand has slight southern aspect and is located along Lick Creek road.

Woodland Description-

Medium-sized (10-16 inch) White and black oak dominate the stand. There are some scattered oaks exceeding 20 inches in diameter. Hickory, red oak and elm are scattered throughout. Mixed oak, ash, hickory, and ironwood compose the understory.

Management Recommendations – Even Age

Crop tree release should be done in 2019 in order to manage for oak.

Stand 2: 7.9 acres

Site Description -

The stand is on the upland along Lick Creek road.

Woodland Description-

Small (4-8 inch) red pines dominate the stand. Black oak, cherry, and elm are scattered throughout. The understory is mixed oak, ash, mixed hickory, and ironwood.

Management Recommendations – Uneven Age

Re-inventory in 2019.

Stand 3: 23.2 acres

Site Description -

Stand 3 is an upland and mid-slope site with a slight western aspect.

Woodland Description-

Red oak, white oak, and black oak of medium size (8-18 inch) dominate the stand. Shagbark hickory is found scattered throughout the stand. The understory is mixed oak, ash, ironwood, and patches of hard maple.

Management Recommendations – Even Age

Crop tree release should be done in 2019 in order to manage for oak.

Stand 4: 38.7 acres

Site Description -

This is a mid-slope site with a south west aspect along Lick Creek road.

Woodland Description-

Red oak, white oak, and black oak of medium size (12-22 inch) are the dominant species. Cherry, basswood, swamp white oak, hickory, and elm are scattered throughout the canopy. The understory is a mix of oak, elm, and ironwood.

Management Recommendations – Even Age

A Shelterwood harvest should be completed in 2009 to facilitate oak regeneration. Post harvest treatment should be done in 2010.

Stand 5: 2.2 acres

Site Description -

Stand 5 is located along a trail in the bottomland.

Woodland Description-

The stand is dominated by medium-sized (8-16 inch) red pine. Walnut, elm and cherry are scattered throughout. The understory is composed of mixed oaks, and elm.

Management Recommendations – Even Age

Complete weed tree eradication in 2019 to manage for native hardwoods.

Stand 6: 17.3 acres

Site Description -

Stand 6 is located in the bottomland.

Woodland Description-

Medium-sized (8-16 inch) hackberry, elm, basswood, walnut, and swamp white oak dominate the canopy. Hard maple, bitternut hickory, and river birch are also found in smaller numbers. The understory is primarily elm, hickory, and hackberry.

Management Recommendations – Even Age

Crop tree release should be completed in the stand to allow for walnut and oak regeneration.

Stand 7: 47.0 acres

Site Description -

This is a gently rolling site with a primary aspect of south.

Woodland Description-

White oak, red oak, and black oak of medium size (8-16 inch) are dominant. Some areas have oaks in excess of 20 inch diameter. Bitternut hickory, shagbark hickory, and elm are scattered. The understory is mostly ash, mixed oak, ironwood, and mixed hickory.

Management Recommendations – Even Age

In order to manage for oak regeneration crop tree release should be completed in 2009.

Stand 8: 8.6 acres

Site Description -

This is a site positioned along a trail in the bottomland.

Woodland Description-

Medium-sized (10-20 inch) red pine and white pine dominate the stand. Walnut, honey locust, river birch, and cottonwood are scattered throughout the stand. Ironwood and hackberry are the main understory species.

Management Recommendations – Even Age

Release the crop trees in 2009 to manage for walnut.

Stand 9: 2.6 acres

Site Description -

Stand 9 is positioned mid-slope with a southern aspect.

Woodland Description-

The dominate trees are small (6-10 inch) and consist of red pine, black locust, and elm. Cherry, and shingle oak are scattered throughout the stand. The understory is mixed oak.

Management Recommendations – Even Age

In 2009 weed tree eradication practices should be implemented to facilitate natural oak regeneration.

Stand 10: 2.1 acres

Site Description -

Stand 10 is located along a trail in the upland.

Woodland Description-

Medium-sized (12-18 inch) white pines dominate the canopy. The understory is mostly elm.

Management Recommendations – Uneven Age

Re-inventory in 2019.

Stand 11: 11.3 acres

Site Description -

Area is located in the bottomland along a trail

Woodland Description-

Small-sized (6-10 inch) walnut, elm, and sycamore. Honey locust, black and swamp white oak, and river birch. The understory is mostly elm and ribes.

Management Recommendations – Uneven Age

Selective management thinning should be implemented in 2009 in order to manage for oak and walnut.

Stand 12: 1.4 acres

Site Description -

The site is a bottomland area near Lick Creek road.

Woodland Description-

Medium-sized (8-14 inch) hackberry, walnut, and elm dominate the stand. Hickory, aspen, and shingle oak are scattered throughout the stand. The understory is elm.

Management Recommendations – Uneven Age

Selective management thinning in 2009 to aid in walnut regeneration.

Stand 13: 4.3 acres

Site Description -

Stand 13 is located on the bottomland.

Woodland Description-

Small (4-8 inch) eastern red cedar, shingle oak, shagbark hickory, honey locust, and elm dominate the over story. Walnut, swamp white oak, and cherry are also present in smaller numbers. The understory is elm, multi-flora rose, and mixed shrub.

Management Recommendations – Even Age

Eradicate weed trees in 2009 to manage for oak and walnut regeneration.

Stand 14: 1.9 acres

Site Description -

Stand 14 sits on the upland and has very little slope.

Woodland Description-

Red oak, walnut, and basswood of small size (6-10 inch) dominate the stand. Also present in the canopy are cherry, elm, hackberry, ironwood, and bitternut hickory.

Management Recommendations – Even Age

A crop tree release should be completed in 2009 to allow for better oak and walnut regeneration.

Stand 15: 6.5 acres

Site Description -

This stand is positioned along a drainage in the bottomland.

Woodland Description-

Medium-sized (10-16 inch) walnut, basswood, honey locust, and elm are the dominant trees. Bitternut hickory, hackberry, swamp white oak, and cottonwood are scattered throughout the canopy. The understory is composed of mixed hickory and elm.

Management Recommendations – Even Age

Complete crop tree release practices in 2009 with an emphasis on oak and walnut.

Stand 16: 1.7 acres

Site Description -

This stand is situated by a trail on the bottomland.

Woodland Description-

Tree planting that consists of seedling mixed hardwoods.

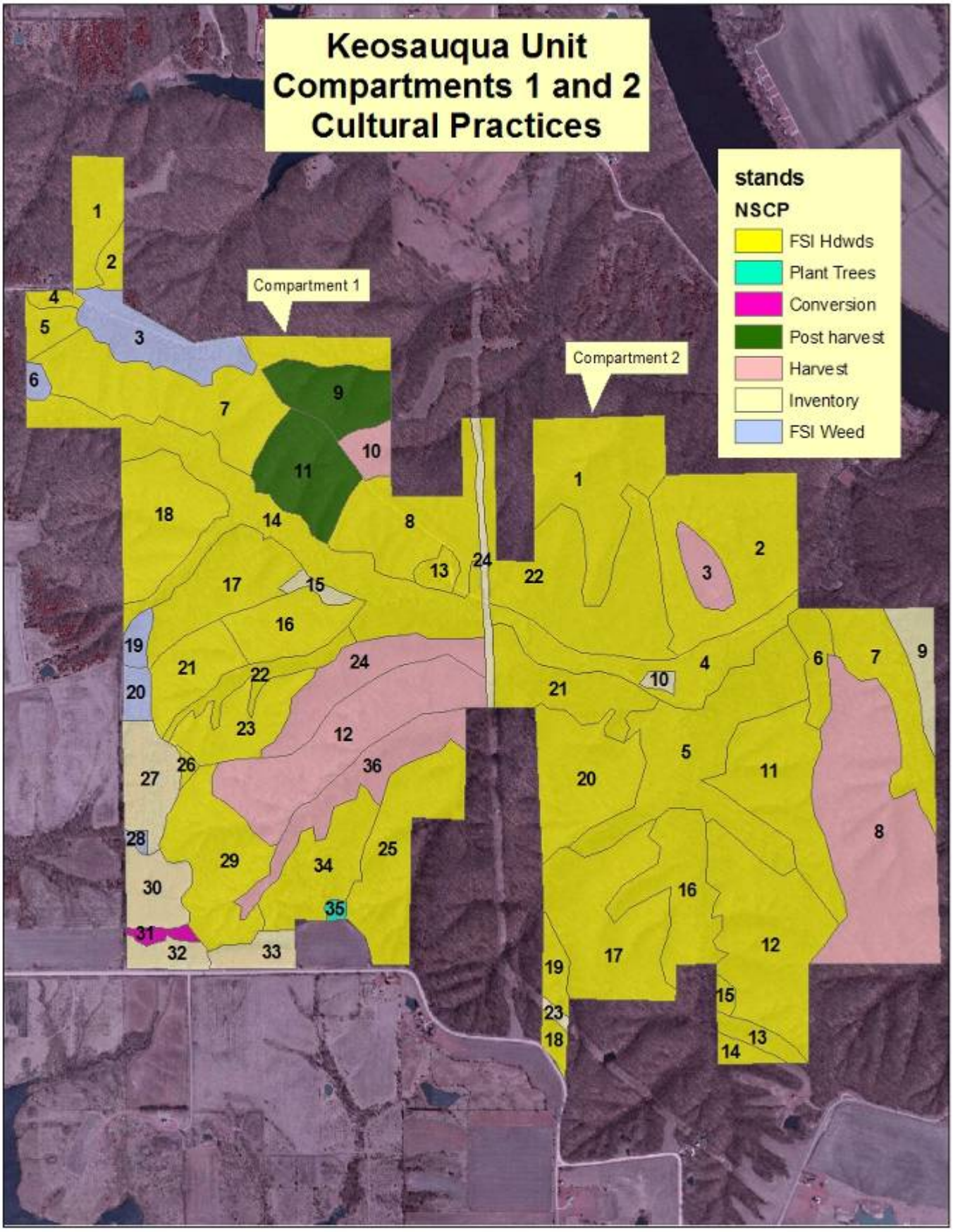
Management Recommendations – Even Age

Maintenance of the trees for best possible growth in 2009.

Work Plan Summary for Lick Creek Unit Compartments 1, 2 and 6

Fiscal Year	Unit	Comp.	Stand(s)	Management Activity	Acres	Cost	Board Foot	Revenue
2009	Lick Creek	1	5,8,9,24	Crop Tree Release	23.9	$2,868		
	Lick Creek	1	13	Stand Conversion	1.9	$760		
	Lick Creek	1	17,20,21	Weed Tree Eradication	9.1	$1,456		
	Lick Creek	1	2	Selective Mgmt Thin	59.8	$7176		
	Lick Creek	2	1,2,10,11,15,16	Crop Tree Release	53.3	$6,396		
	Lick Creek	2	12	Shelter Wood Harvest	28		88,000	$26,400
	Lick Creek	2	5,7	Weed Tree Eradication	15.1	$2,416		
	Lick Creek	2	9	Tree Planting Maintenance	0.7	$28		
	Lick Creek	6	6,7,8,14,15	Crop Tree Release	81.3	$9,756		
	Lick Creek	6	11,12	Selective Mgmt Thin	12.7	$1,524		
	Lick Creek	6	4	Shelter Wood Harvest	38.7		130,000	$39,000
	Lick Creek	6	9,13	Weed Tree Eradication	6.9	$1,104		
2010	Lick Creek	2,6	12,4	Post harvest treatment	66.7	$10,672		
2014	Lick Creek	1,2	14,3	Pre harvest treatment	100.4	$16,064		
2019	Lick Creek	1	11,18,23,26	Crop Tree Release	89.8	$10,776		
	Lick Creek	1	4,7	Stand Conversion	6.8	$2,720		
	Lick Creek	1	14	Shelter Wood Harvest	74		195,000	$58,500
	Lick Creek	1	6	Weed Tree Eradication	1.6	$256		
	Lick Creek	2	14,18,20,21	Crop Tree Release	66.5	$7,980		
	Lick Creek	2	4	Stand Conversion	4	$1,600		
	Lick Creek	2	3	Selective Harvest	26.4		63,000	$18,900
	Lick Creek	2	6	Selective Mgmt Thin	3.3	$396		
	Lick Creek	2	13	Pre harvest treatment	58.9	$9,424		

Lick Creek	6	1,3	Crop Tree Release	55.3	$6,636
Lick Creek	6	5	Weed Tree Eradication	2.2	$352
Lick Creek	1,2,6	ALL STANDS	Re-inventory	788.9	


Keosauqua Unit
Compartments 1 and 2
Cultural Practices
stands
NSCP
FSI Hdwds
Plant Trees
Conversion
Post harvest
Harvest
Inventory
FSI Weed
Compartment 1
Compartment 2

Keosauqua Unit Management Prescriptions

Compartment 1

Stand 1: 12.1 acres

Site Description -

Stand 1 is located on an upland site.

Woodland Description-

Black oak, shagbark hickory, and white oak of medium size (10-18 inch) dominate the site. Bur oak and the occasional walnut are scattered in the stand. The understory is hickory, elm, ash, and mixed oak

Management Recommendations – Even Age

Implement crop tree release in 2010 to manage for oak.

Stand 2: 2.8 acres

Site Description -

Stand 2 is primarily a mid-slope site with an east aspect.

Woodland Description-

Black oak, white oak, and red oak are the dominant trees and are of a medium size (10-16 inch). Scattered among them are shagbark hickory and bitternut hickory. The understory consists of elm, ash, mixed hickory, mixed oak, and ironwood.

Management Recommendations – Even Age

Complete a crop tree release in 2010 to manage for oak.

Stand 3: 16.4 acres

Site Description -

Stand 3 is located in the upland along a trail.

Woodland Description-

Small (6-10 inch) swamp white oak, shingle oak, and eastern red cedar dominate the stand. Elm, cherry, ash, and black oak are found scattered throughout the canopy. The understory is oak, ash, eastern red cedar, hickory, and mixed shrubs.

Management Recommendations – Even Age

Eradicate weed trees in 2010 to allow oaks to become more easily established.

Stand 4: 1.9 acres

Site Description -

The stand is located just off the road in the upland.

Woodland Description-

Hickory, black oak, shingle oak, and eastern red cedar of medium size (8-16 inch) dominate the stand. Elm, honey locust, swamp white oak, and cherry can be found scattered throughout the stand. The understory is made up of mixed oak, mixed hickory, and elm.

Management Recommendations – Even Age

Crop tree release should be completed to manage for oak regeneration in 2010. At that time weed tree eradication practices should be implemented to remove honey locust.

Stand 5: 4.6 acres

Site Description -

The stand is positioned on an upland with an east aspect.

Woodland Description-

White oak, black oak, and honey locust of medium size (8-16 inch) dominate the stand. Hickory and cherry are scattered throughout. The understory is mixed oak and hickory.

Management Recommendations – Even Age

In order to manage for oak regeneration crop tree release should be conducted in 2010.

Stand 6: 1.7 acres

Site Description -

This stand is located along a property line in an upland site.

Woodland Description-

Small (6-10 inch) eastern red cedar and shingle oak dominate the stand. There are also scattered white oak, red oak, post oak, shagbark hickory, and cherry. The understory is hickory and oak.

Management Recommendations – Even Age

In order to promote the oak population weed tree eradication should take place in 2010.

Stand 7: 42.2 acres

Site Description -

Stand 7 is an upland site with some small drainages.

Woodland Description-

Medium-sized (8-16 inch) white oak, red oak, and black oak dominate the stand. Shagbark hickory, bitternut hickory, elm, and cherry are scattered throughout. The understory is composed of elm, oak, ash, and ironwood.

Management Recommendations – Even Age

Complete crop tree release practices in 2010 to manage for oak regeneration.

Stand 8: 21.7 acres

Site Description -

This stand is primarily on an upland site and has a few small drainages in its interior.

Woodland Description-

White oak, red oak, and black oak of medium size (8-16 inch) are the dominant species. Bitternut hickory, shagbark hickory, ash, and cherry are found scattered throughout the canopy. Mixed oak, mixed hickory, elm and ash make up the understory.

Management Recommendations – Even Age

Complete crop tree release in 2010 to manage for oaks.

Stand 9: 14.5 acres

Site Description -

Stand 9 is positioned on a gentle slope with a north aspect.

Woodland Description-

Medium-sized (10-20 inch) white oak, red oak, and black oak dominate the canopy. Shagbark hickory, cherry, and ash are scattered in the stand. The understory is ash, oak, and hickory.

Management Recommendations – Even Age

A Shelterwood harvest was completed in this stand in 2007. Post-harvest treatments should be applied in 2010.

Stand 10: 4.6 acres

Site Description -

This stand is found on a gently sloping mid-slope with a northeast aspect.

Woodland Description-

Medium to large diameter (10-22 inch) white oak, red oak, and shagbark hickory are the dominant trees. Bitternut hickory and black oak are scattered throughout the stand. The understory is oak, hickory, ash, and ironwood.

Management Recommendations – Even Age

To encourage natural oak regeneration a Shelterwood harvest should be conducted in 2020. Pre harvest treatment should be done in 2015.

Stand 11: 18.3 acres

Site Description -

The stand is positioned on a slope with a primary aspect of southwest.

Woodland Description-

Red oak, white oak, and black oak of medium to large diameter (12-24 inch) dominate the stand. Shagbark hickory and elm are also scattered throughout the canopy. The understory contains elm, oak, hickory, and ironwood.

Management Recommendations – Even Age

A Shelterwood harvest was completed in 2007. Post-harvest treatments should be made in 2010.

Stand 12: 35.5 acres

Site Description -

Stand 12 is located on a on an upland/mid-slope site with a southeast aspect.

Woodland Description-

White oak, red oak, and black oak of medium to large size (12-24 inch) dominate the stand. The over story also has scattered shagbark hickory and walnut. The understory is composed of ash, elm, oak, hickory, and ironwood.

Management Recommendations – Even Age

Conduct a Shelterwood harvest in 2020 to manage for oak regeneration. Pre harvest treatment should be done in 2015.

Stand 13: 3.0 acres

Site Description -

This stand has a southwest aspect.

Woodland Description-

Small (6-10 inch) eastern red cedar and shingle oak are the dominant species in the stand. Black oak, white oak, Mockernut hickory, and cherry are found scattered throughout. Oak, hickory, and ash make up the understory.

Management Recommendations – Even Age

Carry out crop tree release practices in 2010 to facilitate natural oak regeneration.

Stand 14: 47.3 acres

Site Description -

Stand 14 is located on a bottomland site.

Woodland Description-

Medium-sized (12-18 inch) walnut, elm, bitternut hickory, and cottonwood dominate the site. Honey locust, elm, swamp white oak, red oak, river birch, ash, hackberry, cherry, basswood, and black locust are found scattered throughout the stand. The understory is multi-flora rose, ironwood, ash, and oak.

Management Recommendations – Uneven Age

Conduct selective management thinning in 2010 to allow for regeneration of oak and walnut.

Stand 15: 2.1 acres

Site Description -

This stand is positioned on a very steep slope with a northeast aspect.

Woodland Description-

The trees in this stand are large diameter (12-26 inch) red oak and basswood. Ash and bitternut hickory, are found scattered throughout the stand. The understory is composed of hickory, oak, and ash.

Management Recommendations – Uneven Age

Very minimal activity should happen on this steep slope. Re-inventory in 2020.

Stand 16: 13.8 acres

Site Description -

This stand sits on a side hill with an overall eastern aspect.

Woodland Description-

Large (10-26 inch) white oaks dominate the stand. Mockernut hickory, bitternut hickory, black oak, red oak, and cherry are found in the stand but do not dominate the canopy. The understory is ironwood, elm, ash, and oak.

Management Recommendations – Even Age

Crop tree release in 2010 to manage for oak.

Stand 17: 20.2 acres

Site Description -

This stand is positioned on an upland having a slight northwest aspect.

Woodland Description-

The stand is dominated by medium-sized (10-18 inch) white oak and black oak. Red oak, shagbark hickory, bitternut hickory, and ash are scattered throughout the canopy. The understory is ash, oak, hickory, and ironwood.

Management Recommendations – Even Age

Crop tree release in 2010 to manage for oak.

Stand 18: 22.4 acres

Site Description -

This stand is located on an upland which exhibits an east aspect.

Woodland Description-

Medium to large (10-22 inch) white oak, red oak, and black oak dominate the canopy. The canopy also has scattered bitternut hickory and shagbark hickory. The understory is composed of oak, hickory, and ironwood.

Management Recommendations – Even Age

Crop tree release in 2010 to manage for oak.

Stand 19: 2.8 acres

Site Description -

This stand sits on a ridge top between two drainages.

Woodland Description-

Black locust and bitternut hickory of small diameter (6-10 inch) are the dominant trees. Ash, elm, white oak, and shagbark hickory are scattered throughout the canopy. The understory is multi-flora rose, hickory, and elm.

Management Recommendations – Even Age

Weed tree eradication practices should take place in 2010 to allow for oak regeneration. In addition, some understory planting may be necessary.

Stand 20: 3.3 acres

Site Description -

This is an upland stand.

Woodland Description-

The trees in the stand are small (4-8 inch) shingle oak, black oak, black locust, and shagbark hickory. White oak and red oak are scattered throughout the stand. The understory is oak.

Management Recommendations – Even Age

Eradicate weed trees in 2010 to allow oaks to become dominant.

Stand 21: 12.5 acres

Site Description -

Stand 21 is an upland site with a west aspect.

Woodland Description-

White oak, red oak, and black oak of medium size (10-16 inch) dominate the stand. Mockernut hickory, shagbark hickory, cherry, and ash are scattered throughout the over story. The understory is composed of ironwood, ash, hickory and oak.

Management Recommendations – Even Age

In 2020 crop tree release practices should be implemented to allow for natural regeneration of oaks.

Stand 22: 7.7 acres

Site Description -

Stand 22 is located at the bottom of a minor drainage ditch.

Woodland Description-

Medium to large (10-22 inch) white oak and black oak dominate the stand. Hickory and ash are scattered throughout the stand. The understory is made up of ash and ironwood.

Management Recommendations – Even Age

Complete crop tree release in 2010 in order to manage for oak.

Stand 23: 14.6 acres

Site Description -

This stand is positioned on an upland having a slight north aspect.

Woodland Description-

White oak of medium size (10-16 inch) is the dominant species. Hickory, black oak, and shingle oak are scattered throughout the stand. The understory is composed of oak, ash, and hickory.

Management Recommendations – Even Age

Complete crop tree release in 2010 to manage for oak regeneration.

Stand 24: 17.4 acres

Site Description -

This stand is an upland slight having a north northwest aspect.

Woodland Description-

Medium-sized (10-16 inch) white oaks dominate the stand. Black oak, hickory, eastern red cedar, ash, and cherry are scattered throughout. The understory is composed of oak, ironwood, and hickory.

Management Recommendations – Even Age

A Shelterwood harvest was completed in 2005. Post harvest treatments were made in 2006. A clearcut harvest should be completed in 2020 to ensure oak component.

Stand 25: 26.6 acres

Site Description -

Stand 25 is a gently sloping upland site with a west aspect.

Woodland Description-

White oak, red oak, and black oak of medium size (12-16 inch) dominate the stand. Shagbark hickory and ash are scattered throughout the canopy. The understory is composed of ironwood, hackberry, oak, and hickory.

Management Recommendations – Even Age

To promote natural regeneration of oaks crop tree release practices should be implemented in 2010.

Stand 26: 1.0 acres

Site Description -

This stand is positioned along a trail in the upland.

Woodland Description-

Small (4-6 inch) black oak and shingle oak dominate the canopy. Ash, eastern red cedar, white oak, and shagbark hickory are a scattered component to the canopy. The understory is primarily elm and hickory.

Management Recommendations – Even Age

Crop tree release practices should be implemented in 2010 to ensure oak dominancy.

Stand 27: 12.2 acres

Site Description -

This is an upland stand.

Woodland Description-

Small to medium-sized (6-12 inch) red pine and white pine are the dominant species. The understory is oak, ironwood, and hickory.

Management Recommendations – Uneven Age

Continue to maintain healthy pines for aesthetics and for wildlife. Re-inventory in 2020.

Stand 28: 1.0 acres

Site Description -

This site is located on the upland.

Woodland Description-

Small (4-6 inch) eastern red cedar, and shingle oak dominate the stand. Cherry and red pine are a scattered component. The understory is shingle oak and elm.

Management Recommendations – Even Age

Eradicate weed trees in 2010 to manage for oak dominance.

Stand 29: 25.7 acres

Site Description -

This stand is located on an upland site having some minor drainages.

Woodland Description-

White oak of medium size (10-16 inch) is the dominant species. Hickory, black oak, and shingle oak are scattered throughout the stand. The understory is composed of oak, ash, and hickory.

Management Recommendations – Even Age

Complete crop tree release in 2010 to manage for oak regeneration.

Stand 30: 9.8 acres

Site Description -

Stand 30 is an upland stand.

Woodland Description-

The canopy is dominated by small (6-10 inch) red pine. The understory is composed of mixed oak, ash, elm, bitternut hickory, and hackberry.

Management Recommendations – Uneven Age

Continue to maintain healthy pines for aesthetics and for wildlife. Re-inventory in 2020.

Stand 31: 2 acres

Site Description -

Stand 31 is an upland stand.

Woodland Description-

The canopy is dominated by small (6-12 inch) black locust, elm, and ash. Honey locust and hickory are scattered. The understory is composed of ash, elm, hickory, and multi-flora rose.

Management Recommendations –Even Age

In 2020 a stand conversion should take place by eradicating weed trees and conducting understory plantings of oak.

Stand 32: 4.9 acres

Site Description -

Stand 32 is an upland stand along a gravel road.

Woodland Description-

The canopy is dominated by small (6-10 inch) red pine. Elm, box elder, mixed oak, and hackberry are scattered. The understory is composed of mixed oak, elm, and multi-flora rose.

Management Recommendations – Uneven Age

Continue to maintain healthy pines for aesthetics and for wildlife. Re-inventory in 2020.

Stand 33: 5.7 acres

Site Description -

Stand 33 is an upland stand along a gravel road.

Woodland Description-

The canopy is dominated by small (8-12 inch) white pine. Red pine, ash, hackberry, and mixed oak are scattered throughout. The understory is composed of mixed oak, ash, cherry, hickory, and hackberry.

Management Recommendations – Uneven Age

Continue to maintain healthy pines for aesthetics and for wildlife. Re-inventory in 2020.

Stand 34: 18.1 acres

Site Description -

This stand is located on the upland and has a gentle slope with a northwest aspect.

Woodland Description-

Medium-sized (12-16 inch) white oak, red oak, and black oak dominate the over story. Shagbark hickory and ash are scattered throughout the stand. The understory is composed of ash, oak, eastern red cedar, ironwood, and elm.

Management Recommendations –Even Age

Complete crop tree release practices to manage for oaks in 2010.

Stand 35: 0.8 acres

Site Description -

This stand is an upland site located near a crop field and property line.

Woodland Description-

The stand dominated by seedling sized shingle oak, eastern red cedar, ash, honey locust, and bitternut hickory that are converting an open field.

Management Recommendations –Even Age

Remove undesirable trees and plant native hardwoods in 2020.

Stand 36: 17.5 acres

Site Description -

This is an upland and mid-slope site exhibiting a northwest aspect.

Woodland Description-

Medium-sized (16-20 inch) white oak, red oak, and black oak dominate the stand. Basswood, hickory, and ash are scattered throughout. The understory is mostly ash, hickory, and ironwood.

Management Recommendations –Even Age

Conduct a Shelterwood harvest in 2020 to increase oak regeneration. Pre harvest treatment should be done in 2015.

Keosauqua Unit Management Prescriptions

Compartment 2

Stand 1: 31.9 acres

Site Description -

This stand is located on an upland site with some drainage ditches running through.

Woodland Description-

Medium-sized (10-18 inch) white oak, black oak, and red oak dominate the canopy. Shagbark hickory and walnut are scattered throughout the stand. The understory is oak, hickory, and ironwood.

Management Recommendations –Even Age

Conduct crop tree release practices to encourage the natural regeneration of oak and walnut.

Stand 2: 40.0 acres

Site Description -

Stand 2 is positioned on an upland site having south aspect.

Woodland Description-

White oak, red oak, and black oak of medium size (10-16 inch) dominate the stand. Shagbark hickory and walnut are scattered throughout the stand. The understory is ironwood, oak, hickory, and elm.

Management Recommendations –Even Age

Conduct crop tree release practices to encourage the natural regeneration of oak and walnut.

Stand 3: 6.1 acres

Site Description -

This stand is located on an upland site.

Woodland Description-

Medium to large (12-24 inch) white oak dominate the stand. Black oak and hickory are scattered throughout. The understory is hickory, oak, and cherry.

Management Recommendations –Even Age

This stand should be Shelterwood harvested in 2010 to stimulate oak regeneration. Post harvest treatment should be done in 2012.

Stand 4: 20.5 acres

Site Description -

This stand is located on the bottomland along a trail.

Woodland Description-

Walnut, cottonwood, bitternut hickory, and elm of medium size (8-18 inch) dominate the stand. Hackberry, red oak, shingle oak, cherry and basswood are scattered throughout the stand. There is a pocket of red pine and eastern red cedar in the middle of the stand. The understory is ironwood, ash, and hickory.

Management Recommendations –Uneven Age

Conduct selective management thinning practices in 2020 to manage for oak and walnut regeneration.

Stand 5: 42.0 acres

Site Description -

Stand 5 is located on the bottomland and has drainages running through it.

Woodland Description-

Medium-sized (8-18 inch) elm, red oak, swamp white oak, and bitternut hickory dominate the canopy. Ash, cherry, basswood, walnut, and white oak are a scattered component of the stand. The understory is ironwood, hickory, ash, and elm.

Management Recommendations –Uneven Age

In order to promote natural regeneration of oak and walnut, selective management thinning practices should be implemented in 2020.

Stand 6: 7.0 acres

Site Description -

This stand is located on the bottomland.

Woodland Description-

Medium-sized (8-14 inch) walnut, bitternut hickory, and elm dominate the canopy. Swamp white oak, shingle oak, ash, shagbark hickory, and hackberry are scattered throughout the stand. The understory is oak, ironwood, hickory, and elm.

Management Recommendations –Even Age

Complete a crop tree release in 2020 to manage for oak and walnut regeneration.

Stand 7: 19.0 acres

Site Description -

This stand is located mid-slope and has a north aspect.

Woodland Description-

Medium-sized (8-16 inch) walnut, elm, and black oak dominate the stand. There are scattered bitternut hickory, sugar maple, swamp white oak, and hackberry. The understory is oak, ironwood, hickory, and elm.

Management Recommendations –Even Age

Complete crop tree release practice to manage for oak and walnut regeneration in 2020. In 2020 conduct weed tree eradication of locust and maple.

Stand 8: 58.0 acres

Site Description -

Stand 8 is an upland site with some east aspect.

Woodland Description-

White oak of medium size (10-24 inch) dominates that canopy. Bitternut hickory, shagbark hickory, red oak, and black oak are scattered throughout the stand. The understory is ironwood, hickory, ash, and oak.

Management Recommendations –Even Age

Have a Shelterwood harvest in 2010 to manage for natural regeneration of oak. Post harvest treatment should be done in 2012.

Stand 9: 7.2 acres

Site Description -

This stand is an upland site with west aspect.

Woodland Description-

Medium-sized (10-14 inch) white oak, red oak, and black oak dominate the stand. There are scattered cherry, bitternut hickory, and shagbark hickory throughout the stand. The understory is ironwood, hickory, oak, and cherry.

Management Recommendations –Even Age

This stand should be re-inventoried in 2020.

Stand 10: 1.2 acres

Site Description -

This stand is located on the bottomland.

Woodland Description-

Medium to large diameter (12-22 inch) tulip poplar dominates the stand. Cottonwood, elm and walnut are scattered throughout. The understory is ironwood, elm, and multi-flora rose.

Management Recommendations –Uneven Age

Re-inventory this stand in 2020.

Stand 11: 26.4 acres

Site Description -

This stand is an upland site with a west aspect.

Woodland Description-

Medium to large diameter (10-22 inch) white oak dominate the stand. Ash and shagbark hickory are scattered. The understory is ironwood, oak, and hickory.

Management Recommendations –Even Age

Conduct crop tree release practices on this stand in 2020 to encourage oak regeneration.

Stand 12: 37.2 acres

Site Description -

Stand 12 is an upland site having a west aspect.

Woodland Description-

Medium-sized (10-18 inch) white oak and shagbark hickory dominate the stand. Black oak and ash are scattered throughout the stand. The understory is ironwood, ash, and hickory.

Management Recommendations –Even Age

Conduct crop tree release practices in 2020 to manage for oak regeneration.

Stand 13: 3.9 acres

Site Description -

This stand is located along drainage ditches.

Woodland Description-

White oak and black oak of medium size (12-18 inch) dominate the canopy. Shagbark hickory, walnut, and basswood are a scattered component of the canopy. The understory is ironwood, hickory, and hackberry.

Management Recommendations –Even Age

Carry out crop tree release practices in 2020 to promote natural oak regeneration.

Stand 14: 2.7 acres

Site Description -

This is an upland site with a north aspect.

Woodland Description-

White oak and shagbark hickory of medium size (8-16 inch) dominate the stand. There are scattered ash, aspen, cherry, and black oak. The understory is ironwood and hickory.

Management Recommendations –Even Age

Conduct crop tree release practices in 2020 to encourage natural oak regeneration.

Stand 15: 1.3 acres

Site Description -

This is an upland site exhibiting a west aspect.

Woodland Description-

Medium-sized (10-16 inch) white oak and ash dominate the stand. Basswood, aspen, elm, shagbark hickory, elm, and walnut are scattered throughout the stand. The understory is ironwood, elm, cherry, and hickory.

Management Recommendations –Even Age

Complete a crop tree release in 2020 with an emphasis placed on encouraging natural regeneration of oak and walnut.

Stand 16: 20.3 acres

Site Description -

This stand in located along drainage ditches.

Woodland Description-

Bitternut hickory, walnut, black oak, red oak, and swamp white oak dominate the canopy. Elm, ash, and basswood are scattered throughout the stand. The understory is ironwood, hickory, hackberry, and elm

Management Recommendations –Even Age

In order to manage for the natural regeneration of oak and walnut, crop tree release practices should be implemented in 2020.

Stand 17: 34.3 acres

Site Description -

This stand is an upland site with some minor slopes.

Woodland Description-

Medium-sized (10-20 inch) white oaks dominate the stand. Red oak, black oak, Mockernut hickory, bitternut hickory, shagbark hickory, and cherry are scattered throughout the stand. The understory is ironwood, ash, and hickory.

Management Recommendations –Even Age

Conduct crop tree release practices in 2020 to manage for natural oak regeneration.

Stand 18: 2.3 acres

Site Description -

This stand is located along a road in the upland.

Woodland Description-

Small (6-10 inch) white oak and shagbark hickory dominate the stand. Cherry, ash, and Mockernut hickory are scattered throughout the canopy. The understory is ironwood, hickory, ash, and oak.

Management Recommendations –Even Age

Re-inventory this stand in 2020.

Stand 19: 4.2 acres

Site Description -

This stand is located on the upland and has an east aspect.

Woodland Description-

Medium-sized (10-16 inch) white oak, red oak, and shagbark hickory dominate the stand. There are scattered ash and Mockernut hickory. The understory is elm, ironwood, hickory, ash, and oak.

Management Recommendations –Even Age

Re-inventory this stand in 2020.

Stand 20: 24.3 acres

Site Description -

Stand 20 is located on the upland and exhibits an east aspect.

Woodland Description-

Medium-sized (10-20 inch) white oaks dominate the canopy. There are scattered red oak, black oak, shagbark hickory, and ash throughout the stand. The understory is hickory, oak, and ironwood.

Management Recommendations –Even Age

Conduct crop tree release practices in 2020 to encourage natural regeneration of oaks.

Stand 21: 17.4 acres

Site Description -

This stand is positioned on an upland site with a north facing slope.

Woodland Description-

Walnut, red oak, basswood, and bitternut hickory of medium size (10-16 inch) dominate the stand. There are scattered elm, ash, shagbark hickory, black oak, shingle oak, and hackberry. The understory is ironwood, ash, oak, and elm.

Management Recommendations –Even Age

In order to manage for natural regeneration of oak and walnut, conduct crop tree release practices in 2020.

Stand 22: 41.2 acres

Site Description -

This stand is positioned on an upland and mid-slope site with southern aspects.

Woodland Description-

Medium-sized (8-16 inch) elm, black locust, black oak, and red oak dominate the canopy. Walnut, honey locust, and cherry are scattered throughout the stand. The understory is multi-flora rose, ash, ribes, hickory, oak, and elm.

Management Recommendations –Even Age

Conduct crop tree release practices in 2020 to encourage natural regeneration of oak and walnut.

Stand 23: 0.8 acres

Site Description -

This stand is a power line right-of-way.

Woodland Description-

There is no woodland present.

Management Recommendations –Even Age

The stand is maintained by the power company.

Stand 24: 4.8 acres

Site Description -

This stand is a power line right-of-way.

Woodland Description-

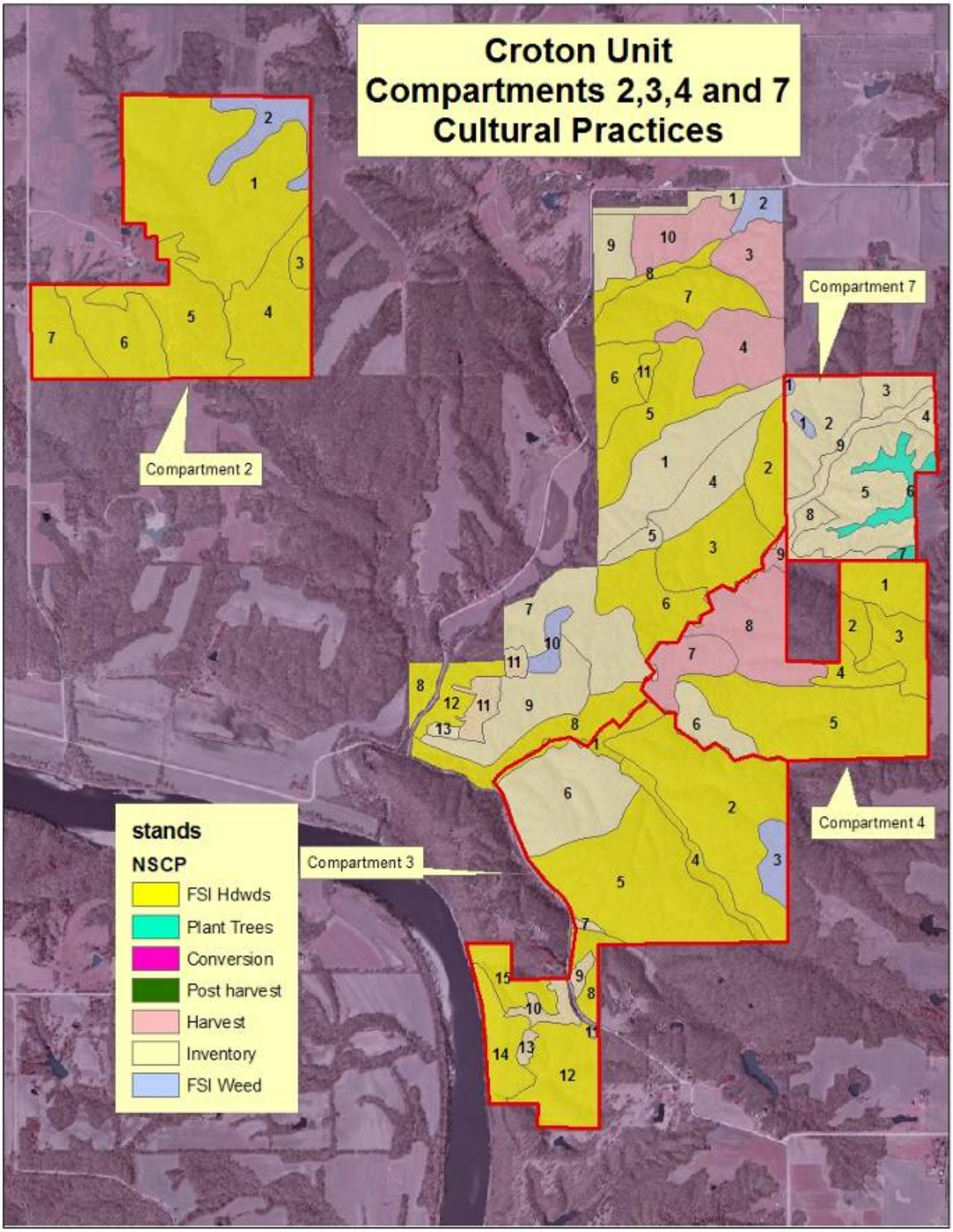
There is no woodland present.

Management Recommendations –Even Age

The stand is maintained by the power company.

Work Plan Summary for Keosauqua Unit Compartments 1 and 2

Fiscal Year	Unit	Comp.	Stand(s)	Management Activity	Acres	Cost	Est. Board Foot	Revenue
2010	Keosauqua	1	1,2,4,5,7,8,13, 16,17,18,21,22, 23, 25,26,29,34	Crop Tree Release	254.1	$30,492		
	Keosauqua	1	14	Selective Mgmt Thin	47.3	$5,676		
	Keosauqua	1	3,6,19,20,28	Weed tree eradication	25.2	$4,032		
	Keosauqua	1	11	Post harvest treatment	18.3	$2,928		
	Keosauqua	2	1	Crop Tree Release	31.9	$3,828		
	Keosauqua	2	3,8	Shelter Wood Harvest	64.1		154,000	$46,000
2012	Keosauqua	2	3,8	Post harvest treatment	64.1	$10,256		
2015	Keosauqua	1	10,12,36	Pre harvest treatment	57.6	$9,216		
2020	Keosauqua	1	10,12,36	Shelter Wood Harvest	57.6		189,000	$56,700
	Keosauqua	1	31	Stand conversion	2	$800		
	Keosauqua	1	35	Tree Planting	.8	$320		
	Keosauqua	1	24	Clearcut Harvest	17.4		33,400	$10,000
	Keosauqua	2	2,6,7,11-17, 20-22	Crop Tree Release	275	$33,000		
	Keosauqua	2	4,5	Selective Mgmt Thin	62.5	$7,500		
	Keosauqua	1 & 2	ALL STANDS	Re-inventory	925.7			


Croton Unit
Compartments 2,3,4 and 7
Cultural Practices
Compartment 2
Compartment 3
Compartment 4
Compartment 7
stands
NSCP
FSI Hdwds
Plant Trees
Conversion
Post harvest
Harvest
Inventory
FSI Weed

Croton Unit Management Prescriptions

Compartment 2

Stand 1: 115 acres

Site Description -

This stand is primarily upland with a large drainage running through it.

Woodland Description-

Medium-sized (8-16 inch) shagbark hickory and white oak dominate the stand. Swamp white oak, shingle oak, black oak, red oak, and ash are scattered. The understory is ironwood, oak, multi-flora rose, hickory, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2011 to manage for oak.

Stand 2: 18.2 acres

Site Description -

Stand 2 is an upland site along a property border.

Woodland Description-

Small (6-12 inch) eastern red cedar, shingle oak, and elm dominate the stand. Cherry and honey locust are scattered. The understory is multi-flora rose, red oak, eastern red cedar, and elm.

Management Recommendations - Even Age

In order to release the oaks conduct weed tree eradication practices in 2011.

Stand 3: 4.5 acres

Site Description -

This stand is an upland site along a property boundary.

Woodland Description-

Medium-sized (12-20 inch) white oak, red oak, black oak, and shagbark hickory dominate the stand. Shingle oak and Mockernut hickory are scattered. The understory is oak, ironwood, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2011 to manage for oaks.

Stand 4: 41.8 acres

Site Description -

This stand is both upland and bottomland with mostly west facing slopes.

Woodland Description-

Small (8-12 inch) shingle oak, swamp white oak, and eastern red cedar dominate the stand. Black oak, elm, honey locust, and ash are scattered. The understory is prickly ash, multi-flora rose, elm, and swamp white oak.

Management Recommendations - Even Age

Conduct crop tree release in 2011 with an emphasis on oaks.

Stand 5: 38.6 acres

Site Description -

This stand is an upland site with some minor slopes.

Woodland Description-

Small (6-12 inch) eastern red cedar, black oak, shingle oak, and shagbark hickory are the dominate species of the canopy. Elm, red oak, white oak, and cherry are scattered. The understory is oak, hickory, and multi-flora rose.

Management Recommendations - Even Age

Conduct crop tree release in 2011 to manage for oaks.

Stand 6: 29.4 acres

Site Description -

This stand is an upland site with some slopes.

Woodland Description-

Medium-sized (8-14 inch) shagbark hickory, Mockernut hickory, and shingle oak are dominant. Eastern red cedar, white oak, black oak, and elm are scattered. The understory is oak, prickly ash, hickory, ash, and cherry.

Management Recommendations - Even Age

Conduct crop tree release practices in 2011 to manage for oaks.

Stand 7: 20.6 acres

Site Description -

This stand is an upland stand located along 140th Avenue.

Woodland Description-

Medium-sized (12-16 inch) shagbark hickory, bitternut hickory, and white oak are dominant in the stand. Elm, shingle oak, and black oak are scattered. The understory is oak, prickly ash, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2011 to manage for oaks.

Croton Unit Management Prescriptions

Compartment 3

Stand 1: 9.2 acres

Site Description -

This stand is on a bottomland site.

Woodland Description-

Medium-sized (8-14 inch) walnut and bitternut hickory dominate the stand. Basswood, red oak, swamp white oak, cherry, hard maple, and elm are scattered. The understory is hickory, oak, multi-flora rose, elm, and ash.

Management Recommendations - Uneven Age

Conduct selective management thinning practices in 2011 to manage for oak and walnut.

Stand 2: 76.3 acres

Site Description -

This stand is located on an upland site with some minor slopes.

Woodland Description-

Medium-sized (10-18 inch) black oak, white oak, and red oak dominate the stand. Walnut and shagbark hickory are scattered throughout. The understory is ironwood, ash, hickory, prickly ash, and oak.

Management Recommendations - Even Age

Implement crop tree release practices in 2011 to manage for oaks.

Stand 3: 9.8 acres

Site Description -

Stand 3 is located on and upland along a property boundary.

Woodland Description-

Small (6-12 inch) black oak, red oak, and honey locust dominate the stand. White oak and hickory are scattered. The understory is oak, ash, ironwood, and multi-flora rose.

Management Recommendations - Even Age

Implement weed tree eradication methods in 2021 to manage for oak and walnut.

Stand 4: 12.0 acres

Site Description -

Stand 4 surrounds a drainage ditch that flows northwest.

Woodland Description-

Medium-sized (10-14 inch) swamp white oak, walnut, and elm dominate the stand. Shingle oak, red oak, bitternut hickory, and honey locust are scattered. The understory is ironwood, hickory, prickly ash, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2021 to manage for oak and walnut.

Stand 5: 79.9 acres

Site Description -

This stand is an upland site with some minor slopes.

Woodland Description-

Medium-sized (8-16 inch) white oak, red oak, and black oak dominate the stand. Shagbark hickory, ash, bitternut hickory, and cherry are scattered. The understory is ironwood, oak, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2021 to manage for oaks.

Stand 6: 46.7 acres

Site Description -

This stand is an upland site with some minor slopes.

Woodland Description-

Medium-sized (8-16 inch) white oak, red oak, and black oak dominate the stand. There are some scattered oaks larger than 20 inch diameter. Shagbark hickory, ash, bitternut hickory, and cherry are scattered. The understory is ironwood, oak, and hickory.

Management Recommendations - Uneven Age

Re-inventory in 2011.

Stand 7: 1.2 acres

Site Description -

This stand is a bottomland site along a road.

Woodland Description-

Small (6-12 inch) white pine and elm dominate the stand. River birch, cottonwood, and honey locust are scattered. The understory is elm, shrubs, and an occasional oak.

Management Recommendations - Uneven Age

Re-inventory in 2011.

Stand 8: 9.0 acres

Site Description -

This stand is an upland site located along a road with a general north facing slope.

Woodland Description-

Medium-sized (8-14 inch) white oak, red oak, and black oak are dominant in the canopy. Shagbark hickory and cherry are scattered throughout. The understory is ironwood, oak, and elm.

Management Recommendations - Even Age

Conduct crop tree release practices in 2021 to manage for oak.

Stand 9: 2.5 acres

Site Description -

Stand 9 is an upland site located along a road.

Woodland Description-

Medium-sized (8-14 inch) white pine dominates the stand. There is some oak encroachment.

Management Recommendations - Uneven Age

Re-inventory in 2011.

Stand 10: 6.6 acres

Site Description -

This stand is an upland site located along a road.

Woodland Description-

Medium-sized (8-14 inch) white pine, shingle oak, and cherry dominate the stand. There are scattered elm, honey locust, and shagbark hickory. The understory is hickory, elm, cherry, and oak.

Management Recommendations - Uneven Age

Re-inventory in 2011.

Stand 11: 0.3 acres

Site Description -

This stand is an upland site located along a road.

Woodland Description-

Medium-sized (8-14 inch) white pine, shingle oak, and cherry dominate the stand. There are scattered elm, honey locust, and shagbark hickory. The understory is hickory, elm, cherry, and oak.

Management Recommendations - Even Age

Re-inventory in 2011.

Stand 12: 31.7 acres

Site Description -

Stand 12 is an upland site located along a property boundary.

Woodland Description-

Medium-sized (10-18 inch) white oak, red oak, and black oak dominate the stand. Ash and shagbark hickory are scattered. The understory is prickly ash, ironwood, hickory, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2021 to manage for oaks.

Stand 13: 2.1 acres

Site Description -

This stand is an upland site located along a road.

Woodland Description-

Medium-sized (8-14 inch) white pine, shingle oak, and cherry dominate the stand. There are scattered elm, honey locust, and shagbark hickory. The understory is hickory, elm, cherry, and oak.

Management Recommendations - Even Age

Re-inventory in 2011.

Stand 14: 18.1 acres

Site Description -

Stand 14 is an upland site with some slopes facing southwest to the Des Moines River.

Woodland Description-

Medium-sized (8-18 inch) white oak, red oak, and black oak dominate the stand. Black locust, elm, shagbark hickory, Mockernut hickory, and cherry are scattered. The understory is ironwood, oak, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2021 to manage for oaks.

Stand 15: 12.7 acres

Site Description -

This stand is positioned on an upland site with some slopes draining to the Des Moines River.

Woodland Description-

Medium-sized (8-18 inch) white oak, red oak, and black oak are the dominant species in the canopy. Ash is scattered. The understory is ironwood, ash, and hard maple.

Management Recommendations - Even Age

Conduct crop tree release practices in 2021 to manage for oaks.

Croton Unit Management Prescriptions

Compartment 4

Stand 1: 18.8 acres

Site Description -
This stand is an upland site with some slopes facing south.

Woodland Description-
Medium-sized (8-14 inch) white oak and shagbark hickory dominate the stand. Ash, honey locust, black locust, black oak, and elm are scattered. The understory is ironwood, hickory, and oak.

Management Recommendations - Even Age
Conduct crop tree release practices in 2011 to manage for oak.

Stand 2: 7.6 acres

Site Description -
This stand is an upland site with some east facing slopes.

Woodland Description-
Medium-sized (8-14 inch) white oak, red oak, and shagbark hickory dominate the stand. Black locust, ash, and honey locust are scattered throughout. The understory is hickory, ironwood, prickly ash, and ash.

Management Recommendations - Even Age
Conduct crop tree release practices in 2011 to manage for oak.

Stand 3: 18.0 acres

Site Description -
This stand is located on an upland site along a property boundary.

Woodland Description-
Medium-sized (8-16 inch) white oak, ash, and red oak dominate the stand. Shagbark hickory, honey locust, and cherry are scattered. The understory is oak, hickory, ash, and ironwood.

Management Recommendations - Even Age
Conduct crop tree release practices in 2011 to manage for oak.

Stand 4: 8.9 acres

Site Description -

This stand is on the upland and has a slight slope.

Woodland Description-

Small (6-12 inch) shingle oak and ash dominate the stand. Red oak, eastern red cedar, and honey locust are scattered. The understory is oak and mixed shrubs.

Management Recommendations - Even Age

Re-inventory in 2011.

Stand 5: 68.4 acres

Site Description -

Stand 5 is located in the upland and has a gradual slope facing southwest.

Woodland Description-

Medium-sized (8-14 inch) white oak dominates the stand. Red oak, black oak, shagbark hickory, and cherry are scattered. The understory is ironwood, prickly ash, hickory, ash, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2021 to manage for oak.

Stand 6: 13.7 acres

Site Description -

This stand is an upland site with some southwest aspect.

Woodland Description-

Small (6-10 inch) eastern red cedar and shingle oak dominate the stand. Walnut, elm, cherry, and honey locust are scattered. The understory is ironwood, multi-flora rose, ash, oak, and hickory.

Management Recommendations - Even Age

Re-inventory in 2011.

Stand 7: 17.5 acres

Site Description -

Stand 7 is a bottomland site on the west with an upland component on the east.

Woodland Description-

Medium-sized (8-16 inch) white oak, red oak, black oak, and shagbark hickory are the dominant species in the canopy. Bitternut hickory, walnut, and the occasional river birch are scattered. The understory is ironwood, oak, and hickory.

Management Recommendations - Even Age

Conduct a Shelterwood harvest in 2011 to increase oak regeneration.

Stand 8: 36.3 acres

Site Description -

This stand is mostly upland having several ridges running southwest to northeast.

Woodland Description-

Medium-sized (10-18 inch) white oak, red oak, and shagbark hickory dominate the stand. Black oak, elm, Mockernut hickory, and cherry are scattered. The understory is hickory, oak, elm, and ironwood.

Management Recommendations - Even Age

Conduct a Shelterwood harvest in 2011 to increase oak regeneration.

Stand 9: 3.1 acres

Site Description -

This stand is positioned on a west facing slope.

Woodland Description-

Medium-sized (8-16 inch) white oak, basswood, and shagbark hickory dominate the stand. Red oak, black oak, hard maple, cherry, honey locust, ash, and walnut are scattered. The understory is ironwood, basswood, hickory, ash, hard maple, and oak.

Management Recommendations - Even Age

Shelterwood harvest this stand in 2011 to increase oak regeneration.

Croton Unit Management Prescriptions

Compartment 7

Stand 1: 2.1 acres

Site Description -
This stand is located on an upland site.

Woodland Description-
Small (4-8 inch) eastern red cedar, shingle oak, and shagbark hickory are the dominant species. Swamp white oak, red oak, white oak, and honey locust are scattered. The understory is grass.

Management Recommendations - Even Age
Implement weed tree eradication methods in 2011 and plant trees.

Stand 2: 27.6 acres

Site Description -
This stand is an upland stand with a general southeast slope.

Woodland Description-
Small (4-10 inch) white oak, red oak, and black oak dominate the stand. Elm, cherry, ash, and shingle oak are scattered. The understory is ironwood, ash, and oak.

Management Recommendations - Even Age
Re-inventory the stand in 2011.

Stand 3: 9.6 acres

Site Description -
This stand is mostly upland with some minor east facing slopes. It was harvested 10-15 years ago.

Woodland Description-
Small (4-6 inch) shingle oak, shagbark hickory, and elm dominate the stand. White oak, black oak, cherry, and eastern red cedar are scattered. The understory is ash, oak, ironwood, elm, and prickly ash.

Management Recommendations - Even Age
Re-inventory this stand in 2011.

Stand 4: 3.1 acres

Site Description -

Stand 4 is located along a property boundary and contains both upland and bottomland slope positions.

Woodland Description-

Small (6-10 inch) shingle oak, swamp white oak, eastern red cedar, and elm dominate the stand. Honey locust and shagbark hickory are scattered. The understory is oak, multi-flora rose, and hickory.

Management Recommendations - Even Age

Re-inventory this stand in 2011.

Stand 5: 42.6 acres

Site Description -

Stand 5 is mostly upland and follows a creek.

Woodland Description-

Small to medium-sized (6-14 inch) white oak, swamp white oak, and elm dominate the stand. Eastern red cedar, ash, post oak, red oak, black oak, and shagbark hickory are scattered. The understory is ironwood and elm.

Management Recommendations - Even Age

Re-inventory the stand in 2011.

Stand 6: 12.1 acres

Site Description -

This stand is composed of upland ridges.

Woodland Description-

Eastern red cedar, Osage orange, swamp white oak, and honey locust are encroaching on an open field.

Management Recommendations - Even Age

Conduct a tree planting in 2021.

Stand 7: 1.5 acres

Site Description -

This stand is located on an upland site.

Woodland Description-

Medium-sized (10-18 inch) white oak and walnut dominate the stand. The understory is oak, multi-flora rose, raspberry, and shingle oak. The area is very open.

Management Recommendations - Even Age

Conduct a tree planting in the understory in 2011.

Stand 8: 8.4 acres

Site Description -

Stand 8 is an upland site following the topography of some side hills.

Woodland Description-

Medium-sized (8-14 inch) white oak dominated the stand. Red oak, black oak, walnut, and ash are scattered. The understory is ironwood, prickly ash, and oak.

Management Recommendations - Even Age

Re-inventory this stand in 2011.

Stand 9: 10.4 acres

Site Description -

This stand is located on a bottomland site.

Woodland Description-

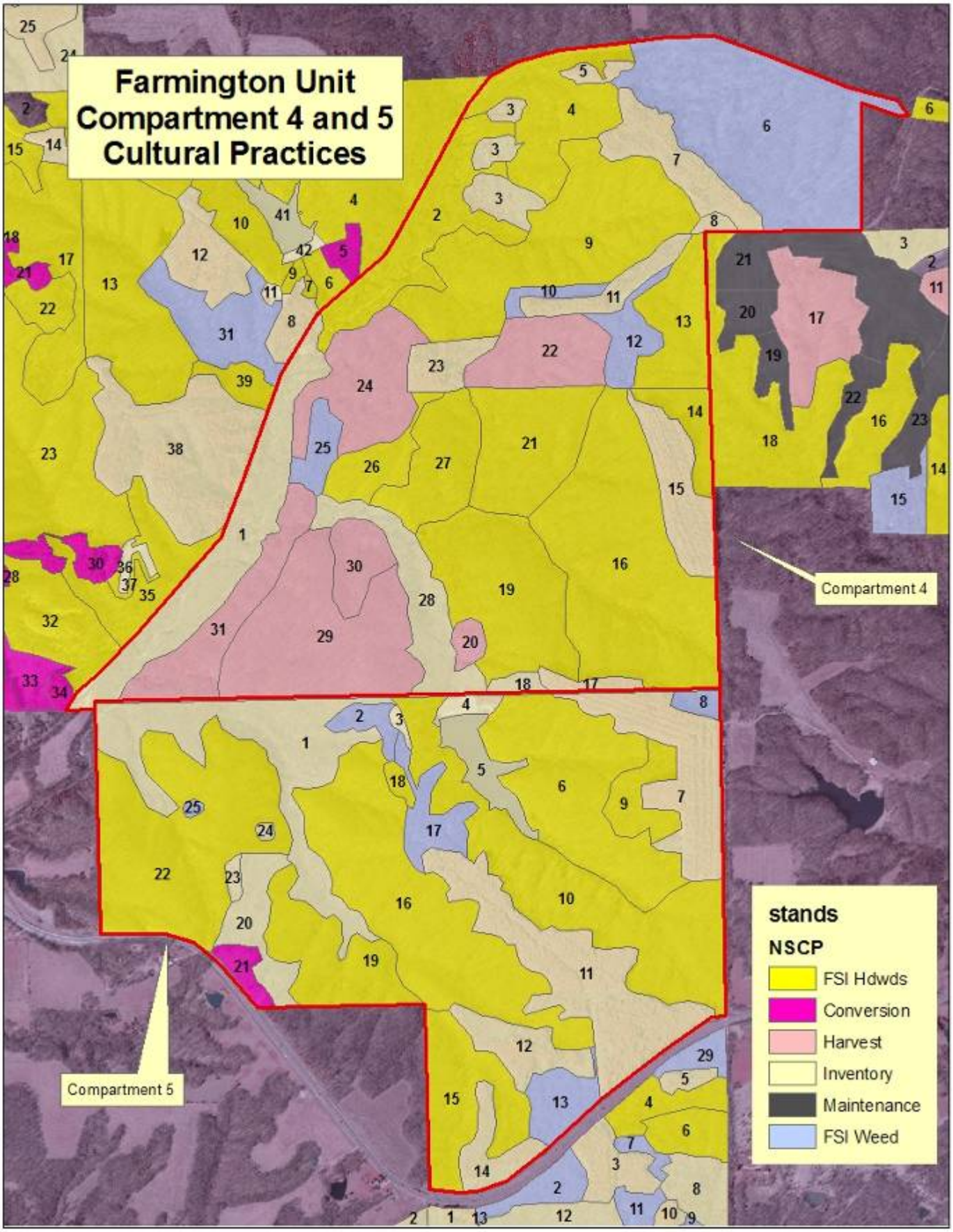
Medium-sized (8-14 inch) swamp white oak, walnut, and elm dominate the stand. Eastern red cedar, river birch, and honey locust are scattered. The understory is multi-flora rose, elm, and oak.

Management Recommendations - Even Age

Re-inventory this stand in 2011.

Work Plan Summary for Croton Unit Compartments 2,3,4,and 7

Fiscal Year	Unit	Comp.	Stand(s)	Management Activity	Acres	Cost	Est. Board Foot	Revenue
2011	Croton	2	1,3,4,5,6,7	Crop Tree Release	249.9	$29,988		
	Croton	2	2	Weed Tree Eradication	18.2	$2,912		
	Croton	3	2	Crop Tree Release	76.3	$9,156		
	Croton	3	1	Selective Mgmt Thin	9.2	$1,104		
	Croton	4	1,2,3	Crop Tree Release	44.4	$5,328		
	Croton	4	7,8,9	Shelter Wood Harvest	56.9		141,600	$42,500
	Croton	7	1	Weed Tree Eradication	2.1	$336		
	Croton	7	6,7	Tree Planting	13.6	$5,440		
	Croton	2,3,4,7	All Stands	Re inventory	896.1			
2013	Croton	4	7,8,9	Post harvest treatment	56.9	$9,104		
2021	Croton	3	4,5,8,12,14,15	Crop Tree Release	163.4	$19,608		
	Croton	3	3	Weed Tree Eradication	9.8	$1,568		
	Croton	4	5	Crop Tree Release	68.4	$8,208		


Farmington Unit
Compartment 4 and 5
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Compartment 5
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Farmington Unit Management Prescriptions

Compartment 4

Stand 1: 28.4 acres

Site Description -

Stand 1 is positioned on a bottomland site following an abandoned railroad bed.

Woodland Description-

Medium-sized (8-16 inch) swamp white oak, cherry, elm, and honey locust dominate the stand. Shingle oak, river birch, cottonwood, and eastern red cedar are scattered. The understory is elm, cherry, multi-flora rose, and mixed shrubs.

Management Recommendations - Uneven Age

Re-inventory stand 1 in 2012.

Stand 2: 21.5 acres

Site Description -

Stand 2 is positioned on the bottomland along an abandoned railroad bed.

Woodland Description-

Medium-sized (8-20 inch) shingle oak and swamp white oak dominate the stand. Cherry, honey locust, black oak, elm, river birch, and shagbark hickory are scattered throughout the stand. The understory is oak, multi-flora rose, autumn olive, and mixed shrubs.

Management Recommendations - Uneven Age

Conduct selective management thinning practices in 2012 to manage for oaks.

Stand 3: 7.7 acres

Site Description -

This stand is located on an upland having a west facing slope.

Woodland Description-

Small (4-12 inch) shingle oak, eastern red cedar, elm, and black locust dominate the stand. Ash and cherry are scattered. The understory is multi-flora rose, autumn olive, and oak.

Management Recommendations - Even Age

Re-inventory this stand in 2012.

Stand 4: 21.1 acres

Site Description -

Stand 4 is positioned on a north facing slope.

Woodland Description-

Medium-sized (8-18 inch) white oak, red oak, black oak, and shagbark hickory dominate the stand. Shingle oak, swamp white oak, and bitternut hickory are scattered. The understory is ironwood, oak, hickory, and ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2012 to manage for oaks.

Stand 5: 1.8 acres

Site Description -

This stand is an upland site located along a converted railroad trail.

Woodland Description-

Medium-sized (8-16 inch) white pines dominate the stand. Elm and cherry are scattered. The understory is hickory, oak, elm, and cherry.

Management Recommendations - Uneven Age

Re-inventory stand 5 in 2012.

Stand 6: 54.1 acres

Site Description -

Stand 6 is an upland site with gently rolling hills.

Woodland Description-

Small to medium-sized (4-18 inch) white oak, black oak, and shagbark hickory dominate the stand. Elm, cherry, walnut, shingle oak, and red oak are scattered. The understory is elm, hickory, and oak.

Management Recommendations - Even Age

Implement weed tree eradication methods to release oaks in the understory.

Stand 7: 12.2 acres

Site Description -

Stand 7 is an upland site.

Woodland Description-

Medium-sized (8-14 inch) white pine, red pine, and jack pine dominate the stand. Elm, black locust, and shingle oak are scattered. The understory is ironwood, oak, hickory, multi-flora rose, hackberry, and prickly ash.

Management Recommendations - Uneven Age

Re-inventory this stand in 2012.

Stand 8: 1.1 acres

Site Description -

This stand is located on an upland site.

Woodland Description-

Small (4-10 inch) elm, eastern red cedar, and shingle oak dominate the stand. Black oak and pine are scattered. The understory is oak, elm, ironwood, ash, hickory, and mixed shrubs.

Management Recommendations - Even Age

Re-inventory stand 8 in 2012.

Stand 9: 45.4 acres

Site Description -

Stand 9 is an upland site with ditches scattered throughout.

Woodland Description-

Medium-sized (8-18 inch) white oaks dominate the stand. Shagbark hickory, bitternut hickory, black oak, red oak, and cherry are scattered. The understory is ironwood, ash, hickory, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2022 to manage for oaks.

Stand 10: 2.4 acres

Site Description -

Stand 10 is an upland site.

Woodland Description-

Medium-sized (6-12 inch) elm, eastern red cedar, and shingle oak dominate the stand. Honey locust, black oak, white oak, and cherry are scattered. The understory is prickly ash, hickory, ironwood, and oak.

Management Recommendations - Even Age

Implement weed tree eradication methods in 2022 to release the oak understory.

Stand 11: 6.4 acres

Site Description -

Stand 11 is an upland site.

Woodland Description-

Medium-sized (8-14 inch) red pines dominate the stand. Elm and Cherry are scattered. The understory is oak, ironwood, elm, and ash.

Management Recommendations - Uneven Age

Re-inventory this stand in 2012.

Stand 12: 6.3 acres

Site Description -

Stand 12 is an upland site located along a trail.

Woodland Description-

Small (6-12 inch) shingle oak, eastern red cedar, and elm dominate the stand. Cherry, white oak, shagbark hickory, and honey locust are scattered. The understory is elm, oak, ash, and mixed shrubs.

Management Recommendations - Even Age

Complete weed tree eradication practices in 2022 to release the oak understory.

Stand 13: 14.3 acres

Site Description -

Stand 13 is an upland site with a minor ditch in the middle.

Woodland Description-

Medium-sized (10-18 inch) white oak, red oak, black oak, and shagbark hickory dominate the stand. Bitternut hickory and elm are scattered. The understory is ironwood, oak, and hickory.

Management Recommendations - Even Age

Complete crop tree release practices in 2012 to manage for oaks.

Stand 14: 6.0 acres

Site Description -

This stand is an upland site with some rolling slopes.

Woodland Description-

Medium-sized (8-14 inch) shagbark hickory dominates the stand. White oak and cherry are scattered. The understory is oak, ironwood, elm, and cherry.

Management Recommendations - Even Age

Conduct crop tree release practices in 2022 to manage for oaks.

Stand 15: 12.2 acres

Site Description -

Stand 15 is an upland site.

Woodland Description-

Medium-sized (10-18 inch) white pines dominate the stand. Elm is scattered. The understory is oak, ironwood, elm, and cherry.

Management Recommendations - Uneven Age

Re-inventory stand 15 in 2012.

Stand 16: 56.8 acres

Site Description -

Stand 16 is an upland site with general west facing slopes and rolling hills.

Woodland Description-

Medium-sized (8-16 inch) white oak and shagbark hickory dominate the stand. Shingle oak and black oak are scattered. The understory is prickly ash, ironwood, oak, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2012 to manage for oaks.

Stand 17: 2.9 acres

Site Description -

This stand is an upland site.

Woodland Description-

Medium-sized (8-18 inch) white pine and red pine dominate the stand. The understory is ash, elm, and oak.

Management Recommendations - Uneven Age

Re-inventory this stand in 2012.

Stand 18: 1.9 acres

Site Description -

Stand 18 is an upland site.

Woodland Description-

Small to medium-sized (6-12 inch) black oak, red oak, and shagbark hickory dominate the stand. White oak, honey locust, and eastern red cedar are scattered. The understory is ironwood, elm, oak, cherry, and hickory.

Management Recommendations - Even Age

Re-inventory stand 18 in 2012.

Stand 19: 30.2 acres

Site Description -

Stand 19 is located on an upland site sloping north-northeast.

Woodland Description-

Medium-sized (8-16 inch) shagbark hickory and black oak dominate the stand. Bitternut hickory, white oak, eastern red cedar and honey locust are scattered. The understory is prickly ash, ironwood, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2022 to manage for oaks.

Stand 20: 2.3 acres

Site Description -

Stand 20 is located on a west facing slope.

Woodland Description-

Large diameter (18-28 inch) white oaks dominate the stand. Shagbark hickory, black oak, eastern red cedar, and cherry are scattered. The understory is oak, ironwood, and hickory.

Management Recommendations - Even Age

Conduct a Shelterwood harvest in 2022 to increase oak regeneration.

Stand 21: 21.6 acres

Site Description -

Stand 21 is an upland site with a west facing slope.

Woodland Description-

Medium-sized (8-16 inch) white oak and shagbark hickory dominate the stand. Swamp white oak and shingle oak are scattered. There are scattered white oaks exceeding 20 inches in diameter. The understory is prickly ash, ironwood, and cherry.

Management Recommendations - Even Age

Conduct crop tree release practices in 2022 to manage for oaks.

Stand 22: 14.6 acres

Site Description -

This stand is an upland site with some rolling hills.

Woodland Description-

Medium-sized (12-20 inch) white oak, red oak, and black oak dominate the stand. The understory is ironwood, elm, and oak.

Management Recommendations - Even Age

Shelterwood harvest the stand in 2012 to increase natural regeneration of oaks.

Stand 23: 5.8 acres

Site Description -

Stand 23 is an upland site.

Woodland Description-

Medium-sized (8-14 inch) white pines dominate the stand. Cherry, ash, shingle oak, black locust, and elm are scattered. The understory is ash, hickory, and oak.

Management Recommendations - Uneven Age

Re-inventory the stand in 2012.

Stand 24: 19.8 acres

Site Description -

Stand 24 is an upland site with rolling slopes.

Woodland Description-

Medium-sized (10-20 inch) red oak, white oak, and black oak are the dominate species. Shagbark hickory is scattered. The understory is ironwood, elm, oak, cherry, and hickory.

Management Recommendations - Even Age

Shelterwood harvest the stand in 2012 to increase oak regeneration.

Stand 25: 4.7 acres

Site Description -

Stand 25 is an upland site sloping to the south.

Woodland Description-

Medium-sized (8-14 inch) black locust, cherry, and elm dominate the stand. Shagbark hickory, shingle oak, and swamp white oak are scattered. The understory is oak, multi-flora rose, and elm.

Management Recommendations - Even Age

Implement weed tree eradication practices in 2022.

Stand 26: 7.6 acres

Site Description -

This stand is an upland site sloping to the south.

Woodland Description-

Medium-sized (8-18 inch) white oaks dominate the stand. Red oak, black oak, and shagbark hickory are scattered. The understory is ironwood, oak, and elm.

Management Recommendations - Even Age

Conduct crop tree release practices to manage for oaks.

Stand 27: 15.0 acres

Site Description -

Stand 27 is located on an east facing upland.

Woodland Description-

Medium-sized (8-18 inch) black oak and shagbark hickory dominate the stand. White oaks are scattered throughout. The understory is ironwood, prickly ash, elm, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2012 to manage for oaks.

Stand 28: 15.2 acres

Site Description -

Stand 28 is located on a bottomland site.

Woodland Description-

Medium-sized (8-14 inch) shagbark hickory, river birch, and elm dominate the stand. Bitternut hickory, walnut, swamp white oak, red oak, cottonwood, honey locust, and cherry are scattered. The understory is elm, multi-flora rose, cherry, and hickory.

Management Recommendations - Uneven Age

Re-inventory in 2012.

Stand 29: 37.5 acres

Site Description -

This stand is located on an upland site with rolling slopes.

Woodland Description-

Medium-sized (10-22 inch) shagbark hickory, white oak, red oak, and black oak dominate the stand. Swamp white oak, shingle oak, bitternut hickory, and honey locust are scattered. The understory is ironwood, oak, hickory, and elm.

Management Recommendations - Even Age

Shelterwood harvest this stand in 2012 to increase oak regeneration.

Stand 30: 7.3 acres

Site Description -

Stand 30 is located on a north facing slope.

Woodland Description-

Medium-sized (10-20 inch) shagbark hickory and black oak dominate the stand. Red oak, white oak, bitternut hickory, and cherry are scattered. The understory is ironwood, oak, and elm.

Management Recommendations - Even Age

Shelterwood harvest the stand in 2012 to increase oak regeneratio

Stand 31: 17.3 acres

Site Description -

Stand 31 is located on some west facing side hills.

Woodland Description-

Medium-sized (8-18 inch) swamp white oak, shingle oak, and shagbark hickory dominate the stand. Cherry, walnut, river birch, eastern red cedar, black oak, and white oak are scattered. The understory is mixed shrubs, multi-flora rose, elm, oak, hickory, and ironwood.

Management Recommendations - Even Age

Shelterwood harvest the stand in 2012 to increase oak regeneration.

Farmington Unit Management Prescriptions

Compartment 5

Stand 1: 33.1 acres

Site Description -
Stand 1 is located on a bottomland site.

Woodland Description-
Medium-sized (8-16 inch) shingle oaks dominate the stand. Shagbark hickory, elm, cherry, red oak, swamp white oak, and walnut are scattered throughout the canopy. The understory is ash, hickory, birch, and hackberry.

Management Recommendations - Even Age
Re-inventory the stand in 2012.

Stand 2: 3.2 acres

Site Description -
This stand is an upland positioned on an upland site with a west facing slope.

Woodland Description-
Medium-sized (6-14 inch) cherry, eastern red cedar, and black oak dominate the stand. White oak, shagbark hickory, lm, and red oak are scattered throughout. The understory is composed of ironwood, eastern red cedar, oak, and prickly ash.

Management Recommendations - Even Age
Conduct weed tree eradication efforts in 2012 to manage for the release of oak in the understory.

Stand 3: 0.7 acres

Site Description -
This site is an upland area along a trail.

Woodland Description-
The stand is an open grass area.

Management Recommendations - Even Age
Maintain open area to prevent encroachment of undesirable woody species.

Stand 4: 2.0 acres

Site Description -

This is a north facing slope on the back of white oak lake.

Woodland Description-

The area is mostly open with some small pines in the northeast corner.

Management Recommendations - Even Age

Mow area regularly to prevent woody encroachment.

Stand 5: 6.9 acres

Site Description -

The stand is White Oak Lake.

Woodland Description-

The stand is open water.

Management Recommendations - Even Age

Continue to work with Fisheries to manage for best recreation opportunity.

Stand 6: 37.0 acres

Site Description -

This stand is an upland area sloping toward White Oak Lake.

Woodland Description-

Medium-sized (6-18 inch) white oak dominate the stand. Black oak, cherry, and shagbark hickory are scattered throughout. The understory is ironwood, oak, hickory, cherry, ash, and multi-flora rose.

Management Recommendations - Even Age

Conduct crop tree release practices in 2012 to manage for oaks.

Stand 7: 21.1 acres

Site Description -

Stand 7 is an upland site along a dead end road.

Woodland Description-

Medium-sized (8-18 inch) white pine and red pine dominate the stand. The understory is ash, elm, and oak.

Management Recommendations - Uneven Age

Maintain pines for aesthetics and re-inventory in 2012.

Stand 8: 1.9 acres

Site Description -

This stand is positioned on an upland site with a slight north facing slope.

Woodland Description-

Small (6-10 inch) honey locust and cherry dominate the stand. White oak, elm, and shagbark hickory are scattered throughout the stand. The understory is elm, oak, multi-flora rose, bitternut hickory, and mixed shrubs.

Management Recommendations - Even Age

Complete weed tree eradication practices in 2012 to release oaks in the understory and remove undesirable species.

Stand 9: 7.3 acres

Site Description -

Stand 9 is a west facing upland site.

Woodland Description-

Medium-sized (10-18 inch) ash, shingle oak, and red oak dominate the stand. Black oak, white oak, Mockernut hickory, shagbark hickory, and elm are scattered. The understory is composed of multi-flora rose, ash, ironwood, oak, hickory, cherry, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2012 to manage for oaks.

Stand 10: 44.5 acres

Site Description -

This stand is an upland site sloping north toward White Oak Lake.

Woodland Description-

Medium-sized (8-16 inch) white oak and red oak dominate the stand. Walnut, elm, swamp white oak, and shagbark hickory are scattered. The understory is hickory, ash, ironwood, elm, oak, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2012 to manage for oaks.

Stand 11: 32.2 acres

Site Description -

Stand 11 is an upland site along a hiking trail and also borders highway 2.

Woodland Description-

Medium-sized (8-20 inch) white pine dominates the stand. The understory is oak, elm, ash, and cherry.

Management Recommendations - Uneven Age

Manage for aesthetics and re-inventory in 2012.

Stand 12: 8.7 acres

Site Description -

This stand is an upland site along a hiking trail.

Woodland Description-

Medium-sized (8-18 inch) white pine, red pine, and jack pine dominate the stand. White oak, ash, and cherry are scattered. The understory is composed of oak, ash, and cherry.

Management Recommendations - Uneven Age

Manage for aesthetics and re-inventory in 2012.

Stand 13: 6.9 acres

Site Description -

This stand is located on an upland site along a hiking trail.

Woodland Description-

Small (2-10 inch) ash and elm dominate the stand. Black locust are scattered throughout the stand. The understory is oak, ash, elm, hackberry, and mixed shrubs.

Management Recommendations - Even Age

Implement weed tree eradication methods in 2012 to release the oak component in the understory.

Stand 14: 6.6 acres

Site Description -

Stand 14 is an upland site along highway 2.

Woodland Description-

Small (6-10 inch) red pine dominates the stand. The understory is oak and ash.

Management Recommendations - Uneven Age

Manage for aesthetics and re-inventory in 2012.

Stand 15: 18.6 acres

Site Description -

This stand is an upland site with a ditch running through the middle.

Woodland Description-

Medium-sized (8-16 inch) white oak, red oak, and black oak dominate the stand. Shagbark hickory is scattered. The understory is ash, hickory, ironwood, cherry, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2022 to manage for oaks.

Stand 16: 50.1 acres

Site Description -

This stand is an upland site with a west southwest aspect.

Woodland Description-

Medium-sized (8-14 inch) white oak dominate the stand. Red oak, black oak, shagbark hickory, elm, and black locust are scattered. The understory is hickory, oak, ash, elm, ironwood, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2022 to increase oak regeneration.

Stand 17: 7.3 acres

Site Description -

This stand is positioned on an upland site by a hiking trail.

Woodland Description-

Small (6-12 inch) honey locust and black locust dominate the stand. White oak, black oak, shingle oak, red oak, shagbark hickory, elm, and ash are scattered throughout the stand. The understory is elm, ash, oak, hickory, and ironwood.

Management Recommendations - Even Age

Implement weed tree eradication practices in 2022 to increase oak regeneration.

Stand 18: 1.3 acres

Site Description -

Stand 18 is an upland site with a slight northwest slope.

Woodland Description-

Medium-sized (10-18 inch) black oak and ash dominate the stand. Red oak, white oak, elm, and Mockernut hickory are scattered throughout the stand. The understory is elm, ash, oak, hickory, and ironwood.

Management Recommendations - Even Age

Conduct crop tree release practices in this stand in 2022 to manage for oaks.

Stand 19: 18.3 acres

Site Description -

This stand is positioned on an upland site sloping north or northeast.

Woodland Description-

Medium-sized (10-20 inch) white oaks dominate the stand. Red oak and black oak are scattered. The understory is ironwood, oak, elm, ash, hickory, and mixed shrub.

Management Recommendations - Even Age

Conduct crop tree release practices in 2012 to manage for oaks.

Stand 20: 9.2 acres

Site Description -

Stand 20 is an upland site sloping to the north.

Woodland Description-

Medium-sized (8-14 inch) white oak and black oak dominate the stand. Shagbark hickory and hard maple are scattered. The understory is ash, ironwood, oak, and hickory.

Management Recommendations - Even Age

Re-inventory stand 20 in 2012.

Stand 21: 3.0 acres

Site Description -

Stand 21 is an upland site along highway 2.

Woodland Description-

Small (6-16 inch) eastern red cedar dominates the stand. Cherry, hard maple, and ash are scattered. The understory is ash and hickory.

Management Recommendations - Even Age

Convert area to desirable oak species in 2012.

Stand 22: 49.7 acres

Site Description -

This stand is located primarily on an upland that has a drainage ditch in the middle.

Woodland Description-

Medium-sized (8-18 inch) white oak and red oak dominate the stand. Shagbark hickory, ash, elm, and walnut are scattered. The understory is hickory, ironwood, oak, ash, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2012 to manage for oaks.

Stand 23: 1.0 acres

Site Description -

Stand 23 is positioned on an upland site.

Woodland Description-

Small (8-12 inch) cherry and shingle oak dominate the stand. Red oak and ash are scattered. The understory is oak, eastern red cedar, and dense shrubs.

Management Recommendations - Even Age

Re-inventory stand 23 in 2012.

Stand 24: 0.5 acres

Site Description -

Stand 24 is positioned on an east facing slope.

Woodland Description-

Medium-sized (8-18 inch) elm and ash dominate the stand. Red oak, white oak, and hackberry are scattered. The understory is ash, elm, hickory, and multi-flora rose.

Management Recommendations - Even Age

Re-inventory stand 24 in 2012.

Stand 25: 0.5 acres

Site Description -

Stand 25 is located on a west facing slope.

Woodland Description-

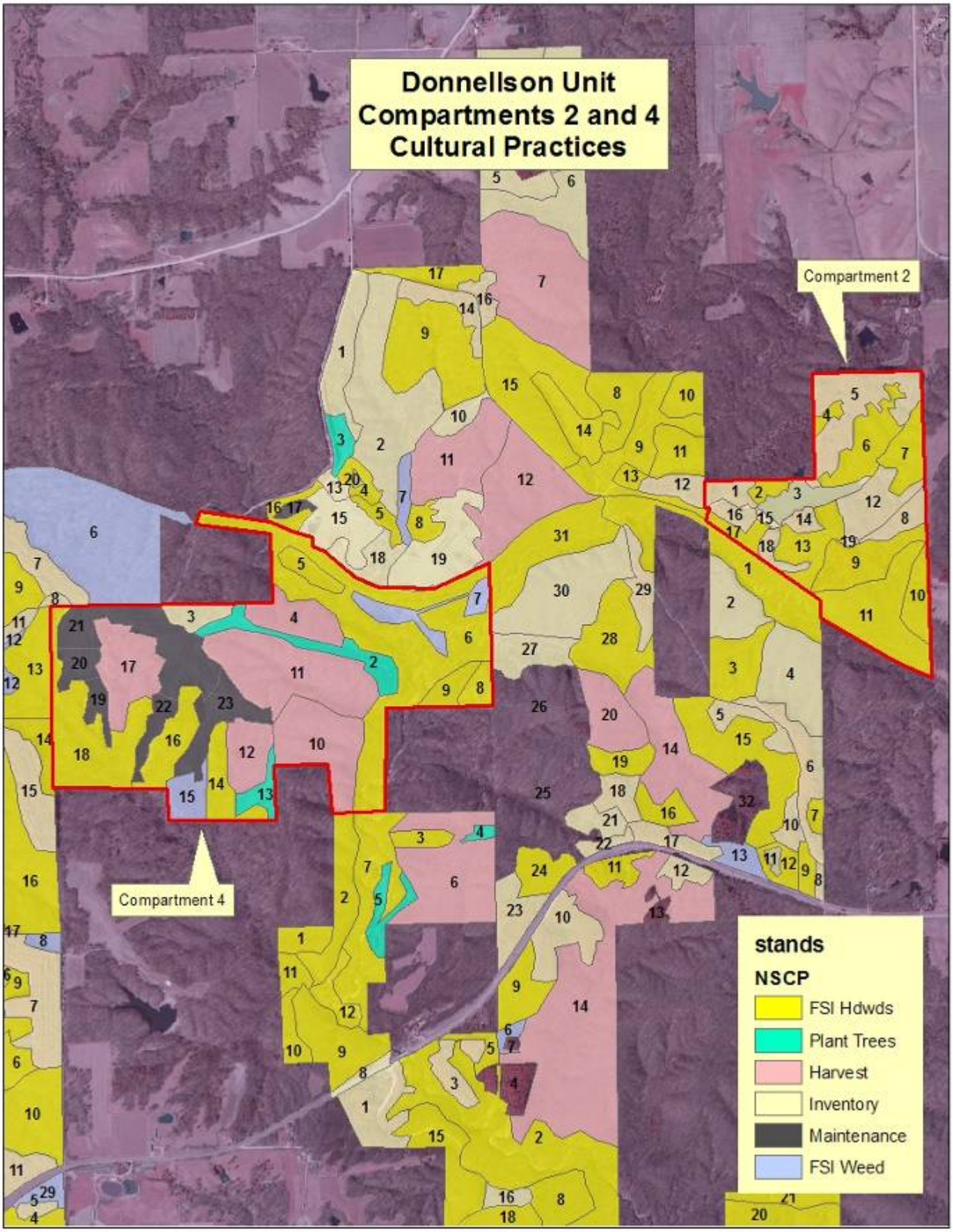
Small to medium-sized (8-12 inch) black locust and red oak dominate the stand. White oak and bitternut hickory are scattered throughout the stand. The understory is elm, ash, oak, and hickory.

Management Recommendations - Even Age

Implement weed tree eradication methods in 2012 to help release the oak understory.

Work Plan Summary for Farmington Unit Compartments 4 & 5

Fiscal Year	Unit	Comp.	Stand(s)	Management Activity	Acres	Cost	Est. Board Foot	Revenue
2012	Farmington	4	1,4,13,16,27	Crop Tree Release	128.7	$15,444		
	Farmington	4	2	Selective Mgmt Thin	21.5	$2,580		
	Farmington	4	6	Weed Tree Eradication	54.1	$8,656		
	Farmington	4	29,30,31	Shelter Wood Harvest	62.1		162,200	$48,600
	Farmington	5	6,9,10,19,22	Crop Tree Release	156.8	$18,816		
	Farmington	5	21	Stand Conversion	3	$1,200		
	Farmington	5	2,8,13,25	Weed Tree Eradication	12.5	$2,000		
	Farmington	4,5	ALL STANDS	Re-inventory	873.2			
2013	Farmington	4	29,30,31	Post harvest treatment	62.1	$9,936		
2017	Farmington	4	20,22,24	Pre harvest treatment	36.7	$5,872		
2022	Farmington	4	9,14,19,21,26	Crop Tree Release	110.8	$13,296		
	Farmington	4	10,12,25	Weed Tree Eradication	13.4	$2,144		
	Farmington	4	20,22,24	Shelter Wood Harvest	36.7		111,000	$33,300
	Farmington	5	15,16,18	Crop Tree Release	70	$8,400		
	Farmington	5	17	Weed Tree Eradication	7.3	$1,168		


Donnellson Unit
Compartments 2 and 4
Cultural Practices
Compartment 2
Compartment 4
stands
NSCP
FSI Hdwds
Plant Trees
Harvest
Inventory
Maintenance
FSI Weed

Donnellson Unit Management Prescriptions

Compartment 2

Stand 1: 3.8 acres

Site Description -

This site is upland and is located along Donnellson Unit Road going to Shagbark Lake.

Woodland Description-

The area is small to medium sized (4-18" diameter) mixed pine. Black, shingle and red oak along with honey locust and elm are scattered throughout the stand. The under story is mostly elm, honeysuckle, and mixed oak.

Management Recommendations –Uneven Age

Visual corridor should be maintained and re-inventoried in 2013.

Stand 2: 2.3 acres

Site Description -

This stand has a slight slope facing south east and is located near Shagbark Lake.

Woodland Description-

The stand is dominated by small to medium-sized (6-14 inch) black oak, red oak, and shagbark hickory. Cherry and white oak are scattered throughout the stand. The understory is oak and prickly ash.

Management Recommendations - Uneven Age

Conduct selective management thinning practices in 2013 to manage for oaks.

Stand 3: 7.1 acres

Site Description -

This stand is Shagbark Lake.

Management Recommendations -

Continue working with fisheries staff to manage the lake for best possible recreation opportunity.

Stand 4: 1.6 acres

Site Description -

This stand has a slight slope on it with a west aspect and sits along a property border.

Woodland Description-

Medium-sized (8-12 inch) post oak dominates the stand. Cherry and black oak are scattered. The understory is oak and multi-flora rose.

Management Recommendations - Even Age

Conduct crop tree release practices in 2013 to manage for oaks.

Stand 5: 20.1 acres

Site Description -

Stand 5 is an upland site located north of Shagbark Lake.

Woodland Description-

Medium-sized (12-16 inch) white pines dominate the stand. There are scattered cherry, shingle oak, elm, and honey locust. The understory is oak, elm, and cherry.

Management Recommendations - Uneven Age

Re-inventory in 2013.

Stand 6: 11.5 acres

Site Description -

This stand exhibits a general southeast facing slope and is located north of Shagbark Lake.

Woodland Description-

Small to medium-sized (6-20 inch) white oak, red oak, and black oak dominate the stand. Cherry, elm, and shagbark hickory are scattered throughout the stand. The understory is oak, hickory, and elm.

Management Recommendations - Even Age

Conduct crop tree release practices in 2013 to manage for oaks.

Stand 7: 8.0 acres

Site Description -

This stand is positioned on a northwest facing slope near Shagbark Lake.

Woodland Description-

White oak and Shagbark hickory of medium size (10-22 inch) are the dominate trees. Ash, cherry, elm, and post oak are scattered throughout the stand. The understory is ironwood, oak, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2013 to manage for oaks.

Stand 8: 4.5 acres

Site Description -

This stand is positioned on the upland.

Woodland Description-

Small (4-10 inch) red pines dominate the stand. Ash, hickory, and oak are encroaching. The understory is ash, hickory, and oak.

Management Recommendations - Uneven Age

Re-inventory the stand in 2013.

Stand 9: 12.1 acres

Site Description -

Stand 9 is an upland site with a southeast aspect.

Woodland Description-

Small to medium-sized (6-14 inch) red pine and black oak dominate the stand. Swamp white oak, white oak, red oak, and elm are found scattered throughout the stand. The understory is hickory, elm, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2013 to manage for oaks.

Stand 10: 5.9 acres

Site Description -

This stand is positioned along a property border in the upland.

Woodland Description-

Medium-sized (12-20 inch) white oak, shingle oak, and shagbark hickory dominate the stand. Walnut and black oak are scattered throughout the stand. The understory is hickory, oak, and elm.

Management Recommendations - Even Age

Conduct crop tree release practices in 2013 to manage for oaks.

Stand 11: 22.7 acres

Site Description -

Stand 11 is composed primarily of bottomland but has some gentle slopes in it.

Woodland Description-

Medium to large diameter (14-22 inch) swamp white oak, bur oak, and shagbark hickory dominate the canopy. Hackberry, elm, walnut, white oak, and black oak are scattered throughout the stand. The understory is hickory, multi-flora rose, elm, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2013 to manage for oaks. Shelterwood harvest the stand in 2023 to encourage oak regeneration.

Stand 12: 10.2 acres

Site Description -

Stand 12 is positioned on a northwest facing slope along Shagbark Lake.

Woodland Description-

Medium-sized (12-16 inch) white pines dominate the stand. Red oak, white oak, shagbark hickory, and cherry are scattered throughout the stand. The understory is hickory, oak, and cherry.

Management Recommendations - Uneven Age

Re-inventory in 2013.

Stand 13: 9.9 acres

Site Description -

This stand is located near Shagbark Lake and is positioned on an upland site with a southwest aspect.

Woodland Description-

Small (4-8 inch) red oak, white oak, black oak, and elm dominate the stand. Walnut, cherry, basswood, ash, and bitternut hickory are scattered throughout. The understory is ironwood and elm.

Management Recommendations - Even Age

Conduct crop tree release practices on this stand in 2013.

Stand 14: 2.3 acres

Site Description -

Stand 14 is located along Shagbark Lake and has a westerly aspect.

Woodland Description-

Medium-sized (12-16 inch) white pines dominate the stand. Cherry, elm, and walnut are widely scattered throughout the stand. Elm and hickory make up the understory.

Management Recommendations - Uneven Age

Re-inventory this stand in 2013.

Stand 15: 0.7 acres

Site Description -

This stand is the Shagbark Lake dam.

Management Recommendations -

Conduct regular mowing to prevent invasive woody plants from establishing.

Stand 16: 3.0 acres

Site Description -

Stand 16 is positioned on an upland area along Shagbark Lake road.

Woodland Description-

Medium-sized (10-16 inch) white pines dominate the stand. There are shingle oak and cherry scattered throughout the stand. The understory is mixed oak, honey suckle, elm, and walnut.

Management Recommendations - Uneven Age

Re-inventory the stand in 2013.

Stand 17: 3.4 acres

Site Description -

Stand 17 is located on a bottomland site.

Woodland Description-

Medium-sized (8-14 inch) swamp white oak, and walnut dominate the canopy. Honey locust, elm, and ash are scattered throughout the stand. The understory is ironwood, elm, hickory, and ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2013 to manage for walnut and oak.

Stand 18: 3.0 acres

Site Description -

This stand is and upland site located near Shagbark Lake.

Woodland Description-

Medium-sized (10-14 inch) white pines dominate the stand. The understory is elm, hickory, and ash.

Management Recommendations - Uneven Age

Re-inventory in 2013.

Stand 19: 0.5 acres

Site Description -

This stand is located in the upland.

Woodland Description-

The area is an open field.

Management Recommendations - Even Age

Occasionally mow the area to prevent invasive woody plants from establishing.

Donnellson Unit Management Prescriptions

Compartment 4

Stand 1: 0.0 acres

Site Description -
There is no stand 1.

Stand 2: 10.2 acres

Site Description -
Stand 2 is an upland site.

Woodland Description-
The stand consists of seedling-sized ash, oak, and hickory from a tree planting.

Management Recommendations - Even Age
Continue tree planting maintenance and replant where necessary. Broadcast seed the east part of the area in 2013.

Stand 3: 4.6 acres

Site Description -
This stand is an upland site with a slight north aspect.

Woodland Description-
Small (4-8 inch) ash and hickory dominate the stand. Cherry, honey locust, and shingle oak are scattered. The understory is multi-flora rose and elm.

Management Recommendations - Even Age
Carry out weed tree eradication practices in 2013 to manage for oak presence.

Stand 4: 10.7 acres

Site Description -
The stand sits on a north facing slope.

Woodland Description-
Medium-sized (12-16 inch) white oak, red oak, and shagbark hickory dominate the stand. Cottonwood and elm are scattered. The understory is oak, hickory, and elm.

Management Recommendations - Even Age
Shelterwood harvest the stand in 2023 to manage for oak regeneration.

Stand 5: 4.1 acres

Site Description -

Stand 5 is positioned on a bottomland.

Woodland Description-

Small (4-8 inch) shingle oak and walnut dominate the stand. River birch and silver maple are scattered. The understory is mixed shrubs.

Management Recommendations - Even Age

Crop tree release practices should be implemented in 2013 to manage for oak and walnut.

Stand 6: 61.4 acres

Site Description -

This stand is positioned on a bottomland.

Woodland Description-

Medium-sized (10-20 inch) hackberry, elm, swamp white oak, and walnut dominate the stand. Cottonwood, ash, hickory, red oak, and cherry are scattered. The understory is elm, oak, cherry, and hickory.

Management Recommendations - Uneven Age

Perform selective management thinning in 2023 to manage for oak and walnut.

Stand 7: 8.0 acres

Site Description -

This stand is a bottomland site.

Woodland Description-

Small (2-4 inch) walnuts dominate the stand. Easter red cedar, cherry, and silver maple are scattered.

Management Recommendations - Uneven Age

Implement selective management thinning practices in 2013 to manage for walnut. Replant in necessary.

Stand 8: 4.0 acres

Site Description -

Stand 8 is located on an upland area along a property border.

Woodland Description-

Small (4-8 inch) shingle oak and black oak dominate the stand. Walnut and swamp white oak are scattered.

Management Recommendations - Even Age

Conduct crop tree release practices in 2013 to manage for oak and walnut.

Stand 9: 4.6 acres

Site Description -

This stand is located on the bottomland.

Woodland Description-

Medium-sized (8-16 inch) river birch, elm, and swamp white oak dominate the stand. Walnut and cottonwood are scattered. The understory is elm, oak, and ash.

Management Recommendations - Uneven Age

Implement selective management thinning practices in 2013 to manage for oak and walnut.

Stand 10: 21.0 acres

Site Description -

Stand 10 is an upland site with a general east slope.

Woodland Description-

Medium-sized (10-18 inch) white oak, red oak, and black oak dominate the stand. Shagbark hickory, hackberry, and cherry are scattered. The understory is oak, hickory, elm, and cherry..

Management Recommendations - Even Age

Shelterwood harvest this stand in 2013 to aid natural oak regeneration.

Stand 11: 31.9 acres

Site Description -

Stand 11 is an upland site with a drainage down the center.

Woodland Description-

Medium-sized (10-18 inch) white oak and red oak dominate the stand. Elm, shagbark hickory, ash, and cherry are scattered. The understory is oak, elm, hickory, and ironwood.

Management Recommendations - Even Age

Shelterwood harvest the area in 2013 to help oak regeneration.

Stand 12: 9.6 acres

Site Description -

Stand 12 is an upland site with a westerly as aspect.

Woodland Description-

Medium-sized (10-18 inch) white oak, red oak, and black oak dominate the stand. Bitternut hickory, shagbark hickory, and elm are scattered. The understory is elm, ironwood, and oak.

Management Recommendations - Even Age

Shelterwood harvest the stand in 2013 to help oak regeneration.

Stand 13: 4.4 acres

Site Description -

Stand 13 is an upland site.

Woodland Description-

Small (2-6 inch) eastern red cedar, honey locust, and ash dominate the stand.

Management Recommendations - Even Age

Implement weed tree eradication strategies on undesirable species and plant seedlings in 2013.

Stand 14: 8.7 acres

Site Description -

This stand is located on an upland having a general east slope.

Woodland Description-

Small to medium-sized (6-16 inch) elm, white oak, red oak, and post oak dominate the stand. Cherry and shagbark hickory are scattered. The understory is elm, oak, ironwood, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2013 to release oaks.

Stand 15: 6.3 acres

Site Description -

This stand is an upland site with southern aspect.

Woodland Description-

Small to medium-sized (4-16 inch) eastern red cedar and shingle oak dominate the stand. Cherry and black oak are scattered. The understory is sparse with some multi-flora rose present.

Management Recommendations - Even Age

Implement weed tree eradication efforts in 2013 to release oaks.

Stand 16: 10.5 acres

Site Description -

This stand is an upland site with a minor drainage in the middle.

Woodland Description-

Medium-sized (10-18 inch) white oak, red oak, and shagbark hickory dominate the stand. Elm, swamp white oak, and cherry are scattered. The understory is elm, oak, ironwood, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2013 to release oaks.

Stand 17: 16.1 acres

Site Description -

Stand 17 is an upland site buffering a small drainage.

Woodland Description-

Medium-sized (8-16 inch) white oak, red oak, and shagbark hickory dominate the stand. Cherry, elm, and hackberry are scattered throughout the stand. The understory is elm, oak, ironwood, and hickory.

Management Recommendations - Even Age

Shelterwood harvest the stand in 2023 to manage for oaks.

Stand 18: 26.4 acres

Site Description -

This stand is located on an upland site with a small drainage to the south.

Woodland Description-

Small to medium-sized (6-16 inch) white oak, shingle oak, and red oak dominate the stand. Shagbark hickory, cherry, elm, and swamp white oak are scattered. The understory is oak, ash, ironwood, elm, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2023 to manage for oaks.

Stand 19: 3.4 acres

Site Description -

This stand is located in the upland.

Woodland Description-

The stand is a tree planting in the seedling stage and consists of mixed hardwoods.

Management Recommendations - Even Age

Continue tree planting maintenance.

Stand 20: 4.5 acres

Site Description -

This stand is located in the upland.

Woodland Description-

The stand is a tree planting in the seedling stage and consists of mixed hardwoods.

Management Recommendations - Even Age

Continue tree planting maintenance.

Stand 21: 21.4 acres

Site Description -

This stand is an upland site.

Woodland Description-

The stand is an old crop field being converted to hardwoods.

Management Recommendations - Even Age

Plant hardwoods every year until 2010.

Stand 22: 4.3 acres

Site Description -

This stand is located in the upland.

Woodland Description-

The stand is a tree planting in the seedling stage and consists of mixed hardwoods.

Management Recommendations - Even Age

Continue tree planting maintenance.

Stand 23: 11.1 acres

Site Description -

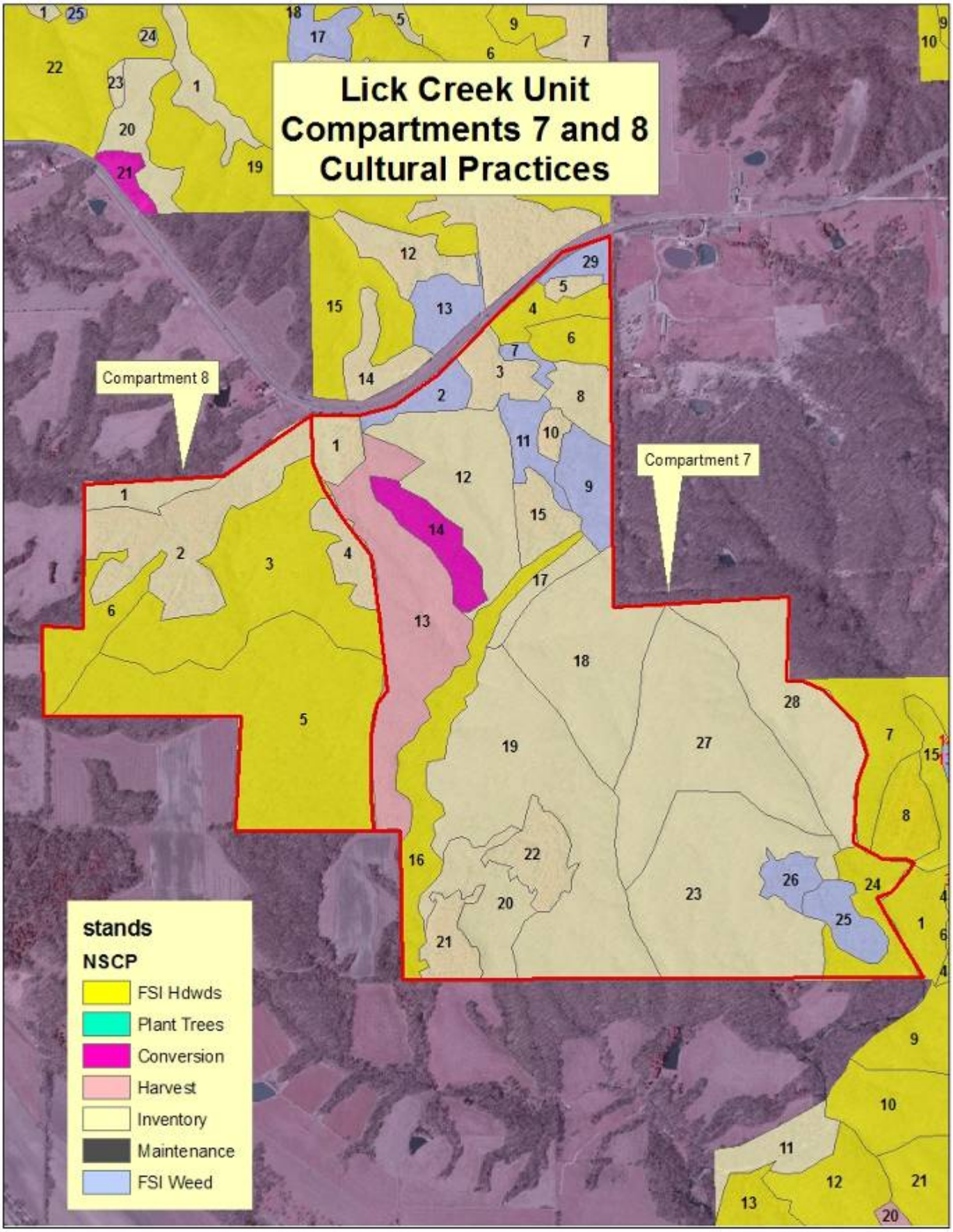
This stand is located in the upland.

Woodland Description-

The stand is a tree planting in the seedling stage and consists of mixed hardwoods.

Management Recommendations - Even Age

Continue tree planting maintenance.


Lick Creek Unit
Compartments 7 and 8
Cultural Practices
Compartment 8
Compartment 7
stands
NSCP
FSI Hdwds
Plant Trees
Conversion
Harvest
Inventory
Maintenance
FSI Weed

Lick Creek Unit Management Prescriptions

Compartment 7

Stand 1: 5.2 acres

Site Description -
Stand 1 is located on an upland along highway 2.

Woodland Description-
Medium-sized (10-16 inch) white pines dominate the stand. Ash and silver maple are scattered. The understory is ash, swamp white oak, and silver maple.

Management Recommendations - Uneven Age
Re-inventory the stand in 2013.

Stand 2: 5.1 acres

Site Description -
Stand 2 is an upland area located near highway 2.

Woodland Description-
Small (4-12 inch) ash dominate the stand. Cherry, bitternut hickory, and eastern red cedar are scattered. The understory is cherry, oak, elm, and multi-flora rose.

Management Recommendations - Even Age
Conduct weed tree eradication practices in 2013 to release the oak understory.

Stand 3: 7.0 acres

Site Description -
Stand 3 is an upland area along highway 2.

Woodland Description-
Medium-sized (8-16 inch) white pines dominate the stand. Shingle oak, cherry, honey locust, and elm are scattered. The understory is ironwood, cherry, and ash.

Management Recommendations - Uneven Age
Re-inventory in 2013.

Stand 4: 6.2 acres

Site Description -

This stand is a gently rolling upland along highway 2.

Woodland Description-

Small to medium-sized (6-14 inch) ash dominate the stand. Shagbark hickory, black oak, swamp white oak, and black locust are scattered. The understory is oak, ironwood, ash, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2013 to manage for oaks.

Stand 5: 1.8 acres

Site Description -

Stand 5 is a poorly drained upland.

Woodland Description-

Small (6-12 inch) red pines dominate the stand. The understory is oak and ash.

Management Recommendations - Uneven Age

Re-inventory in 2013.

Stand 6: 6.1 acres

Site Description -

Stand 6 is a gently rolling upland.

Woodland Description-

Medium-sized (10-16 inch) white oaks dominate the stand. Black oak, red oak, ad shagbark hickory are scattered. The understory is ironwood, oak, and hickory.

Management Recommendations - Even Age

Implement crop tree release practices in 2013 to manage for oaks.

Stand 7: 1.6 acres

Site Description -

Stand 7 is an upland area along a horse trail.

Woodland Description-

Small (4-12 inch) ash and black oak dominate the stand. Cherry is scattered. The understory is ironwood, ash, elm, oak, and hickory.

Management Recommendations - Even Age

Conduct weed tree eradication practices in 2013 to release the oak understory.

Stand 8: 6.9 acres

Site Description -

This stand is an upland site with gently rolling hills.

Woodland Description-

Medium-sized (10-18 inch) white oak, ash, and eastern red cedar dominate the stand. Red oak, swamp white oak, walnut, bitternut hickory, shagbark hickory, cherry, and cottonwood are scattered. The understory is oak, ash, hickory, and ironwood.

Management Recommendations - Even Age

Re-inventory stand 8 in 2013.

Stand 9: 8.6 acres

Site Description -

Stand 9 is an upland site with a general south slope.

Woodland Description-

Medium-sized (8-20 inch) black oak, red oak, eastern red cedar, and ash dominate the stand. Cherry, walnut, elm, white oak, and shagbark hickory are scattered. The understory is oak, ironwood, and ash.

Management Recommendations - Even Age

Implement weed tree eradication practices in 2013 to release the oak understory.

Stand 10: 2.1 acres

Site Description -

Stand 10 is an upland site.

Woodland Description-

Medium-sized (10-18 inch) white pines dominate the stand. There is a sparse understory.

Management Recommendations - Uneven Age

Re-inventory the stand in 2013.

Stand 11: 5.6 acres

Site Description -

Stand 11 is an upland site along a horse trail.

Woodland Description-

Medium-sized (8-16 inch) ash, elm, and honey locust dominate the stand. Shingle oak, walnut, hackberry, and eastern red cedar are scattered. The understory is multi-flora rose, oak, elm, hackberry, and ash.

Management Recommendations - Even Age

Implement weed tree eradication practices in 2023 to remove undesirable species and help release the walnuts.

Stand 12: 25.3 acres

Site Description -

Stand 12 is an upland site with a ditch running through the middle.

Woodland Description-

Medium-sized (10-18 inch) white oak, black oak, and white oak dominate the stand. Shagbark hickory is scattered. The understory is ironwood, oak, and elm.

Management Recommendations - Even Age

Re-inventory in 2013.

Stand 13: 36.4 acres

Site Description -

Stand 13 is an upland site with a ditch running through it.

Woodland Description-

Medium-sized (12-20 inch) white oak, red oak, and black oak dominate the stand. Shagbark hickory, cherry, and walnut are scattered. The understory is ironwood and oak.

Management Recommendations - Even Age

Shelterwood harvest the stand in 2023.

Stand 14: 8.7 acres

Site Description -

Stand 14 is an upland site.

Woodland Description-

Medium-sized (10-16 inch) black locust and shingle oak dominate the stand. Cherry, ash, walnut, and hackberry are scattered. The understory is elm, oak, rose, and cherry.

Management Recommendations - Even Age

Stand conversion should take place in 2023 to add oak to the stand.

Stand 15: 6.5 acres

Site Description -

Stand 15 is an upland site near a horse trail.

Woodland Description-

Small (4-8 inch) white pine and red pine dominate the stand. Ash, honey locust, shingle oak, black oak, and cherry are scattered. The understory is ash.

Management Recommendations - Uneven Age

Re-inventory in 2013.

Stand 16: 20.1 acres

Site Description -

Stand 16 is a bottomland site.

Woodland Description-

Medium-sized (8-18 inch) red oak, swamp white oak, and walnut dominate the stand. Honey locust, hackberry, and ash are scattered. The understory is ash, elm, oak, and hackberry.

Management Recommendations - Uneven Age

Conduct selective management thinning practices in 2013 to manage for oak and walnut.

Stand 17: 4.2 acres

Site Description -

Stand 17 is positioned on a very steep northwest facing slope.

Woodland Description-

Medium-sized (12-20 inch) red oaks dominate the stand. Cherry, cottonwood, ash, and eastern red cedar are scattered. The understory is ash, elm, ironwood, and oak.

Management Recommendations - Uneven Age

Re-inventory stand 17 in 2013.

Stand 18: 33.5 acres

Site Description -

Stand 18 is an upland site with gently rolling hills and some steep slopes.

Woodland Description-

Medium-sized (12-18 inch) white oaks dominate the stand. Red oak, black oak, swamp white oak, and shagbark hickory are scattered. The understory is hickory, oak, ironwood, and prickly ash.

Management Recommendations - Even Age

Re-inventory stand in 2013.

Stand 19: 59.2 acres

Site Description -

Stand 19 is an upland site with gently rolling hills and some steep slopes.

Woodland Description-

Medium-sized (12-18 inch) white oaks dominate the stand. Red oak, black oak, swamp white oak, and shagbark hickory are scattered. The understory is hickory, oak, ironwood, and prickly ash.

Management Recommendations - Even Age

Re-inventory stand 19 in 2013.

Stand 20: 14.3 acres

Site Description -

Stand 20 is an upland site with some minor drainages throughout.

Woodland Description-

Medium-sized (8-14 inch) black locust and elm dominate the stand. Honey locust, cherry, white pine, black oak, swamp white oak, and shingle oak are scattered. The understory is multi-flora rose, elm, and cherry.

Management Recommendations - Even Age

Re-inventory in 2013.

Stand 21: 6.8 acres

Site Description -

Stand 21 is an upland site along a property boundary.

Woodland Description-

Medium-sized (12-20 inch) white pines dominate the stand. The understory is hickory, ash, cherry and ironwood.

Management Recommendations - Uneven Age

Re-inventory the stand in 2013.

Stand 22: 8.9 acres

Site Description -

Stand 22 is an upland site along a horse trail.

Woodland Description-

Medium-sized (8-16 inch) red pine and white pine dominate the stand. Elm and black locust are scattered. The understory is elm, cherry, and hickory.

Management Recommendations - Uneven Age

Re-inventory stand 22 in 2013.

Stand 23: 48.0 acres

Site Description -

Stand 23 is an upland site with gently rolling hills and some steep slopes.

Woodland Description-

Medium-sized (12-18 inch) white oaks dominate the stand. Red oak, black oak, swamp white oak, and shagbark hickory are scattered. The understory is hickory, oak, ironwood, and prickly ash.

Management Recommendations - Even Age

Re-inventory stand 23 in 2013.

Stand 24: 10.5 acres

Site Description -

Stand 24 is a bottomland site located near a horse trail.

Woodland Description-

Medium-sized (6-16 inch) walnuts dominate the stand. Hackberry, honey locust and elm are scattered. The understory is elm, hackberry, and mixed shrubs.

Management Recommendations - Even Age

Conduct crop tree release practices in 2023 to manage for walnuts.

Stand 25: 6.4 acres

Site Description -

Stand 25 is an upland site.

Woodland Description-

Small to medium-sized (4-16 inch) shingle oak, white oak and shagbark hickory dominate the stand. Eastern red cedar swamp white oak, cherry, and ash are scattered. The understory is hickory, oak, and ironwood.

Management Recommendations - Even Age

Conduct weed tree eradication practices in 2023 to release the oak understory.

Stand 26: 4.1 acres

Site Description -

Stand 26 is an upland area by a horse trail.

Woodland Description-

Small (6-12 inch) eastern red cedar dominate the stand. Ash and shingle oak are scattered. The understory is mixed oak and ironwood.

Management Recommendations - Even Age

Conduct weed tree eradication practices in 2023 to release the oak understory.

Stand 27: 45.2 acres

Site Description -

Stand 27 is an upland site with gently rolling hills and some steep slopes.

Woodland Description-

Medium-sized (12-18 inch) white oaks dominate the stand. Red oak, black oak, swamp white oak, and shagbark hickory are scattered. The understory is hickory, oak, ironwood, and prickly ash.

Management Recommendations - Even Age

Re-inventory stand in 2013.

Stand 28: 28.2 acres

Site Description -

Stand 28 is an upland site with gently rolling hills and some steep slopes.

Woodland Description-

Medium-sized (12-18 inch) white oaks dominate the stand. Red oak, black oak, swamp white oak, and shagbark hickory are scattered. The understory is hickory, oak, ironwood, and prickly ash.

Management Recommendations - Even Age

Re-inventory stand in 2013.

Stand 29: 3.1 acres

Site Description -

Stand 29 is an upland site along highway 2.

Woodland Description-

Small (4-12 inch) swamp white oak, black oak, and ash dominate the stand. Elm is scattered. The understory is oak, elm, ironwood, and ash.

Management Recommendations - Even Age

Conduct weed tree eradication practices in 2013 to release the oak understory.

Lick Creek Unit Management Prescriptions

Compartment 8

Stand 1: 5.2 acres

Site Description -

Stand 1 is an upland site with north facing slopes.

Woodland Description-

Medium-sized (8-14 inch) white oak and black oak dominate the stand. Shagbark hickory, Mockernut hickory, red oak, shingle oak, black locust, cherry, ash, and elm are scattered. The understory is ironwood, hickory, ash, and oak.

Management Recommendations - Even Age

Re-inventory stand 1 in 2013.

Stand 2: 27.4 acres

Site Description -

This stand is located on an upland site having trails intermixed.

Woodland Description-

Medium-sized (6-14 inch) white pine and red pine dominate the stand. Ash, black oak, shingle oak, cherry, and honey locust are scattered. The understory is ash, oak, elm, and hickory.

Management Recommendations - Uneven Age

Manage stand 2 for aesthetics and re-inventory in 2013.

Stand 3: 41.3 acres

Site Description -

Stand 3 is an upland site with a minor ditch in the interior.

Woodland Description-

Small to medium-sized (8-14 inch) white oak, black oak, and shagbark hickory dominate the stand. Cherry, bitternut hickory, ash, hard maple, and red oak are scattered. The understory is ironwood, ash, oak, hickory, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2023 to manage for oaks.

Stand 4: 6.1 acres

Site Description -

This stand is an upland site located along a trail.

Woodland Description-

Small to medium-sized (6-12 inch) red pine, white pine, and jack pine dominate the stand. The understory is shingle oak, ash, and hickory.

Management Recommendations - Uneven Age

Manage for aesthetics and re-inventory in 2013.

Stand 5: 61.1 acres

Site Description -

Stand 5 is an upland site with some gently rolling slopes.

Woodland Description-

Medium-sized (10-20 inch) white oaks dominate the stand. Elm, cherry, shagbark hickory, ash, and red oak are scattered. The understory is ironwood, ash, hickory, oak, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2013 to manage for oaks.

Stand 6: 10.8 acres

Site Description -

This stand is an upland site with minor drainages throughout.

Woodland Description-

Small to medium-sized (6-14 inch) bitternut hickory and white oak dominate the stand. Red oak, ash, cherry, Mockernut hickory, and elm are scattered. The understory is hickory, ironwood, oak, ash, and mixed shrubs.

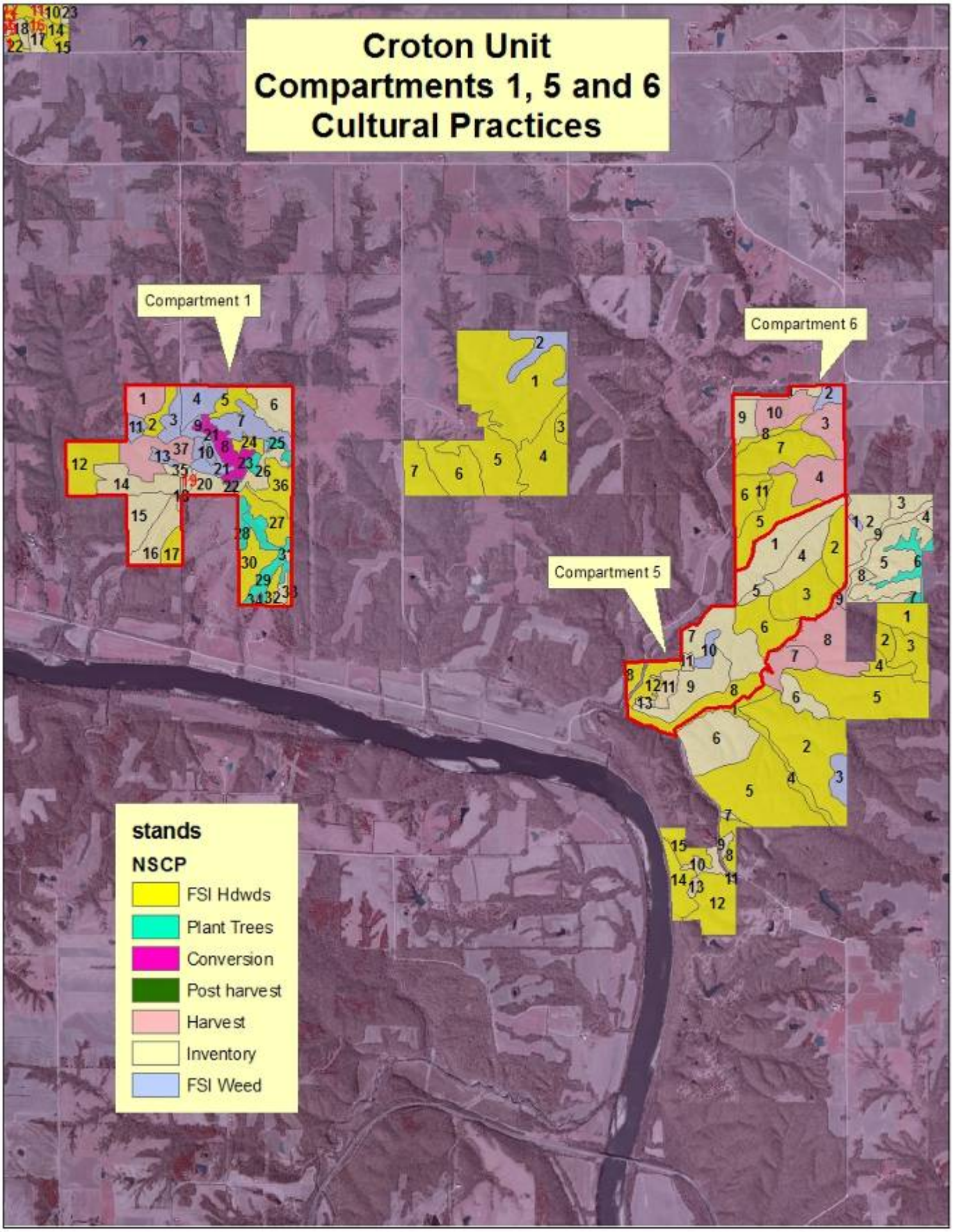
Management Recommendations - Even Age

Conduct crop tree release practices in 2023 to manage for oaks.

Work Plan Summary for Donnnellson Unit Compartments 2 & 4, and Lick Creek Unit Compartments 7 & 8

Fiscal Year	Unit	Comp.	Stand(s)	Management Activity	Acres	Cost	Est. Board Foot	Revenue
2009	Donnellson	4	10,11,12	Pre harvest treatment	62.5	$10,000		
2013	Donnellson	2	4,6,9,11,13, 17,7,10	Crop Tree Release	75.1	$9,012		
	Donnellson	2	2	Selective Mgmt Thin	2.3	$276		
	Donnellson	4	5,8,14,16	Crop Tree Release	27.3	$3,276		
	Donnellson	4	7,9	Selective Mgmt Thin	12.6	$1,512		
	Donnellson	4	10,11,12	Shelter Wood Harvest	62.5		213,400	$64,000
	Donnellson	4	3,15	Weed Tree Eradication	10.9	$1,799		
	Donnellson	4	2,13,21	Tree Planting	36	$14,400		
	Donnellson	4	19,20,21,22,23	Tree Planting Maintenance	44.7	$1,788		
	Donnellson	6	6,7,8,11,12,14,15	Crop Tree Release	94	$11,280		
	Lick Creek	7	6	Crop Tree Release	6.1	$732		
	Lick Creek	7	16	Selective Mgmt Thin	20.1	$2,412		
	Lick Creek	7	2,9,29	Weed Tree Eradication	16.8	$2,688		
	Lick Creek	8	5	Crop Tree Release	61.1	$7,332		
	Donnellson Lick Creek	2,4 7,8	ALL STANDS	Re-inventory	997.1			
2018	Donnellson	4	4,17	Pre harvest treatment	26.8	$4,288		
	Lick Creek	7	13	Pre harvest treatment	36.4	$5,824		
2023	Donnellson	4	18	Crop Tree Release	26.4	$3,168		
	Donnellson	4	6	Selective Mgmt Thin	61.4	$7,368		
	Donnellson	4	4,17	Shelter Wood Harvest	26.8		95,100	$28,500
	Lick Creek	7	4,24	Crop Tree Release	16.7	$2,004		

Lick Creek	7	13	Shelter Wood Harvest	36.4		96,100	$28,800
Lick Creek	7	14	Stand Conversion	8.7	$3,480		
Lick Creek	7	7,11,25,26	Weed Tree Eradication	17.7	$2,832		
Lick Creek	8	3,6	Crop Tree Release	52.1	$6,252		


Croton Unit
Compartments 1, 5 and 6
Cultural Practices
Compartment 1
Compartment 6
Compartment 5
stands
NSCP
FSI Hdwds
Plant Trees
Conversion
Post harvest
Harvest
Inventory
FSI Weed

Croton Unit Management Prescriptions

Compartment 1

Stand 1: 15.0 acres

Site Description -

Stand 1 is an upland site with some gentle slopes.

Woodland Description-

Medium-sized (8-16 inch) white oak and black oak dominate the stand. Red oak, swamp white oak, cherry, and shagbark hickory are scattered. The understory is oak, elm, and hickory.

Management Recommendations - Even Age

Clearcut harvest this area in 2024 to release the oak understory.

Stand 2: 8.5 acres

Site Description -

This stand is an upland site with a general west facing slope.

Woodland Description-

Medium-sized (4-18 inch) eastern red cedar and white oak dominate the stand. Black oak, shingle oak, swamp white oak, and bitternut hickory are scattered. The understory is multi-flora rose, ironwood, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2014 to manage for oaks. Remove undesirable cedars to release the oak understory.

Stand 3: 9.8 acres

Site Description -

Stand 3 is an upland site along a semi-maintained trail.

Woodland Description-

Small (4-10 inch) eastern red cedar dominates the stand. Honey locust, shingle oak, and cherry are scattered. The understory is hickory and shingle oak.

Management Recommendations - Even Age

Implement weed tree eradication practices in 2014 to remove cedars and allow better oak regeneration.

Stand 4: 17.0 acres

Site Description -

Stand 4 is an upland site with a southern aspect and a drainage running through the middle.

Woodland Description-

Small to medium-sized (6-14 inch) eastern red cedar dominate the stand. Shingle oak, red oak, elm, and cherry are scattered. The drainage has white oak, red oak, and shingle oak. The understory is ash, hickory, and oak.

Management Recommendations - Even Age

Implement weed tree eradication practices in 2014 to encourage oak regeneration.

Stand 5: 10.6 acres

Site Description -

Stand five is primarily a bottomland site.

Woodland Description-

Medium-sized (8-18 inch) shingle oak, cherry, Osage orange, and honey locust dominate the stand. White oak, eastern red cedar, elm, ash, and river birch are scattered. The understory is hickory, multi-flora rose, ash, and ribes.

Management Recommendations - Even Age

Crop tree release practices should be implemented in 2024 to manage for any oaks.

Stand 6: 21.2 acres

Site Description -

Stand 6 consists of a southwest facing slope running to a ditch.

Woodland Description-

Small to large diameter (6-24 inch) white oak, shingle oak, and shagbark hickory dominate the stand. Red oak, cherry, eastern red cedar and elm are scattered. The understory is ironwood, eastern red cedar, hickory, oak, multi-flora rose, ash, and prickly ash.

Management Recommendations - Even Age

Re-inventory this stand in 2014.

Stand 7: 21.2 acres

Site Description -

Stand 7 is an upland site.

Woodland Description-

Medium-sized (6-16 inch) eastern red cedars dominate the stand. Osage orange, honey locust, and shingle oak are scattered. The understory is hickory, oak, cherry, ash, multi-flora rose, and eastern red cedar.

Management Recommendations - Even Age

Conduct weed tree eradication practices in 2024 to release oaks for better natural regeneration.

Stand 8: 14.8 acres

Site Description -

Stand 8 is an upland site with a general north facing slope.

Woodland Description-

Medium-sized (6-16 inch) eastern red cedar dominates the stand. Shingle oak, Osage orange, and honey locust are scattered. The understory is hard maple, cherry, oak, elm, honey locust, and eastern red cedar.

Management Recommendations - Even Age

Convert the stand in 2024 to bring back oaks on the site.

Stand 9: 2.7 acres

Site Description -

Stand 9 has a general north facing slope.

Woodland Description-

Small (6-12 inch) eastern red cedar and honey locust dominate the stand. Shingle oak and mixed shrubs are scattered. The understory is multi-flora rose.

Management Recommendations - Even Age

Convert the stand in 2024 to bring oaks back to the site.

Stand 10: 12.5 acres

Site Description -

Stand 10 is positioned on a generally north facing slope in the upland.

Woodland Description-

Small to medium-sized (6-14 inch) honey locust, Osage orange, elm, and hard maple dominate the stand. Walnut, eastern red cedar, shingle oak, red oak, and basswood are scattered. The understory is hard maple, ash, shingle oak, ironwood, and mixed shrubs.

Management Recommendations - Even Age

Conduct weed tree eradication practices in 2024 to remove undesirable species. Interplant native hardwoods.

Stand 11: 5.4 acres

Site Description -

Stand 11 is an upland site with gentle south facing slopes.

Woodland Description-

Small to medium-sized (4-14 inch) eastern red cedar dominates the stand. Cherry, hard maple, walnut, Osage orange, shingle oak, and elm are scattered. The understory is elm, hickory, and ash.

Management Recommendations - Even Age

Conduct weed tree eradication practices in 2014 to remove undesirable species and interplant native hardwoods.

Stand 12: 56.5 acres

Site Description -

Stand 12 is an upland site with general north facing slopes.

Woodland Description-

Large diameter (10-26 inch) white oaks dominate the stand. Red oak, black oak, shagbark hickory, and hard maple are scattered. There is a small patch of chinkapin oaks. The understory is ironwood, oak, hard maple, and hickory.

Management Recommendations - Even Age

Shelterwood harvest the stand in 2014 to increase oak regeneration.

Stand 13: 3.5 acres

Site Description -

Stand 13 is positioned on the upland.

Woodland Description-

Medium-sized (8-14 inch) eastern red cedar dominates the stand. Osage orange, shingle oak, and honey locust are scattered. The understory is ironwood.

Management Recommendations - Even Age

Implement weed tree eradication practices on the stand in 2014 to remove undesirable species and interplant native hardwoods.

Stand 14: 25.2 acres

Site Description -

Stand 14 is an upland site.

Woodland Description-

Small (6-12 inch) eastern red cedars dominate the stand. Honey locust, shingle oak, elm, and cherry are scattered. The understory is sumac.

Management Recommendations - Even Age

Re-inventory the stand in 2014.

Stand 15: 22.2 acres

Site Description -

Stand 15 is an upland site with general southeast facing slopes.

Woodland Description-

Medium-sized (8-16 inch) eastern red cedar, shingle oak, black oak, and honey locust dominate the canopy. Red oak, white oak, swamp white oak, cherry, shagbark hickory, Osage orange, and walnut are scattered. The understory is hickory, oak, ironwood, ash, and hard maple.

Management Recommendations - Even Age

Re-inventory the stand in 2014.

Stand 16: 20.9 acres

Site Description -

Stand 16 is an upland site with a trail running through the middle of it.

Woodland Description-

Medium-sized (6-14 inch) eastern red cedar, shingle oak, honey locust, and Osage orange dominate the stand. Cherry, black oak, and elm are scattered. The understory is oak, honey locust, eastern red cedar, and sumac.

Management Recommendations - Even Age

Re-inventory the stand in 2014.

Stand 17: 9.2 acres

Site Description -

Stand 17 is an upland site with a drainage running through it.

Woodland Description-

Medium-sized (12-20 inch) white oak, and red oak dominate the stand. Shagbark hickory, black oak, and shingle oak are scattered. The understory is prickly ash, oak, hickory, and hard maple.

Management Recommendations - Even Age

Conduct crop tree release practices on the stand in 2014 to manage for oaks.

Stand 18: 1.7 acres

Site Description -

Stand 18 is an upland site along a property boundary.

Woodland Description-

Medium-sized (8-14 inch) white oak, shingle oak, and honey locust dominate the stand. Eastern red cedar, shagbark hickory, and Osage orange are scattered. The understory is oak, elm, and mixed shrubs.

Management Recommendations - Even Age

Re-inventory the stand in 2014.

Stand 19: 1.2 acres

Site Description -

Stand 19 is an upland site.

Woodland Description-

Small (2-4 inch) white pines dominate the stand. Shingle oak, black oak, and eastern red cedar are scattered.

Management Recommendations - Uneven Age

Re-inventory the stand in 2014.

Stand 20: 11.6 acres

Site Description -

Stand 20 is an upland site along a property boundary.

Woodland Description-

Medium-sized (8-14 inch) eastern red cedar, honey locust, and Osage orange dominate the stand. Shingle oak, bitternut hickory, silver maple, and hard maple are scattered. The understory is eastern red cedar, ironwood, and shingle oak.

Management Recommendations - Even Age

Re-inventory the stand in 2014.

Stand 21: 4.6 acres

Site Description -

Stand 21 is an upland site.

Woodland Description-

Small (4-10 inch) eastern red cedars dominate the stand. Shingle oak and Osage orange are scattered. The understory is hickory, ash, oak, multi-flora rose, and mixed shrubs.

Management Recommendations - Even Age

Conduct weed tree eradication practices in 2024 to remove undesirable species. Interplant native hardwoods.

Stand 22: 1.4 acres

Site Description -

Stand 22 is an upland site.

Woodland Description-

Small (2-4 inch) eastern red cedar, red oak, black oak, and shingle oak dominate the stand. Elm, honey locust, and multi-flora rose are scattered.

Management Recommendations - Even Age

Conduct routine tree planting maintenance in 2014.

Stand 23: 3.1 acres

Site Description -

Stand 23 is an upland site.

Woodland Description-

The stand is an open field with 2-3 foot eastern red cedar and shingle oaks encroaching.

Management Recommendations - Even Age

Remove encroaching trees and plant area to hardwoods in 2014.

Stand 24: 5.4 acres

Site Description -

Stand 24 is an upland site with a general north facing slope.

Woodland Description-

Medium-sized (8-14 inch) white oak, black oak, and bitternut hickory dominate the stand. Honey locust, elm, shagbark hickory, Osage orange, and shingle oak are scattered. The understory is oak, ash, and multi-flora rose.

Management Recommendations - Even Age

Crop tree release practices should be implemented in 2024 to manage for oaks. Remove weed trees.

Stand 25: 3.7 acres

Site Description -

Stand 25 is an upland site along a property boundary.

Woodland Description-

The stand is mostly open with encroaching eastern red cedar, red oak, shingle oak, honey locust, sumac and shagbark hickory.

Management Recommendations - Even Age

Remove undesirable species and plant with native hardwoods in 2014.

Stand 26: 10.4 acres

Site Description -

Stand 26 is an upland site.

Woodland Description-

Medium-sized (6-14 inch) eastern red cedar and ash dominate the stand. Elm, honey locust, and shingle oak are scattered. The understory is elm, honey locust, and eastern red cedar.

Management Recommendations - Even Age

Re-inventory the stand in 2014.

Stand 27: 34.2 acres

Site Description -

Stand 27 is an upland facing northeast.

Woodland Description-

Medium-sized (10-18 inch) red oak and shagbark hickory dominate the stand. Black oak, white oak, shingle oak, eastern red cedar, ash, basswood, and walnut are scattered. The understory is hard maple, hickory, ironwood, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2024 to manage for oaks.

Stand 28: 7.0 acres

Site Description -

Stand 28 is an upland site along a property boundary.

Woodland Description-

It is mostly an open area with 4-10 inch diameter eastern red cedars encroaching. The area also contains multi-flora rose and mixed shrubs.

Management Recommendations - Even Age

Remove encroachment and plant trees in 2024.

Stand 29: 19.3 acres

Site Description -

Stand 29 is an upland site.

Woodland Description-

Stand 29 is a mostly open site with some small eastern red cedar, black oak, shingle oak, shagbark hickory, sumac, and honey locust encroaching upon it.

Management Recommendations - Even Age

Remove encroachment and plant trees in 2024.

Stand 30: 18.5 acres

Site Description -

Stand 30 is an upland site with drainages running through it.

Woodland Description-

Medium-sized (4-14 inch) white oak and shagbark hickory dominate the stand. Black oak, red oak, cherry, elm, and honey locust are scattered. The understory is elm, ironwood, oak, prickly ash, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2024 to manage for oaks.

Stand 31: 1.0 acres

Site Description -

Stand 31 is an upland site on a property boundary.

Woodland Description-

Small (6-12 inch) red oak and eastern red cedar dominate the stand. White oak, shingle oak, and elm are scattered. The understory is oak, ironwood, hickory, and multi-flora rose.

Management Recommendations - Even Age

Re-inventory the stand in 2014.

Stand 32: 6.4 acres

Site Description -

Stand 32 is an upland site containing a drainage ditch.

Woodland Description-

Medium-sized (8-14 inch) white oak, red oak and shagbark hickory dominate the stand. Eastern red cedar, shingle oak, basswood, and sycamore are scattered. The understory is elm, oak, and ash.

Management Recommendations - Even Age

Re-inventory the stand in 2014.

Stand 33: 3.4 acres

Site Description -

Stand 33 is an upland site.

Woodland Description-

Small (4-12 inch) eastern red cedar and shingle oak dominate the stand. Red oak and mixed shrubs are scattered.

Management Recommendations - Even Age

Re-inventory the stand in 2014.

Stand 34: 1.5 acres

Site Description -

Stand 34 is an upland site with a ditch running through it.

Woodland Description-

Small (6-12 inch) shingle oak and red oak dominate the stand. White oak, ash, cherry, eastern red cedar, and elm are scattered. The understory is oak, elm, and ash.

Management Recommendations - Even Age

Re-inventory in 2014.

Stand 35: 3.3 acres

Site Description -

Stand 35 is an upland site sloping north.

Woodland Description-

Medium-sized (6-16 inch) walnut and white oak dominate the stand. Shingle oak, black oak, swamp white oak, hard maple, elm, shagbark hickory, and ash are scattered. The understory is hard maple, ironwood, oak, and hickory.

Management Recommendations - Even Age

Re-inventory the stand in 2014.

Stand 36: 16.6 acres

Site Description -

Stand 36 is an upland site with drainage ditches and gently rolling slopes.

Woodland Description-

Medium-sized (8-18 inch) white oaks dominate the stand. Red oak, black oak, shagbark hickory, ash, cherry, and hard maple are scattered. The understory is hickory, oak, ash, multi-flora rose, and ironwood.

Management Recommendations - Even Age

Conduct crop tree release practices in 2014 to manage for oaks.

Croton Unit Management Prescriptions

Compartment 5

Stand 1: 42.5 acres

Site Description -

Stand 1 is located on an upland site on a north facing slope.

Woodland Description-

Medium-sized (10-18 inch) white oaks dominate the stand. Red oak, black oak, shagbark hickory, elm, and cherry are scattered. The understory is ironwood, ash, oak, hickory, and prickly ash.

Management Recommendations - Even Age

Re-inventory the stand in 2014.

Stand 2: 18.7 acres

Site Description -

Stand 2 is positioned on an upland site having a west facing slope.

Woodland Description-

Medium-sized (10-20 inch) white oaks dominate the stand. Red oak, black oak, and shagbark hickory are scattered. The understory is prickly ash, hickory, oak, and ironwood.

Management Recommendations - Even Age

Conduct crop tree release practices in 2014 to manage for oaks.

Stand 3: 34.3 acres

Site Description -

This stand is positioned on an upland having a north facing slope.

Woodland Description-

Medium-sized (8-18 inch) white oak and red oak dominate the stand. Shagbark hickory, cherry, and honey locust are scattered. The understory is ironwood, elm, oak, hickory, mixed shrubs, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2014 to manage for oaks.

Stand 4: 22.3 acres

Site Description -

Stand 4 is an upland site.

Woodland Description-

Medium-sized (12-18 inch) white oaks dominate the stand. Red oak, black oak, shagbark hickory, cherry, and honey locust are scattered. The understory is ironwood, elm, hickory, oak, and prickly ash.

Management Recommendations - Even Age

Re-inventory this stand in 2014.

Stand 5: 5.1 acres

Site Description -

Stand 5 is on an upland site.

Woodland Description-

Small to medium-sized (6-14 inch) eastern red cedar dominates the stand. Shingle oak, hard maple, elm, and honey locust are scattered. The understory is multi-flora rose, ironwood, and mixed shrubs.

Management Recommendations - Even Age

Re-inventory this stand in 2014.

Stand 6: 28.2 acres

Site Description -

Stand 6 is positioned on an upland having a southeast facing slope.

Woodland Description-

Medium-sized (10-16 inch) black oak, and shagbark hickory dominate the stand. Cherry, white oak, red oak, shingle oak, bitternut hickory, elm, and honey locust are scattered. The understory is oak, ironwood, hickory, prickly ash, and mixed shrubs.

Management Recommendations - Even Age

Conduct crop tree release practices in 2024 to manage for oaks.

Stand 7: 42.3 acres

Site Description -

Stand 7 is a site in the upland with gently rolling hills throughout.

Woodland Description-

Medium-sized (10-18 inch) white oaks dominate the stand. Red oak, shingle oak, shagbark hickory, bitternut hickory, cherry, elm, and honey locust are scattered. The understory is ironwood, hickory, oak, and hard maple.

Management Recommendations - Even Age

Re-inventory this stand in 2014.

Stand 8: 32.1 acres

Site Description -

Stand 8 is positioned in the bottomland.

Woodland Description-

Medium-sized (8-16 inch) walnut, elm, and honey locust dominate the stand. Swamp white oak, shingle oak, cottonwood, shagbark hickory, and hard maple are scattered. The understory is hackberry, hard maple, eastern red cedar, hickory, and multi-flora rose.

Management Recommendations - Uneven Age

Conduct selective management thinning practices in 2024 to manage for oaks and walnut.

Stand 9: 31.8 acres

Site Description -

Stand 9 is located on an upland having a south facing slope.

Woodland Description-

Medium-sized (8-16 inch) white oaks dominate the stand. Elm, hard maple, red oak, hackberry, basswood, walnut, and cherry are scattered. The understory is hard maple, bitternut hickory, ironwood, prickly ash, and oak.

Management Recommendations - Even Age

Re-inventory in 2014.

Stand 10: 6.0 acres

Site Description -

Stand 10 is positioned on an upland site.

Woodland Description-

Medium-sized (8-14 inch) shingle oak and eastern red cedar dominate the stand. Hard maple, cherry, ironwood, hickory, red oak, and black oak are scattered. The understory is ironwood, oak, multi-flora rose, eastern red cedar, and hickory.

Management Recommendations - Even Age

Implement weed tree eradication methods in 2024 to release the oak understory.

Stand 11: 11.0 acres

Site Description -

Stand 11 is located on an upland site.

Woodland Description-

Medium-sized (8-14 inch) white pines dominate the stand. Cherry, elm, and honey locust are scattered. The understory is hackberry, hard maple, oak, elm, hickory, and eastern red cedar.

Management Recommendations - Uneven Age

Re-inventory this stand in 2014.

Stand 12: 12.0 acres

Site Description -

Stand 12 is an upland site with a west facing slope.

Woodland Description-

Medium-sized (10-20 inch) white oak, red oak, and shagbark hickory dominate the stand. Mockernut hickory, black oak, shingle oak, hard maple, and ash are scattered. The understory is hickory, hard maple, ironwood, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2024 to manage for oaks.

Stand 13: 1.8 acres

Site Description -

Stand 13 is an upland site.

Woodland Description-

Small (2-8 inch) eastern red cedar dominates the stand. Honey locust, and elm are scattered. The stand is a mostly open area with some woody encroachment.

Management Recommendations - Even Age

Re-inventory this stand in 2014.

Croton Unit Management Prescriptions

Compartment 6

Stand 1: 7.0 acres

Site Description -

Stand 1 is an upland site with gently rolling hills along a property boundary.

Woodland Description-

Medium-sized (6-18 inch) white oak and shagbark hickory dominate the stand. Red oak, black oak, and cherry are scattered. The understory is prickly ash, ironwood, oak, and hickory.

Management Recommendations - Even Age

Re-inventory the stand in 2014.

Stand 2: 6.6 acres

Site Description -

Stand 2 is an upland site sloping southwest along a road and property boundary.

Woodland Description-

Medium-sized (4-14 inch) white oak, red oak, black oak, and shagbark hickory dominate the stand. Cherry and elm are scattered. The understory is prickly ash, hickory, oak, and ironwood.

Management Recommendations - Even Age

Implement weed tree eradication practices in 2014 to remove the ironwood and elm.

Stand 3: 19.6 acres

Site Description -

Stand 3 is an upland site with some gently rolling slopes.

Woodland Description-

Medium-sized (6-20 inch) white oak and shagbark hickory dominate the stand. Ash, post oak, and red oak are scattered. The understory is oak, hickory, elm, ironwood, prickly ash, and ash.

Management Recommendations - Even Age

Clearcut harvest the area in 2014 to increase oak regeneration.

Stand 4: 31.5 acres

Site Description -

Stand 4 is an upland site located along a property boundary.

Woodland Description-

Medium-sized (12-22 inch) white oak and shagbark hickory dominate the stand. Ash and cherry are scattered. The understory is ash, cherry, ironwood, oak, and elm.

Management Recommendations - Even Age

Shelterwood harvest the stand in 2014 to increase oak regeneration.

Stand 5: 34.6 acres

Site Description -

Stand 5 is an upland site sloping east.

Woodland Description-

Medium-sized (8-22 inch) white oak, red oak and black oak dominate the stand. Cherry and shagbark hickory are scattered. The understory is ironwood, oak, hickory, and cherry.

Management Recommendations - Even Age

Conduct crop tree release practices in 2014 to manage for oaks.

Stand 6: 16.3 acres

Site Description -

Stand 6 is an upland site sloping west.

Woodland Description-

Medium-sized (8-18 inch) white oaks dominate the stand. Black oak, red oak, bitternut hickory and shagbark hickory are scattered. The understory is ironwood, elm, and prickly ash

Management Recommendations - Even Age

Conduct crop tree release practices in 2014 to manage for oaks.

Stand 7: 34.8 acres

Site Description -

Stand 7 is an upland site with a general north facing slope.

Woodland Description-

Medium-sized (10-20 inch) white oaks dominate the stand. Black oak, red oak, and shagbark hickory are scattered. The understory is ironwood, prickly ash, hickory, and elm.

Management Recommendations - Even Age

Conduct crop tree release practices in 2014 to manage for oaks.

Stand 8: 7.2 acres

Site Description -

Stand 8 is a bottomland site bordering a creek.

Woodland Description-

Medium-sized (12-20 inch) walnut and bitternut hickory dominate the stand. Swamp white oak, white oak, red oak, cottonwood, elm, honey locust, and hackberry are scattered. The understory is hickory, oak, and elm.

Management Recommendations - Uneven Age

Conduct selective management thinning practices in 2014 to manage for oaks and walnut.

Stand 9: 12.4 acres

Site Description -

Stand 9 is a west facing upland site.

Woodland Description-

Medium-sized (12-20 inch) white oaks dominate the stand. Red oak and shagbark hickory are scattered. The understory is ironwood, hickory, and oak.

Management Recommendations - Even Age

Re-inventory the stand in 2014.

Stand 10: 21.6 acres

Site Description -

Stand 10 is an upland site with gently rolling hills having primarily a southern aspect.

Woodland Description-

Medium-sized (10-18 inch) white oaks dominate the stand. Red oak, black oak, shagbark hickory and cherry are scattered. The understory is hickory, elm, oak, and cherry.

Management Recommendations - Even Age

Clearcut harvest the area in 2024 to ensure continued presence of oak.

Stand 11: 3.3 acres

Site Description -

Stand 11 is an upland site with a minor west facing slope.

Woodland Description-

Small (6-12 inch) ash, elm and bitternut hickory dominate the stand. White oak, black oak, shagbark hickory, and cherry are scattered. The understory is ironwood, elm, hickory, oak, and ash.

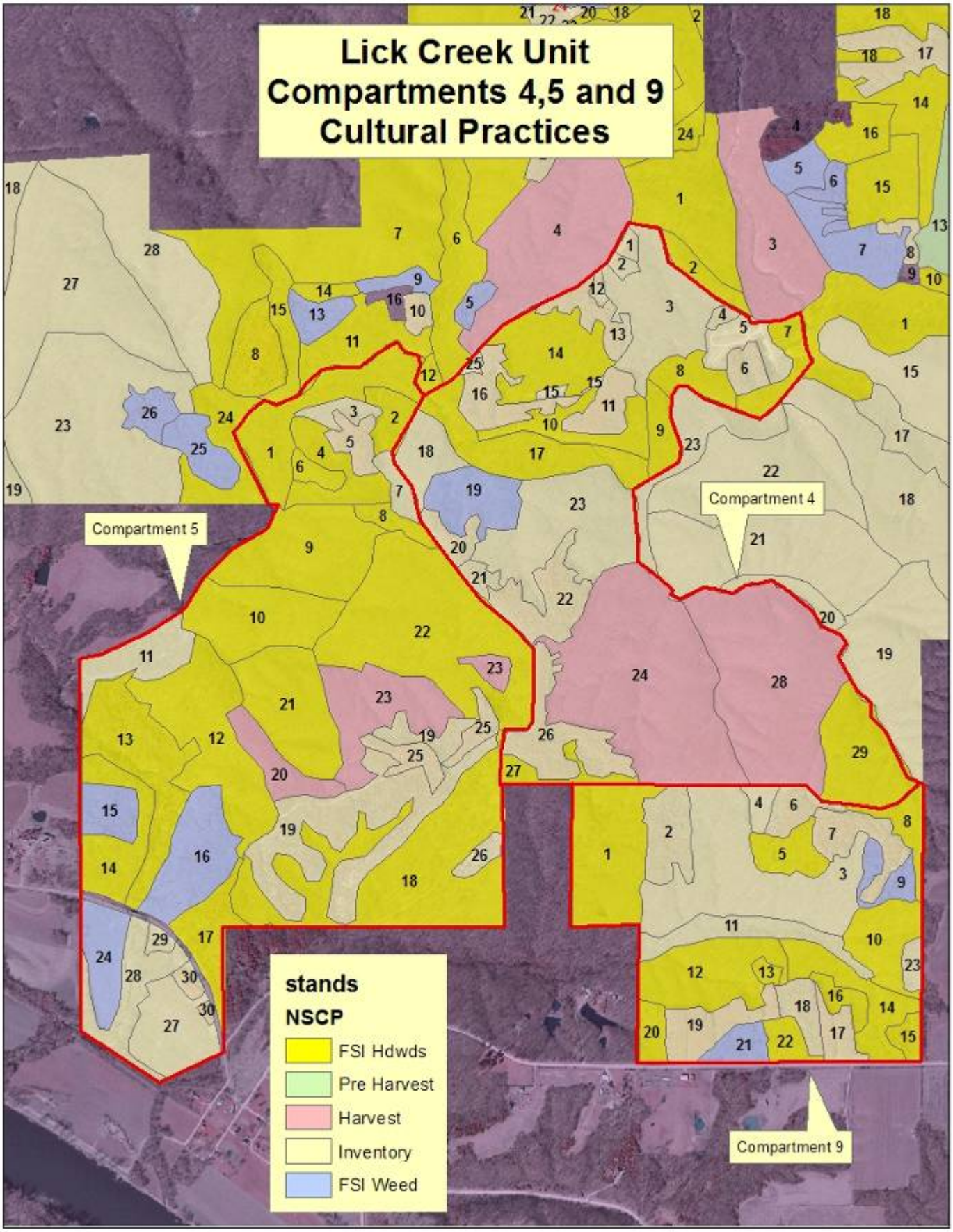
Management Recommendations - Even Age

Conduct crop tree release practices in 2014 to manage for oaks.

Work Plan Summary for Croton Unit Compartments 1,5 & 6

Fiscal Year	Unit	Comp.	Stand(s)	Management Activity	Acres	Cost	Est. Board Foot	Revenue
2009	Croton	6	3,4	Pre harvest treatment	51.1	$8,176		
2014	Croton	1	2,12,17,36	Crop Tree Release	63.4	$7,608		
	Croton	1	3,4,11	Weed Tree Eradication	32.2	$5,152		
	Croton	1	23,25	Tree Planting	6.8	$2,720		
	Croton	1	22	Tree Planting Maintenance	1.4	$56		
	Croton	5	2,3	Crop Tree Release	53	$6,360		
	Croton	6	5,6,7,11	Crop Tree Release	89	$10,680		
	Croton	6	8	Selective Mgmt Thin	7.2	$864		
	Croton	6	4	Shelter Wood Harvest	31.5		66,200	$20,000
	Croton	6	3	Clear cut Harvest	19.6		94,000	$28,200
	Croton	6	2	Weed Tree Eradication	6.6	$1,056		
	Croton	1,5,6	ALL STANDS	Re inventory	896.5			
2019	Croton	1	1,37	Pre harvest treatment	42.3	$6,768		
	Croton	6	10	Pre harvest treatment	21.6	$3,456		
2024	Croton	1	5,24,27,30	Crop Tree Release	68.7	$8,244		
	Croton	1	8,9	Stand Conversion	17.5	$7,000		
	Croton	1	37	Shelter Wood Harvest	27.3		73,700	$22,000
	Croton	1	1	Clear cut Harvest	15		43,200	$13,000
	Croton	1	7,10,13,21	Weed Tree Eradication	41.8	$6,688		
	Croton	1	28,29	Tree Planting	26.3	$10,520		
	Croton	5	6,12	Crop Tree Release	40.2	$4,824		

Croton	5	8	Selective Mgmt Thin	32.1	$3,852		
Croton	5	10	Weed Tree Eradication	6	$960		
Croton	6	10	Clear cut Harvest	21.6		93,300	$28,000


Lick Creek Unit
Compartments 4,5 and 9
Cultural Practices
Compartment 5
Compartment 4
Compartment 9
stands
NSCP
FSI Hdwds
Pre Harvest
Harvest
Inventory
FSI Weed

Lick Creek Unit Management Prescriptions

Compartment 4

Stand 1: 1.0 acres

Site Description -
Stand 1 is an upland site along a road.

Woodland Description-
Small (6-10 inch) red pines dominate the stand. Cherry, black oak, elm, and black locust are scattered. The understory is oak, hickory, ash, elm, and box elder.

Management Recommendations - Uneven Age
Re-inventory in 2015.

Stand 2: 1.0 acres

Site Description -
Stand 2 is an upland site along a road.

Woodland Description-
Medium-sized (12-18 inch) tulip poplars dominate the stand. Black locust and elm are scattered. The understory is elm and tulip poplar.

Management Recommendations - Even Age
Re-inventory the stand in 2015.

Stand 3: 20.2 acres

Site Description -
Stand 3 is an upland site having a south facing slope.

Woodland Description-
Medium-sized (10-16 inch) honey locust, black locust, elm, and ash dominate the stand. Cherry, walnut, red oak, and shagbark hickory are scattered. The understory is cherry, oak, multi-flora rose, elm, and ironwood.

Management Recommendations - Even Age
Re-inventory this stand in 2015.

Stand 4: 1.0 acres

Site Description -

Stand 4 is an upland site along a road and near lower campground.

Woodland Description-

Medium-sized (12-22 inch) white pine, and red pine dominate the stand. The understory is cherry and elm.

Management Recommendations - Uneven Age

Re-inventory this stand in 2015.

Stand 5: 6.1 acres

Site Description -

Stand 5 is the Lick Creek Lower Campground.

Management Recommendations

Continue to maintain for best recreational use.

Stand 6: 3.4 acres

Site Description -

Stand 6 is a bottomland area near lower campground.

Woodland Description-

Medium-sized (8-18 inch) white pine and red pine dominate the stand. Cherry, honey locust, and elm are scattered. The understory is oak, box elder, elm, hackberry, ash, and mixed shrubs.

Management Recommendations - Uneven Age

Re-inventory this stand in 2015.

Stand 7: 5.9 acres

Site Description -

Stand 7 is a bottomland site near lower campground.

Woodland Description-

Medium-sized (8-18 inch) black walnut dominates the stand. Elm and honey locust are scattered. The understory is cherry, elm, and multi-flora rose.

Management Recommendations - Uneven Age

Conduct selective management thinning practices in 2015 to manage for walnuts.

Stand 8: 5.5 acres

Site Description -

Stand 8 is a bottomland area near the lower campground.

Woodland Description-

Medium-sized (10-18 inch) honey locust, walnut, and black locust dominate the stand. River birch, swamp white oak, black oak, shingle oak, cherry, cottonwood, and elm are scattered. The understory is multi-flora rose, oak, and walnut.

Management Recommendations - Uneven Age

Conduct selective management thinning practices in 2015 to manage for oaks and walnuts.

Stand 9: 4.8 acres

Site Description -

Stand 9 is a bottomland site.

Woodland Description-

Medium-sized (10-18 inch) black locust, honey locust, and elm dominate the stand. Shagbark hickory, walnut, and cherry are scattered. The understory is multi-flora rose, hickory, cherry, and oak.

Management Recommendations - Uneven Age

Conduct selective management thinning practices in 2015 to manage for oaks and walnuts.

Stand 10: 8.0 acres

Site Description -

Stand 10 is an upland site along Lick Creek.

Woodland Description-

Medium-sized (6-20 inch) white oak, red oak, and bitternut hickory dominate the stand. Shagbark hickory, shingle oak, cherry, walnut, and honey locust are scattered. The understory is ironwood, hickory, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2015 to manage for oak and walnut.

Stand 11: 5.6 acres

Site Description -

Stand 11 is an upland site.

Woodland Description-

Medium-sized (8-14 inch) red pines dominate the stand. Black locust, elm, and cherry are scattered. The understory is oak, elm, hickory, and box elder.

Management Recommendations - Uneven Age

Re-inventory in 2015.

Stand 12: 0.8 acres

Site Description -

Stand 12 is an upland site along a road.

Woodland Description-

Medium-sized (12-18 inch) tulip poplars dominate the stand. Black locust and elm are scattered. The understory is elm and tulip poplar.

Management Recommendations - Even Age

Re-inventory the stand in 2015.

Stand 13: 5.5 acres

Site Description -

Stand 13 is an upland site along a road.

Woodland Description-

Medium-sized (10-20 inch) white pine and red pine dominate the stand. Elm, cherry, white oak, and shingle oak are scattered. The understory is hickory, oak, elm, ash, and mixed shrubs.

Management Recommendations - Uneven Age

Re-inventory in 2015.

Stand 14: 16.5 acres

Site Description -

Stand 14 is an upland site with a south facing slope.

Woodland Description-

Medium-sized (6-16 inch) honey locust, black locust, and elm dominate the stand. Swamp white oak, red oak, shingle oak, hackberry, and cherry are scattered. The understory is oak, multi-flora rose, hickory, and elm.

Management Recommendations - Even Age

Conduct crop tree release practices in 2015 to manage for oaks.

Stand 15: 0.9 acres

Site Description -

Stand 15 is an open are near a trail.

Woodland Description-

Open grassy area.

Management Recommendations - Even Age

Maintain horse trail and re-inventory in 2015.

Stand 16: 7.9 acres

Site Description -

Stand 16 is an upland area by a road and a horse trail.

Woodland Description-

Medium-sized (6-14 inch) red pine dominates the stand. Elm, cherry, and honey locust are scattered. The understory is hickory, ironwood, oak, elm, hackberry, ash, basswood, and mixed shrubs.

Management Recommendations - Uneven Age

Re-inventory in 2015.

Stand 17: 16.8 acres

Site Description -

Stand 17 is a bottomland site.

Woodland Description-

Medium-sized (8-20 inch) walnut, elm, and honey locust dominate the stand. Bitternut, swamp white oak, red oak, sycamore, cherry, cottonwood, hackberry, and basswood are scattered. The understory is multi-flora rose, oak, ironwood, cherry, and mixed shrubs.

Management Recommendations - Uneven Age

Conduct selective management thinning practices in 2015 to manage for oak and walnut.

Stand 18: 6.9 acres

Site Description -

Stand 18 is an upland site with a slight northwest facing slope.

Woodland Description-

Medium-sized (12-20 inch) white oaks dominate the stand. Red oak, black oak, shagbark hickory, and walnut are scattered. The understory is ironwood, hard maple, elm, hickory, and oak.

Management Recommendations - Even Age

Re-inventory stand in 2015.

Stand 19: 10.1 acres

Site Description -

Stand 19 is an upland site with gently rolling hills.

Woodland Description-

Medium-sized (6-16 inch) white oak, red oak, and ash dominate the stand. Shagbark hickory and cherry are scattered. The understory ironwood, ash, oak, elm, prickly ash, and cherry.

Management Recommendations - Even Age

Complete weed tree eradication methods in 2015 to release oaks and allow for better growth.

Stand 20: 3.5 acres

Site Description -

Stand 20 is an upland area near a trail.

Woodland Description-

Medium-sized (8-18 inch) white pine dominates the stand. Red oak, ash, and cherry are scattered. The understory is ironwood, elm, prickly ash, and mixed shrubs.

Management Recommendations - Uneven Age

Re-inventory in 2015.

Stand 21: 1.9 acres

Site Description -

Stand 21 is an upland site near a trail.

Woodland Description-

Medium-sized (6-14 inch) eastern red cedar, red pine, and elm dominate the stand. Red oak, white oak, and black oak are scattered. The understory is elm, oak, ash, and hickory.

Management Recommendations - Even Age

Re-inventory in 2015.

Stand 22: 10.5 acres

Site Description -

Stand 22 is an upland area near a trail.

Woodland Description-

Medium-sized (8-16 inch) white pine and red pine dominate the stand. Elm, eastern red cedar, and shingle oak are scattered. The understory is ash, ironwood, elm, oak, and hickory.

Management Recommendations - Uneven Age

Re-inventory in 2015.

Stand 23: 27.2 acres

Site Description -

Stand 23 is an upland site with gently rolling slopes.

Woodland Description-

Medium to large (12-26 inch) red oak, black oak, white oak, and shagbark hickory dominate the stand. Elm, basswood, and cherry are scattered. The understory is ash, ironwood, hard maple, and oak.

Management Recommendations - Even Age

Re-inventory stand in 2015.

Stand 24: 56.5 acres

Site Description -

Stand 24 is an upland site with rolling hills.

Woodland Description-

Medium-sized (10-20 inch) red oak, white oak, and shagbark hickory dominate the stand. Ash and cherry are scattered. The understory is ironwood, elm, and ash.

Management Recommendations - Even Age

Conduct a Shelterwood harvest in 2025 to increase oak regeneration.

Stand 25: 0.7 acres

Site Description -

Stand 25 is a bottomland area near a road and a trail.

Woodland Description-

Medium to large (12-24 inch) silver maple dominates the stand. Elm and honey locust are scattered. The understory is multi-flora rose, elm, and mixed shrubs.

Management Recommendations - Even Age

Re-inventory in 2015.

Stand 26: 13.0 acres

Site Description -

Stand 26 is an upland area near a trail.

Woodland Description-

Medium-sized (8-16 inch) white pine and red pine dominate the stand. Honey locust, elm, eastern red cedar, and cherry are scattered. The understory is hickory, ironwood, elm, ash, oak, and multi-flora rose.

Management Recommendations - Uneven Age

Re-inventory the stand in 2015.

Stand 27: 3.9 acres

Site Description -

Stand 27 is an upland site near a trail.

Woodland Description-

Medium-sized (8-14 inch) honey locust, walnut, and black oak dominate the stand. Elm, red oak, shingle oak, and eastern red cedar are scattered. The understory is elm, oak, and multi-flora rose.

Management Recommendations - Even Age

Conduct crop tree release practices in 2015 to manage for oaks and walnut.

Stand 28: 45.3 acres

Site Description -

Stand 28 is an upland site with some gently rolling hills.

Woodland Description-

Medium-sized (12-20 inch) white oak, black oak, and red oak, dominate the stand. Ash and shagbark hickory are scattered. The understory is ash, elm, prickly ash, and oak.

Management Recommendations - Even Age

Conduct a Shelterwood harvest in 2015 to increase oak regeneration.

Stand 29: 16.2 acres

Site Description -

Stand 29 is an upland site with a northwest facing slope.

Woodland Description-

Medium-sized (10-18 inch) white oak, red oak, and black oak dominate the stand. Shagbark hickory, elm, and ash are scattered. The understory is oak, elm, ash, hickory, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2015 to manage for oaks.

Lick Creek Unit Management Prescriptions

Compartment 5

Stand 1: 17.3 acres

Site Description -
Stand 1 is a bottomland site.

Woodland Description-
Medium-sized (10-16 inch) walnut dominates the stand. Elm, honey locust, swamp white oak, river birch, and hackberry are scattered. The understory is elm, ash, and multi-flora rose.

Management Recommendations - Uneven Age
Conduct selective management thinning practices in 2025 to manage for oaks and walnuts.

Stand 2: 4.6 acres

Site Description -
Stand 2 is an upland site along a trail.

Woodland Description-
Medium-sized (8-20 inch) swamp white oak, walnut, and red oak dominate the stand. Bitternut hickory, shagbark hickory, white oak, shingle oak, tamarack, cherry, and elm are scattered. The understory is elm, multi-flora rose, hickory, and mixed shrubs.

Management Recommendations - Even Age
Conduct crop tree release practices in 2025 to manage for oak and walnut.

Stand 3: 2.9 acres

Site Description -
Stand 3 is an upland site.

Woodland Description-
Medium-sized (12-22 inch) red oak, swamp white oak, and walnut dominate the stand. Cherry, ash, and shagbark hickory are scattered. The understory is elm, hackberry, and oak.

Management Recommendations - Even Age
Re-inventory this stand in 2015.

Stand 4: 8.7 acres

Site Description -

Stand 4 is an upland site.

Woodland Description-

Medium-sized (6-16 inch) elm and black locust dominate the stand. Walnut, black oak, white oak, and swamp white oak are scattered. The understory is multi-flora rose, elm, hickory, ash, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2025 to manage for oak and walnut.

Stand 5: 4.0 acres

Site Description -

Stand 5 is an upland site.

Woodland Description-

Medium-sized (6-20 inch) white pines dominate the stand. Cherry, elm, and black locust are scattered. The understory is oak, elm, hickory, ash, multi-flora rose, and elm.

Management Recommendations - Uneven Age

Re-inventory in 2015.

Stand 6: 2.5 acres

Site Description -

Stand 6 is an upland site.

Woodland Description-

Medium-sized (12-16 inch) white oaks dominate the stand. Swamp white oak, black oak, cherry, and basswood are scattered. The understory is elm, oak, and cherry.

Management Recommendations - Even Age

Conduct crop tree release practices in 2015 to manage for oaks.

Stand 7: 3.2 acres

Site Description -

Stand 7 is an upland site with a general north facing slope.

Woodland Description-

Medium-sized (14-22 inch) white oaks dominate the stand. Red oak, bitternut hickory, walnut, and shagbark hickory are scattered. The understory is hickory, elm, oak, and ironwood.

Management Recommendations - Even Age

Re-inventory stand in 2015.

Stand 8: 3.0 acres

Site Description -

Stand 8 is an upland site.

Woodland Description-

Medium-sized (10-16 inch) black oak dominates the stand. Red oak, shingle oak, cherry, bitternut hickory, shagbark hickory, eastern red cedar, and ash are scattered. The understory is hickory, ash, oak, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release in 2025 to manage for oak.

Stand 9: 22.6 acres

Site Description -

Stand 9 is an upland site with a west facing slope.

Woodland Description-

Medium-sized (12-20 inch) white oak, red oak, and black oak dominate the stand. Cherry, shagbark hickory, and honey locust are scattered. The understory is ironwood, oak, elm, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2015 to manage for oak.

Stand 10: 18.0 acres

Site Description -

Stand 10 is an upland site with a west facing slope.

Woodland Description-

Medium-sized (12-20 inch) white oak, red oak, and black oak dominate the stand. Cherry, shagbark hickory, and honey locust are scattered. The understory is ironwood, oak, elm, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2015 to manage for oak.

Stand 11: 9.2 acres

Site Description -

Stand 11 is a bottomland site along a property boundary.

Woodland Description-

Medium-sized (8-16 inch) walnut and elm dominate the stand. Silver maple, honey locust, and box elder are scattered. The understory is elm, and silver maple.

Management Recommendations - Uneven Age

Re-inventory in 2015.

Stand 12: 26.4 acres

Site Description -

Stand 12 is an upland site with a southwest facing slope.

Woodland Description-

Medium-sized (10-20 inch) white oak dominates the stand. Black oak, red oak, walnut, bitternut hickory, shagbark hickory, hard maple, basswood, cherry, and honey locust are scattered. The understory is ironwood, hickory, elm, hard maple, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2015 to manage for oak.

Stand 13: 20.7 acres

Site Description -

Stand 13 is a bottomland site.

Woodland Description-

Small (4-10 inch) eastern red cedar, cottonwood, and elm dominate the stand. Bitternut hickory, white oak, walnut, sycamore, honey locust, hackberry, cherry, and hard maple are scattered. The understory is ironwood, hickory, elm, and mixed shrubs.

Management Recommendations - Even Age

Conduct crop tree release practices in 2025 to manage for oak and walnut.

Stand 14: 11.3 acres

Site Description -

Stand 14 is an upland site with an east facing slope.

Woodland Description-

Medium-sized (8-12 inch) shagbark hickory, shingle oak, and red oak dominate the stand. Hard maple, walnut, honey locust, bitternut hickory, cherry, and white oak are scattered. The understory is hard maple, multi-flora rose, ironwood, hackberry, elm, and mixed shrubs.

Management Recommendations - Even Age

Conduct crop tree release practices in 2025 to manage for oaks.

Stand 15: 5.8 acres

Site Description -

Stand 15 is an upland site along a property boundary.

Woodland Description-

Medium-sized (6-12 inch) eastern red cedar, shingle oak, and red oak dominate the stand. Elm and bitternut hickory are scattered. The understory is elm, and mixed shrubs.

Management Recommendations - Even Age

Implement weed tree eradication techniques in 2025 to remove eastern red cedars.

Stand 16: 15.2 acres

Site Description -

Stand 16 is an upland site with a west facing slope.

Woodland Description-

Medium-sized (8-14 inch) white oak, red oak, and shagbark hickory dominate the stand. Eastern red cedar, hard maple, and ash are scattered. The understory is hard maple, hickory, ironwood, buckeye, and mixed shrubs.

Management Recommendations - Even Age

Implement weed tree eradication practices in 2025 to remove eastern red cedars.

Stand 17: 9.4 acres

Site Description -

Stand 17 is an upland site along Croton Road.

Woodland Description-

Medium-sized (8-12 inch) eastern red cedar dominates the stand. Ash, white oak, red oak, honey locust, shagbark hickory, and hackberry are scattered. The understory is hickory, oak, ash, elm, and multi-flora rose.

Management Recommendations - Even Age

Conduct crop tree release practices in 2025 to manage for oaks.

Stand 18: 46.2 acres

Site Description -

Stand 18 is an upland site having rolling hills.

Woodland Description-

Medium-sized (10-18 inch) white oak dominates the stand. Red oak, black oak, cherry, shagbark hickory, bitternut hickory, and elm are scattered. The understory is ironwood, elm, oak, hickory, and cherry.

Management Recommendations - Even Age

Conduct crop tree release practices in 2015 to manage for oaks.

Stand 19: 34.6 acres

Site Description -

Stand 19 is an upland site.

Woodland Description-

Medium-sized (8-16 inch) eastern red cedar dominates the stand. Cherry, ash, elm, honey locust, hard maple, bitternut hickory, red oak, and shingle oak are scattered. The understory is oak, hickory, multi-flora rose, and ash.

Management Recommendations - Even Age

Re-inventory in 2015.

Stand 20: 7.1 acres

Site Description -

Stand 20 is an upland site with a northwest facing slope.

Woodland Description-

Medium-sized (12-22 inch) red oak dominates the stand. Black oak, white oak, and cherry are scattered. The understory is oak, ironwood, hickory, hard maple, and elm.

Management Recommendations - Even Age

Shelterwood harvest the stand in 2025 to increase oak regeneration.

Stand 21: 19.1 acres

Site Description -

Stand 21 is an upland site with gently rolling hills.

Woodland Description-

Medium-sized (10-20 inch) white oak dominates the stand. Black oak, cherry, and shagbark hickory are scattered. The understory is elm, prickly ash, cherry, hickory, ironwood, hard maple, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2015 to manage for oaks.

Stand 22: 45.6 acres

Site Description -

Stand 22 is an upland site with rolling hills.

Woodland Description-

Medium-sized (12-20 inch) white oak, red oak, black oak, and shagbark hickory dominate the stand. Bitternut hickory and ash are scattered. The understory is hard maple, hickory, ironwood, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2015 to manage for oaks.

Stand 23: 19.5 acres

Site Description -

Stand 23 is an upland site.

Woodland Description-

Medium to large diameter (12-24 inch) white oak dominates the stand. Red oak, black oak, shagbark hickory, walnut, and cherry are scattered. The understory is hard maple, elm, and oak.

Management Recommendations - Even Age

Shelterwood harvest the stand in 2015 to manage for increased oak regeneration.

Stand 24: 8.7 acres

Site Description -

Stand 24 is a bottomland site.

Woodland Description-

Small diameter (2-8 inch) cottonwood and box elder dominate the stand. Pin oak, silver maple, walnut, red oak, and mulberry are scattered. The understory is garlic mustard.

Management Recommendations - Even Age

Implement weed tree eradication methods in 2025 and plant in oaks and walnuts

Stand 25: 6.6 acres

Site Description -

Stand 25 is an upland site along a trail.

Woodland Description-

Medium-sized (8-20 inch) white pine are red pine dominate the stand. Honey locust, cherry, elm, and eastern red cedar are scattered. The understory is oak, elm, ash, hickory, and Osage orange.

Management Recommendations - Uneven Age

Re-inventory in 2015.

Stand 26: 2.2 acres

Site Description -

Stand 26 is an upland site.

Woodland Description-

Medium-sized (8-12 inch) eastern red cedar dominates the stand. Red oak, white oak, shingle oak, ash, and cherry are scattered. The understory is hickory, hard maple, prickly ash, multi-flora rose, and mixed shrubs.

Management Recommendations - Even Age

Re-inventory in 2015.

Stand 27: 12.7 acres

Site Description -

Stand 27 is a bottomland site near Croton Road and a property boundary.

Woodland Description-

Small diameter (4-12 inch) walnut dominates the stand. Autumn olive is scattered.

Management Recommendations - Even Age

Re-inventory in 2015.

Stand 28: 11.1 acres

Site Description -

Stand 28 is a bottomland site.

Woodland Description-

Medium-sized (12-20 inch) cottonwood and silver maple dominate the stand. Box elder, black locust, and walnut are scattered. The understory is honeysuckle, autumn olive, and garlic mustard.

Management Recommendations - Uneven Age

Re-inventory in 2015.

Stand 29: 1.2 acres

Site Description -

Stand 29 is a bottomland site near Croton Road and a property boundary.

Woodland Description-

Small diameter (4-12 inch) walnut dominates the stand. Autumn olive is scattered.

Management Recommendations - Even Age

Re-inventory in 2015.

Stand 30: 2.0 acres

Site Description -

Stand 30 is an upland site near Croton Road.

Woodland Description-

Medium-sized (6-14 inch) white pine dominates the stand. The understory is honeysuckle.

Management Recommendations - Uneven Age

Re-inventory the stand in 2015.

Lick Creek Unit Management Prescriptions

Compartment 9

Stand 1: 21.1 acres

Site Description -
Stand 1 is an upland site near a trail.

Woodland Description-
Medium-sized (6-16 inch) white oak, black oak, and shagbark hickory dominate the stand. Bitternut hickory and eastern red cedar are scattered. The understory is ironwood, hickory, elm, and oak.

Management Recommendations - Even Age
Conduct crop tree release practices in 2025 to manage for oaks.

Stand 2: 8.4 acres

Site Description -
Stand 2 is an upland site near a trail.

Woodland Description-
Small to medium-sized (4-18 inch) eastern red cedar and shingle oak dominate the stand. Ash, cherry, black oak, and shagbark hickory are scattered. The understory is oak, hickory, multi-flora rose, ash, eastern red cedar, and prickly ash.

Management Recommendations - Even Age
Re-inventory in 2015.

Stand 3: 34.3 acres

Site Description -
Stand 3 is an upland site having gently rolling hills.

Woodland Description-
Medium to large (12-24 inch) white oak, red oak, black oak, and shagbark hickory dominate the stand. Ash, bitternut hickory, and elm are scattered. The understory is ironwood, hickory, prickly ash, and elm.

Management Recommendations - Even Age
Re-inventory stand in 2015.

Stand 4: 2.4 acres

Site Description -

Stand 4 is an upland area near a trail.

Woodland Description-

The stand is a white pine and red pine tree planting exhibiting some oak encroachment.

Management Recommendations - Uneven Age

Re-inventory stand in 2015.

Stand 5: 5.9 acres

Site Description -

Stand 5 is an upland area next to a pine stand.

Woodland Description-

Small (4-10 inch) ash dominates the stand. White oak, red oak, shingle oak, elm, honey locust, and shagbark hickory are scattered. The understory is hickory, elm, prickly ash, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2025 to manage for oaks.

Stand 6: 4.4 acres

Site Description -

Stand 6 is an upland site near a trail.

Woodland Description-

Medium-sized (8-12 inch) white pine and red pine dominate the stand. Elm and ash are scattered. The understory is cherry, elm, ash, honey locust, and mixed shrubs.

Management Recommendations - Uneven Age

Re-inventory the stand in 2015.

Stand 7: 8.0 acres

Site Description -

Stand 7 is an upland site near a trail.

Woodland Description-

Medium-sized (6-18 inch) white pine and red pine dominate the stand. Elm, honey locust, and cherry are scattered. The understory is elm, honey locust, and hackberry.

Management Recommendations - Uneven Age

Re-inventory the stand in 2015.

Stand 8: 4.8 acres

Site Description -

Stand 8 is an upland area with some northeast facing slopes.

Woodland Description-

Medium-sized (10-18 inch) white oak, red oak, and black oak dominate the stand. Shingle oak, honey locust, hackberry, shagbark hickory, and ash are scattered. The understory is ash, cherry, hickory, oak, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2025 to manage for oaks.

Stand 9: 4.2 acres

Site Description -

Stand 9 is an upland site.

Woodland Description-

Medium-sized (6-16 inch) red pine, white pine, eastern red cedar, elm, and shingle oak dominate the stand. Honey locust, white oak, and ash are scattered. The understory is elm, multi-flora rose, oak, hickory, ash, and prickly ash.

Management Recommendations - Even Age

Weed tree eradication practices should be implemented in 2025 to release oak seedlings.

Stand 10: 10.0 acres

Site Description -

Stand 10 is an upland site with some minor ditches through it.

Woodland Description-

Medium-sized (10-18 inch) white oak, red oak, black oak, and shagbark hickory dominate the stand. Ash, cherry, and bitternut hickory are scattered. The understory is oak, elm, ash, hickory, and ironwood.

Management Recommendations - Even Age

Conduct crop tree release practices in 2025 to manage for oaks.

Stand 11: 9.2 acres

Site Description -

Stand 11 is a bottomland site.

Woodland Description-

Medium-sized (10-20 inch) swamp white oak, black oak, and red oak dominate the stand. Cottonwood, shingle oak, walnut, honey locust, and elm are scattered. The understory is oak and elm.

Management Recommendations - Uneven Age

Re-inventory in 2015.

Stand 12: 16.7 acres

Site Description -

Stand 12 is an upland site with a north facing slope.

Woodland Description-

Medium-sized (10-20 inch) white oak, red oak, black oak, and shagbark hickory dominate the stand. Walnut and cherry are scattered. The understory is elm, ironwood, oak, cherry, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2015 to manage for oak.

Stand 13: 1.1 acres

Site Description -

Stand 13 is an upland site.

Woodland Description-

Small to medium-sized black oak and elm dominate the stand. Eastern red cedar, ash, cherry, shingle oak bitternut hickory, and shagbark hickory are scattered. The understory is ironwood, multi-flora rose, hickory, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2025 to manage for oaks.

Stand 14: 10.8 acres

Site Description -

Stand 14 is an upland site with some slight north facing slopes.

Woodland Description-

Medium-sized (10-18 inch) black oak, white oak, and red oak dominate the stand. Shagbark hickory and cherry are scattered. The understory is ironwood, ash, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2025 to manage for oaks.

Stand 15: 2.5 acres

Site Description -

Stand 15 is an upland site along a property boundary.

Woodland Description-

Small to medium-sized (4-14 inch) eastern red cedar, shingle oak, black oak, and swamp white oak dominate the stand. Honey locust, cherry, and elm are scattered. The understory is elm, oak, and eastern red cedar.

Management Recommendations - Even Age

Conduct crop tree release practices in 2025 to manage for oak.

Stand 16: 3.0 acres

Site Description -

Stand 16 is an upland site.

Woodland Description-

Small (6-10 inch) walnut and shingle oak dominate the stand. Ash, elm, black locust, eastern red cedar, honey locust, and Osage orange are scattered. The understory is mixed shrubs and elm.

Management Recommendations - Even Age

Conduct crop tree release practices in 2025 to manage for oak and walnut.

Stand 17: 4.0 acres

Site Description -

Stand 17 is an upland site along a road.

Woodland Description-

Medium-sized (8-18 inch) white pine dominates the stand. Elm and black locust are scattered. The understory is oak and shagbark hickory.

Management Recommendations - Uneven Age

Re-inventory in 2015.

Stand 18: 4.4 acres

Site Description -

Stand 18 is an upland site located near a trail and a road.

Woodland Description-

Medium-sized (8-14 inch) white pine, red pine, and eastern red cedar dominate the stand. Elm and hard maple are scattered. The understory is prickly ash, multi-flora rose, and mixed shrubs.

Management Recommendations - Uneven Age

Re-inventory the stand 2015.

Stand 19: 8.3 acres

Site Description -

Stand 19 is an upland site near trails and a road.

Woodland Description-

Medium-sized (8-18 inch) white pine and red pine dominate the stand. Cherry, elm, red oak, and shingle oak are scattered. The understory is hickory, ash, oak, cherry, ironwood, and mixed shrubs.

Management Recommendations - Uneven Age

Re-inventory the stand in 2015.

Stand 20: 3.3 acres

Site Description -

Stand 20 is an upland site with gentle slopes.

Woodland Description-

Medium-sized (10-14 inch) honey locust and black locust dominate the stand. White oak, walnut, and shagbark hickory are scattered. The understory is elm, ash, ironwood, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2025 to manage for oak.

Stand 21: 4.1 acres

Site Description -

Stand 21 is an upland site near a road.

Woodland Description-

Medium-sized (8-14 inch) eastern red cedar, red oak, shagbark hickory, and elm dominate the stand. Cherry, ash, shingle oak, and honey locust are scattered. The understory is ash, hickory, oak, cherry, multi-flora rose, and prickly ash.

Management Recommendations - Even Age

Implement weed tree eradication practices in 2025 to release oak seedlings.

Stand 22: 3.7 acres

Site Description -

Stand 22 is an upland site next to a road.

Woodland Description-

Medium-sized (8-14 inch) shagbark hickory and shingle oak dominate the stand. White oak, red oak, and elm are scattered. The understory is ash, elm, oak, and mixed shrubs.

Management Recommendations - Even Age

Conduct crop tree release practices in 2025 to manage for oaks.

Stand 23: 2.1 acres

Site Description -

Stand 23 is an upland site along a property boundary.

Woodland Description-

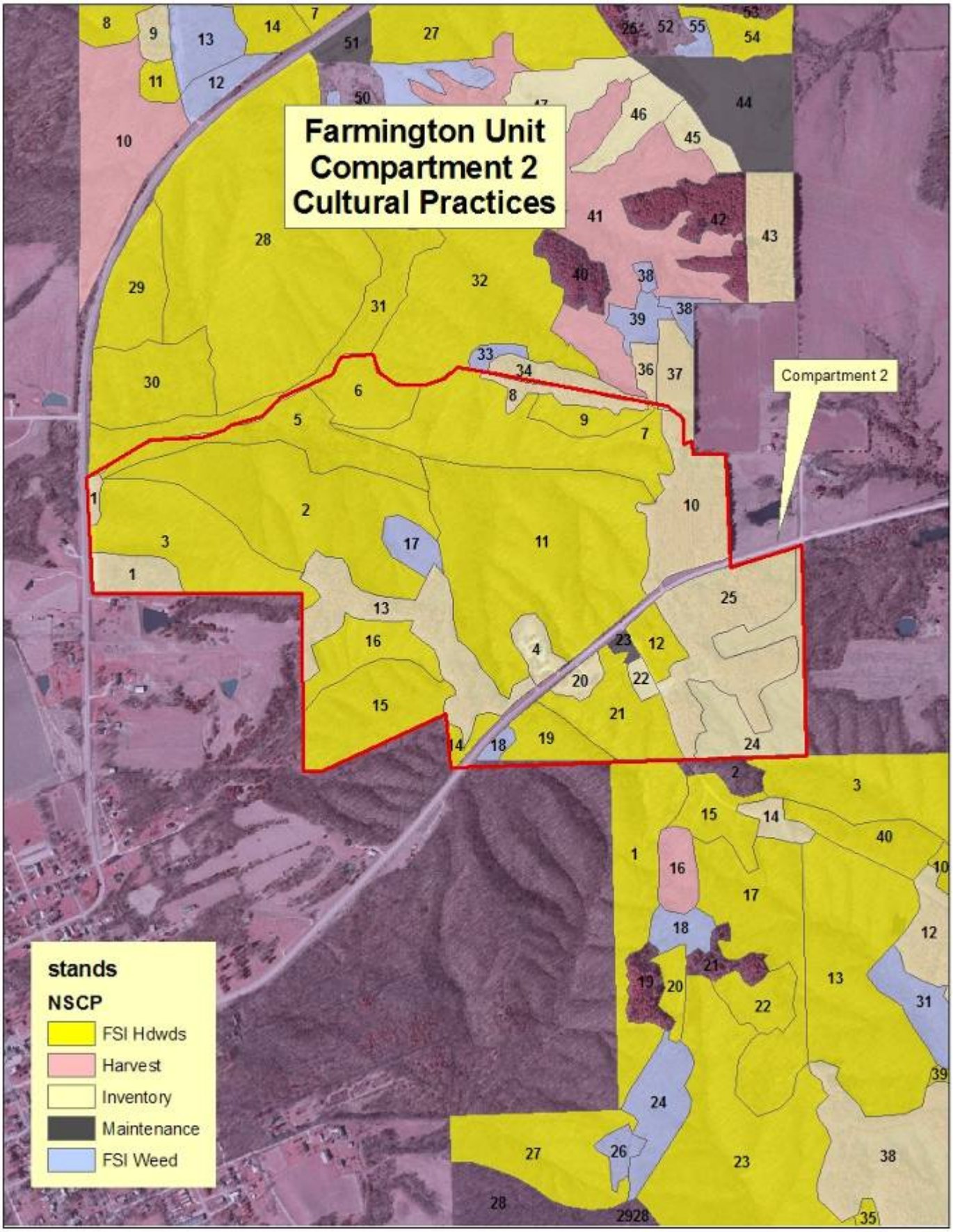
Small (4-10 inch) Eastern red cedar, shingle oak, and ash dominate the stand. Swamp white oak, black oak, and bitternut hickory are scattered. The understory is hickory and oak.

Management Recommendations - Even Age

Re-inventory the stand in 2015.

Work Plan Summary for Lick Creek Unit Compartments 4,5&9

Fiscal Year	Unit	Comp.	Stand(s)	Management Activity	Acres	Cost	Est. Board Foot	Revenue
2010	Lick Creek	4 5	28 23	Pre harvest treatment	64.8	$10,368		
2015	Lick Creek	4	10,14, 27,29	Crop Tree Release	44.6	$5,352		
	Lick Creek	4	7,8,9,17	Selective Mgmt Thin	33	$3,960		
	Lick Creek	4	28	Shelter Wood Harvest	45.3		177,000	$53,100
	Lick Creek	4	19	Weed Tree Eradication	10.1	$1,616		
	Lick Creek	5	6,9,10,12, 18,21,22	Crop Tree Release	162.4	$19,488		
	Lick Creek	5	23	Shelter Wood Harvest	19.5		41,000	$12,300
	Lick Creek	9	12	Crop Tree Release	16.7	$2,004		
	Lick Creek	4,5,9	ALL STANDS	Re inventory	884.5			
2020	Lick Creek	4 5	24 20	Pre harvest treatment	63.6	$10,176		
2025	Lick Creek	4	24	Shelter Wood Harvest	56.5		152,500	$46,000
	Lick Creek	5	2,4,8,13,14, 17	Crop Tree Release	57.7	$6,924		
	Lick Creek	5	1	Selective Mgmt Thin	17.3	$2,076		
	Lick Creek	5	20	Shelter Wood Harvest	7.1		26,000	$7,800
	Lick Creek	5	17	Tree Planting Maintenance	1.4	$56		
	Lick Creek	5	15,16,24	Weed Tree Eradication	29.7	$4,752		
	Lick Creek	9	1,5,8,10,13,14, 15,16,20,22	Crop Tree Release	66.2	$7,944		
	Lick Creek	9	9,21	Weed Tree Eradication	8.3	$1,328		


Farmington Unit
Compartment 2
Cultural Practices
Compartment 2
stands
NSCP
FSI Hdwds
Harvest
Inventory
Maintenance
FSI Weed

Farmington Unit Management Prescriptions

Compartment 2

Stand 1: 5.2 acres

Site Description -

Stand 1 is an upland site along a property boundary and a road.

Woodland Description-

Medium-sized (8-16 inch) Virginia pines dominate the stand. Cherry, elm, ash, hackberry, and black locust are scattered. The understory is oak, elm, hickory, and mixed shrubs.

Management Recommendations - Uneven Age

Re-inventory the stand in 2016.

Stand 2: 30.8 acres

Site Description -

Stand 2 is an upland site with rolling hills. The site's primary aspect is north.

Woodland Description-

Medium-sized (8-18 inch) white oak, red oak, and shagbark hickory dominate the stand. Bitternut hickory, ash, elm, and walnut are scattered. The understory is ash, elm, hickory, oak, and ironwood.

Management Recommendations - Even Age

Conduct crop tree release practices in 2016 to manage for oaks.

Stand 3: 18.5 acres

Site Description -

Stand 3 is an upland site having primarily a northwest facing slope.

Woodland Description-

Medium-sized (8-14 inch) white oak dominates the stand. Red oak, shagbark hickory, bitternut hickory, ash, and elm are scattered. The understory is hickory, oak, elm, cherry, ash, hard maple, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2016 to manage for oaks.

Stand 4: 2.7 acres

Site Description -

Stand 4 is the Shimek State Forest Headquarters.

Management Recommendations -

Maintain buildings and conduct general upkeep as needed.

Stand 5: 12.0 acres

Site Description -

Stand 5 is a bottomland site.

Woodland Description-

Medium-sized (8-16 inch) river birch, cherry, and red pine dominate the stand. Hackberry, swamp white oak, red oak, elm, honey locust, ash, and eastern red cedar are scattered. The understory is hard maple, oak, elm, ash, cherry, and hickory.

Management Recommendations - Even Age

Conduct crop tree release practices in 2016 to manage for oaks.

Stand 6: 6.9 acres

Site Description -

Stand 6 is an upland site with a northwest facing slope.

Woodland Description-

Medium-sized (8-16 inch) shingle oak dominates the stand. Red oak, walnut, black locust, sycamore, aspen, elm, and bitternut hickory are scattered. The understory is hard maple, oak, elm, ash, cherry, hickory, and multi-flora rose.

Management Recommendations - Even Age

Conduct crop tree release practices in 2016 to release any desirable oaks.

Stand 7: 22.2 acres

Site Description -

Stand 7 is an upland site with a south facing slope.

Woodland Description-

Medium-sized (10-20) white oak. Red oak, shagbark hickory, and honey locust are scattered. The understory is oak, ironwood, hickory, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2016 to release any desirable oaks.

Stand 8: 2.8 acres

Site Description -

Stand 8 is an upland site by a road.

Woodland Description-

Medium-sized (10-20) red pine. Ash, black and honey locust, and shingle oak are scattered. The understory is oak, ash, hickory, elm, rose, cherry, and hackberry.

Management Recommendations - Uneven Age

Re-inventory the stand in 2016.

Stand 9: 3.7 acres

Site Description -

Stand 9 is an upland site with a south facing slope.

Woodland Description-

Medium-sized (6-14) white and red oak, and ash. Shagbark hickory, cherry, elm, black locust, and shingle oak are scattered. The understory is oak, ash, hickory, elm, prickly ash, and mixed shrubs.

Management Recommendations - Even Age

Conduct crop tree release practices in 2026 to release any desirable oaks.

Stand 10: 12.5 acres

Site Description -

Stand 10 is an upland site by a road and the property border.

Woodland Description-

Medium-sized (10-22) white and red pine. Ash, hackberry, elm, and honey locust are scattered. The understory is oak, ash, hickory, elm, rose, cherry, and prickly ash.

Management Recommendations - Uneven Age

Re-inventory the stand in 2016.

Stand 11: 46.5 acres

Site Description -

Stand 11 is an upland site with gently rolling hills and slopes.

Woodland Description-

Medium-sized (10-18) white and red oak and shagbark hickory. Ash is scattered. The understory is oak, ash, cherry, hard maple, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2016 to release any desirable oaks.

Stand 12: 3.3 acres

Site Description -

Stand 12 is an upland site beside a trail.

Woodland Description-

Small-sized (6-10) elm and ash. White, red, and shingle oak, and red pine are scattered. The understory is honeysuckle and mixed shrubs.

Management Recommendations - Even Age

Conduct crop tree release practices in 2026 to release any desirable oaks.

Stand 13: 15.7 acres

Site Description -

Stand 13 is an upland site by a trail.

Woodland Description-

Medium-sized (10-22) white pine. Ash, elm, and black locust are scattered. The understory is honeysuckle, hickory, elm, and hackberry.

Management Recommendations - Uneven Age

Re-inventory the stand in 2016.

Stand 14: 1.5 acres

Site Description -

Stand 14 is an upland site beside a road.

Woodland Description-

Medium-sized (10-16) black locust. White and red oak, cherry, shagbark and Mockernut hickory, walnut, elm, and ash are scattered. The understory is hickory, oak, cherry, ash, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2026 to release any desirable oaks.

Stand 15: 13.6 acres

Site Description -

Stand 15 is an upland site with a slope to the northwest.

Woodland Description-

Medium-sized (10-16) black locust. White and red oak, cherry, shagbark and Mockernut hickory, walnut, elm, and ash are scattered. The understory is hickory, oak, cherry, ash, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2026 to release any desirable oaks.

Stand 16: 7.2 acres

Site Description -

Stand 16 is an upland site with a south facing slope.

Woodland Description-

Medium-sized (8-14) white oak. Red oak and shagbark hickory are scattered. The understory is oak, elm, ash, hickory, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2016 to release any desirable oaks.

Stand 17: 3 acres

Site Description -

Stand 17 is an upland site with a slope to the northwest.

Woodland Description-

Small-sized (4-8) black locust and aspen. The understory is hickory, elm, oak, cherry, and ash.

Management Recommendations - Even Age

Implement weed tree eradication practices in 2026 to release oak seedlings and to thin out locust and aspen.

Stand 18: .9 acres

Site Description -

Stand 18 is an upland site by a road.

Woodland Description-

Small-sized (2-8) ash. The understory is hickory, rose, oak, black locust, and prickly ash.

Management Recommendations - Even Age

Implement weed tree eradication practices in 2016 to release oak seedlings and to thin out ash and locust.

Stand 19: 4.9 acres

Site Description -

Stand 19 is an upland site with a east facing slope by a road.

Woodland Description-

Medium-sized (10-18) shagbark hickory, white, red, and black oak. Ash is scattered. The understory is oak, elm, honeysuckle, hickory, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2016 to release any desirable oaks.

Stand 20: 1.7 acres

Site Description -

Stand 20 is the Shimek State Forest residence.

Management Recommendations -

Maintain buildings and conduct general upkeep as needed.

Stand 21: 9.8 acres

Site Description -

Stand 21 is an upland site with a slope to the southwest.

Woodland Description-

Medium-sized (10-18) white oak. Red and black oak, cherry, shagbark hickory, elm, and black locust are scattered. The understory is hickory, oak, ash, and prickly ash.

Management Recommendations - Even Age

Conduct crop tree release practices in 2026 to release any desirable oaks.

Stand 22: 1 acres

Site Description -

Stand 22 is an upland site by a road.

Woodland Description-

Area managed as a prairie.

Management Recommendations -

Maintain for prairie diversity.

Stand 23: .7 acres

Site Description -

Stand 23 is an upland site by a road.

Woodland Description-

Direct seeding established in the Fall of 2006

Management Recommendations - Even Age

Perform maintenance as needed in 2016.

Stand 24: 12.8 acres

Site Description -

Stand 24 is an upland site with some gently rolling slopes.

Woodland Description-

Medium-sized (6-16) elm, red and black oak. White and shingle oak, cherry, and ash are scattered. The understory is hickory, oak, rose, cherry, elm, ash, and prickly ash.

Management Recommendations - Even Age

Re-inventory the stand in 2016.

Stand 25: 20.7 acres

Site Description -

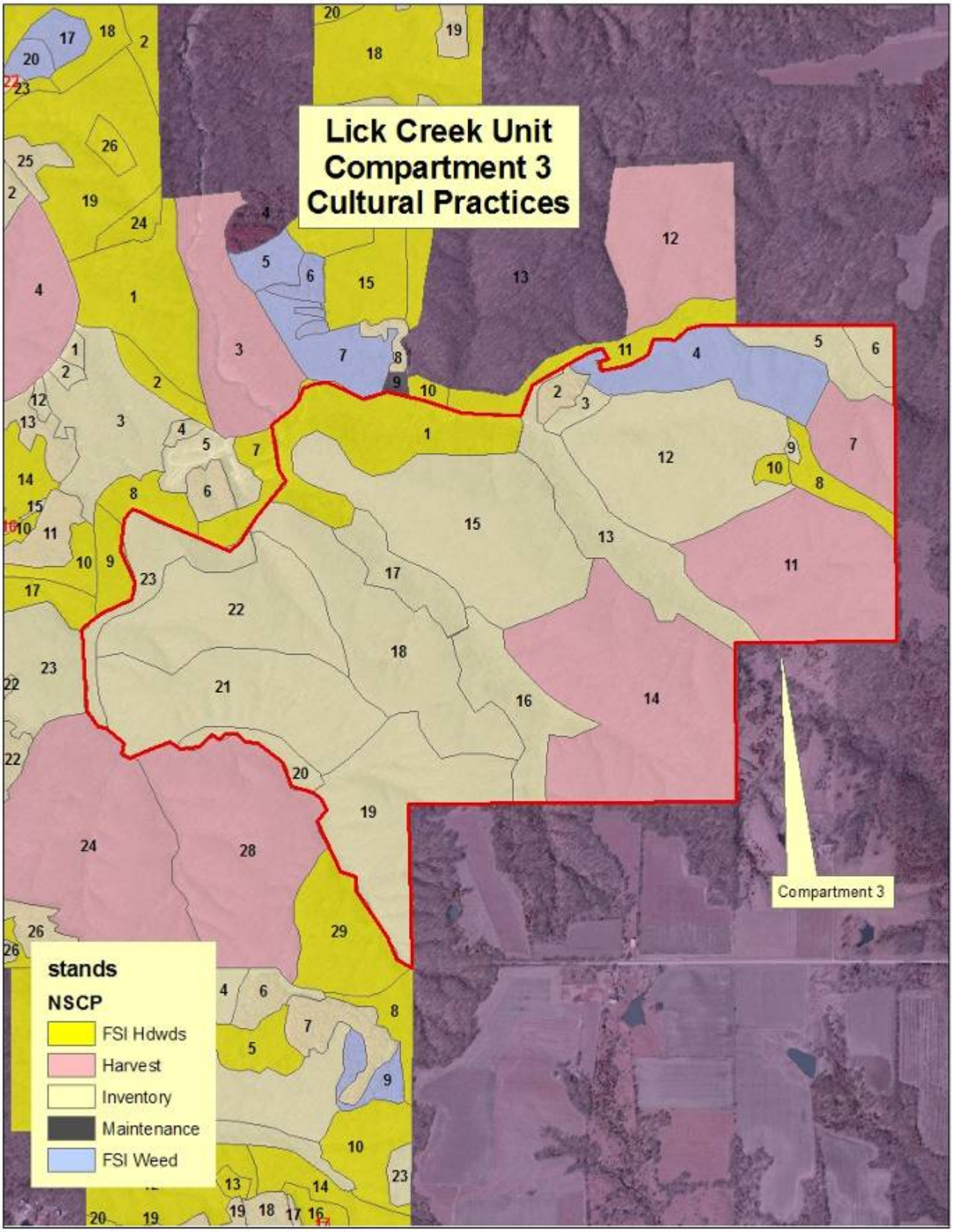
Stand 25 is an upland site by a road.

Woodland Description-

Medium-sized (8-20) white and red pine. Ash, elm, cherry, hackberry, and shingle oak are scattered. The understory is oak, ash, hickory, elm, and cherry.

Management Recommendations - Uneven Age

Re-inventory the stand in 2016


Lick Creek Unit
Compartment 3
Cultural Practices
Compartment 3
stands
NSCP
FSI Hdwds
Harvest
Inventory
Maintenance
FSI Weed

Lick Creek Unit Management Prescriptions

Compartment 3

Stand 1: 24.5 acres

Site Description -
Stand 1 is a bottomland site.

Woodland Description-
Medium-sized (10-18 inch) walnut dominates the stand. Elm, cottonwood, black locust, river birch, sycamore, basswood, red oak, cherry, and hackberry are scattered. The understory is multi-flora rose, elm, garlic mustard, and oak.

Management Recommendations - Uneven Age
Conduct selective management thinning practices in 2016 to manage for walnut and oak.

Stand 2: 2.6 acres

Site Description -
Stand 2 is a bottomland site.

Woodland Description-
Medium-sized (8-16 inch) white pines dominate the stand. Elm and cherry are scattered. The understory is oak, elm, hickory, and cherry.

Management Recommendations - Uneven Age
Re-inventory the stand in 2016.

Stand 3: 2.2 acres

Site Description -
Stand 3 is an upland site with a north facing slope.

Woodland Description-
Medium-sized (8-18 inch) white oak dominates the stand. Walnut, black oak, and bitternut hickory are scattered. The understory is oak, elm, hickory, and prickly ash.

Management Recommendations - Even Age
Re-inventory the stand in 2016.

Stand 4: 19.0 acres

Site Description -

Stand 4 is an upland site with a north facing slope.

Woodland Description-

Small (2-8 inch) elm, ash, and shagbark hickory dominate the stand. Cherry, basswood, walnut, and red oak are scattered. The understory is oak, elm, and ash.

Management Recommendations - Even Age

Implement weed tree eradication practices in 2016 to release oak seedlings and to thin out elm and ash.

Stand 5: 8.0 acres

Site Description -

Stand 5 is a bottomland site.

Woodland Description-

Medium-sized (12-20 inch) walnut and red oak dominate the stand. Swamp white oak, shagbark hickory, cottonwood, and hackberry are scattered. The understory is elm, hickory, and oak.

Management Recommendations - Uneven Age

Re-inventory the stand in 2016.

Stand 6: 3.5 acres

Site Description -

Stand 6 is an upland site with a southwest facing slope.

Woodland Description-

Medium-sized to large diameter (12-24 inch) white oak, red oak, bitternut hickory, and shagbark hickory dominate the stand. Walnut and black oak are scattered. The understory is elm, oak, and hickory.

Management Recommendations - Even Age

Re-inventory in 2016.

Stand 7: 12.2 acres

Site Description -

Stand 7 is an upland site with a north facing slope.

Woodland Description-

Large diameter (14-26 inch) white oak and red oak dominate the stand. Hard maple, basswood, cherry, bitternut hickory, shagbark hickory, and ash are scattered. The understory is hard maple, ironwood, elm, hickory, and oak.

Management Recommendations - Even Age

Clearcut harvest the stand in 2026 to regenerate oaks.

Stand 8: 5.1 acres

Site Description -

Stand 8 is an upland site near a trail.

Woodland Description-

Medium-sized (6-14 inch) black oak and ash dominate the stand. Swamp white oak, shingle oak, and eastern red cedar are scattered. The understory is elm, oak, hickory, cherry, and ironwood.

Management Recommendations - Even Age

Conduct crop tree release practices in 2026 to manage for oaks.

Stand 9: 0.4 acres

Site Description -

Stand 9 is an upland site near a trail.

Woodland Description-

This site is an open field.

Management Recommendations - Even Age

Conduct regular mowing to keep out invasive species. Re-inventory in 2016.

Stand 10: 1.5 acres

Site Description -

Stand 10 is an upland site near a trail with a south facing slope.

Woodland Description-

Medium-sized (8-14 inch) black oak, bitternut hickory, and ash dominate the stand. White oak, shagbark hickory, and cherry are scattered. The understory is ironwood, hickory, and oak.

Management Recommendations - Even Age

Conduct crop tree release practices in 2026 to manage for oak.

Stand 11: 38.7 acres

Site Description -

Stand 11 is an upland site with a southwest facing slope.

Woodland Description-

Medium-sized (12-20 inch) white oak, red oak, and shagbark hickory dominate the stand. Ash and walnut are scattered. The understory is ash, oak, elm, ironwood, and prickly ash.

Management Recommendations - Even Age

Conduct a Shelterwood harvest in 2026 to increase oak regeneration.

Stand 12: 39.0 acres

Site Description -

Stand 12 is an upland site with gently rolling hills.

Woodland Description-

Medium-sized (12-20 inch) white oak, red oak, and shagbark hickory dominate the stand. Ash and walnut are scattered. The understory is ash, oak, elm, ironwood, and prickly ash.

Management Recommendations - Even Age

Re-inventory the stand in 2016.

Stand 13: 20.8 acres

Site Description -

Stand 13 is a bottomland site.

Woodland Description-

Medium-sized (10-16 inch) walnut dominates the stand. Sycamore, elm, cottonwood, and honey locust are scattered. The understory is elm, hackberry, multi-flora rose, and hickory.

Management Recommendations - Uneven Age

Re-inventory the stand in 2016.

Stand 14: 59.5 acres

Site Description -

Stand 14 is an upland site that has some minor slopes.

Woodland Description-

Medium-sized to large diameter (10-24 inch) white oak and red oak dominate the stand. Basswood, shagbark hickory, walnut, and ash are scattered. The understory is elm, ironwood, hickory, oak, and ash.

Management Recommendations - Even Age

Shelterwood harvest the area in 2016 to increase oak regeneration.

Stand 15: 46.4 acres

Site Description -

Stand 15 is an upland site that has some minor slopes.

Woodland Description-

Medium-sized to large diameter (10-24 inch) white oak and red oak dominate the stand. Basswood, shagbark hickory, walnut, and ash are scattered. The understory is elm, ironwood, hickory, oak, and ash.

Management Recommendations - Even Age

Re-inventory the stand in 2016.

Stand 16: 15.0 acres

Site Description -

Stand 15 is a bottomland site.

Woodland Description-

Medium-sized to large diameter (10-24 inch) red oak, ash, and basswood dominate the stand. Swamp white oak, white oak, walnut, shagbark hickory, bitternut hickory, and honey locust are scattered. The understory is elm, oak, hickory basswood, ash, and garlic mustard.

Management Recommendations - Uneven Age

Re-inventory the stand in 2016.

Stand 17: 9.0 acres

Site Description -

Stand 17 is a bottomland site.

Woodland Description-

Medium-sized (8-18 inch) swamp white oak dominates the stand. Walnut, honey locust, white oak, red oak, bitternut hickory, shagbark hickory, basswood, and cherry are scattered. The understory is hickory, oak, elm, and ash.

Management Recommendations - Even Age

Re-inventory the stand in 2016.

Stand 18: 33.9 acres

Site Description -

Stand 18 is an upland site with a north aspect.

Woodland Description-

Medium-sized (12-20 inch) white oak, red oak, black oak, and shagbark hickory dominate the stand. Cherry and bitternut hickory are scattered. The understory is ironwood, ash, elm, oak, and prickly ash.

Management Recommendations - Even Age

Re-inventory the stand in 2016.

Stand 19: 31.3 acres

Site Description -

Stand 19 is an upland site with some minor slopes.

Woodland Description-

Medium-sized (12-20 inch) white oak, red oak, black oak, and shagbark hickory dominate the stand. Cherry and bitternut hickory are scattered. The understory is ironwood, ash, elm, oak, and prickly ash.

Management Recommendations - Even Age

Re-inventory the stand in 2016.

Stand 20: 4.0 acres

Site Description -

Stand 20 is a bottomland site.

Woodland Description-

Medium-sized to large diameter (12-22 inch) red oak dominates the stand. Swamp white oak, white oak, black oak, walnut, ash, cherry, and bitternut hickory are scattered. The understory is oak, hickory, elm, and ironwood.

Management Recommendations - Uneven Age

Re-inventory the stand in 2016.

Stand 21: 35.8 acres

Site Description -

Stand 21 is an upland site with a south facing slope.

Woodland Description-

Medium-sized (8-18 inch) swamp white oak dominates the stand. Walnut, honey locust, white oak, red oak, bitternut hickory, shagbark hickory, basswood, and cherry are scattered. The understory is hickory, oak, elm, and ash.

Management Recommendations - Even Age

Re-inventory the stand in 2016.

Stand 22: 29.6 acres

Site Description -

Stand 22 is an upland site with rolling hills.

Woodland Description-

Medium-sized (8-18 inch) swamp white oak dominates the stand. Walnut, honey locust, white oak, red oak, bitternut hickory, shagbark hickory, basswood, and cherry are scattered. The understory is hickory, oak, elm, and ash.

Management Recommendations - Even Age

Re-inventory the stand in 2016.

Stand 23: 11.5 acres

Site Description -

Stand 23 is a bottomland site.

Woodland Description-

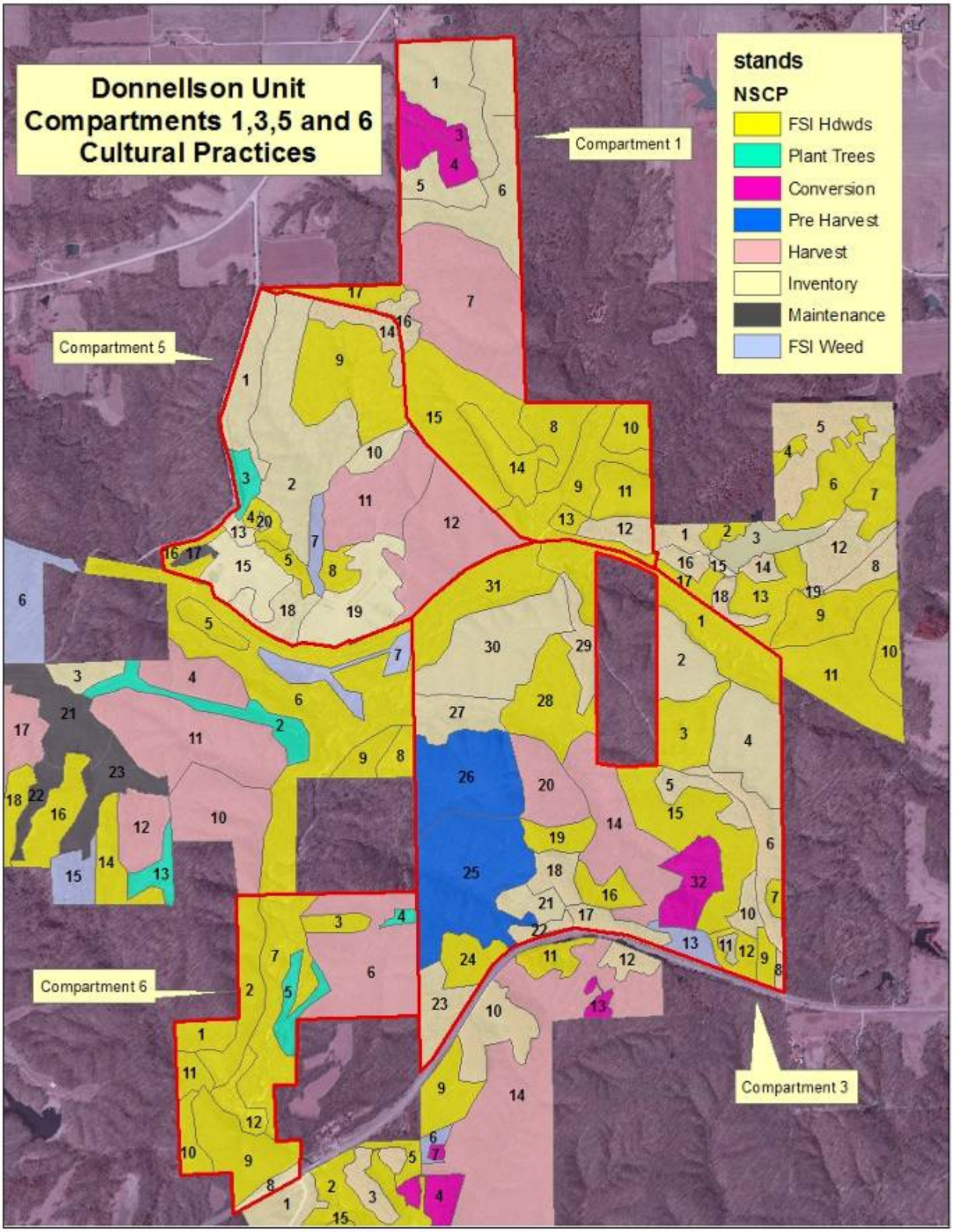
Medium-sized (10-20 inch) red oak, basswood, and walnut dominate the stand. Elm, white oak, and hard maple are scattered. The understory is hard maple, ironwood, elm, oak, and mixed shrubs.

Management Recommendations - Uneven Age

Re-inventory the stand in 2016.

Work Plan Summary for Farmington Unit Comp. 2 and Lick Creek Comp. 3

Fiscal Year	Unit	Comp.	Stand(s)	Management Activity	Acres	Cost	Est. Board Foot	Revenue
2011	Lick Creek	3	14	Pre harvest treatment	59.5	$9,520		
2016	Farmington	2	2,3,5,6,7,10, 11,16,19	Crop Tree Release	161.5	$19,380		
	Farmington	2	18	Weed Tree Eradication	0.9	$144		
	Farmington	2	23	Tree Planting Maintenance	0.7	$28		
	Lick Creek	3	1	Selective Mgmt Thin	24.5	$2,940		
	Lick Creek	3	14	Shelter Wood Harvest	59.5		250,000	$75,000
	Lick Creek	3	4	Weed Tree Eradication	19	$3,040		
	Farmington Lick Creek	2 3	ALL STANDS	Re-inventory	714			
2021	Lick Creek	3	11,4	Pre harvest treatment	50.9	$8,144		
2026	Farmington	2	9,12,14,15,21	Crop Tree Release	31.9	$3,828		
	Farmington	2	17	Weed Tree Eradication	3	$480		
	Lick Creek	3	8,10	Crop Tree Release	6.6	$792		
	Lick Creek	3	11	Shelter Wood Harvest	38.7		104,500	$31,300
	Lick Creek	3	7	Clear cut Harvest	12.2		88,000	$26,400


Donnellson Unit
Compartments 1,3,5 and 6
Cultural Practices
stands
NSCP
FSI Hdwds
Plant Trees
Conversion
Pre Harvest
Harvest
Inventory
Maintenance
FSI Weed
Compartment 1
Compartment 5
Compartment 6
Compartment 3

Donnellson Unit Management Prescriptions

Compartment 1

Stand 1: 19 acres

Site Description -
This stand consists of up land with some gentle slopes around drainage ditches.

Woodland Description-
The area is medium sized (8-16" dia.) majority species being hickory, white, red and black oak. The under story is mixed oak, cherry, elm and hickory.

Management Recommendations – Even Age
This stand was crop tree released in 2006 with emphasis on the oaks. Take another inventory in 2017 should see an increase in regeneration of oaks.

Stand 2: No Stand

Stand 3: 3.7 acres

Site Description -
This stand consists of up land.

Woodland Description-
The area is medium sized (8-16" diameter) white pine, elm river birch with mixed oak scattered. The under story is mixed hardwoods. There is a very thick canopy.

Management Recommendations – Even Age
Thinning to increase regeneration of native hard woods in 2017. Some under planting needed when enough sunlight is present.

Stand 4: 7.6 acres

Site Description -
This stand consists of up land.

Woodland Description-
The area is small sized (4-10" diameter) red pine. There is a very dense canopy. But there is some cherry and elm regeneration.

Management Recommendations – Even Age
Thinning to increase regeneration of native hard woods in 2017. Some under planting needed when enough sunlight is present.

Stand 5: 7.2 acres

Site Description -

This stand has a gentle south facing slope.

Woodland Description-

The area is medium sized (10-20" diameter) hickory, red, black and white oak. Elm and cherry are scattered throughout the stand. There is an under story of cherry, elm and mixed oak.

Management Recommendations – Even Age

Crop tree release was done in 2006 with emphasis on oaks. Re inventory stand in 2017.

Stand 6: 26.4 acres

Site Description -

This stand is bottom land along drainage ditches.

Woodland Description-

The area is medium sized (10-20" diameter) shingle, red, swamp white oak. Hickory, elm and cherry are scattered throughout the stand. There is an under story of cherry, elm and mixed oak.

Management Recommendations – Even Age

Crop tree release was done in 2006 with emphasis on oaks. Re inventory stand in 2017.

Stand 7: 40 acres

Site Description -

This stand is an up land with a drainage ditch running through it...

Woodland Description-

The area is medium sized (8-20" diameter) white oak. Cherry, ash, red and black oak are scattered throughout the stand. There is an under story of cherry, ash and mixed oak.

Management Recommendations – Even Age

Crop tree release was done in 2006 with emphasis on oaks. Shelter wood harvest in 2027 should increase regeneration of oaks.

Stand 8: 10 acres

Site Description -

This stand has a gentle slope towards the east with a ditch also to the east.

Woodland Description-

The area is medium sized (8-18" diameter) shagbark hickory, red, and white oak. Bitternut hickory and elm are scattered throughout the stand. There is an under story of hickory, elm and mixed oak.

Management Recommendations – Even Age

Crop tree release will be done in 2017 to enhance the oak growth rate and increase mast production.

Stand 9: 18.7 acres

Site Description -

This stand is bottomland.

Woodland Description-

The area is medium sized (10-18" diameter) shingle, bur and white oak. Elm, cherry, red oak, shagbark and bitternut hickory are scattered throughout. An under story of elm, cherry, hickory and mixed oak is present.

Management Recommendations – Even Age

Crop tree release will be done in 2017 to enhance the oak growth rate, increase mast production and release any black walnut.

Stand 10: 5.4 acres

Site Description -

This stand has a west facing slope and is surrounded on two sides by property border.

Woodland Description-

The area is medium sized (10-20" diameter) shagbark hickory, black and white oak. Elm, cherry, ash are scattered throughout. An under story of elm, cherry, hickory and mixed oak is present.

Management Recommendations – Even Age

Crop tree release will be done in 2017 to enhance the oak growth rate, increase mast production.

Stand 11: 7.9 acres

Site Description -

This stand is mainly upland with a general westerly facing slope.

Woodland Description-

The area is medium sized (10-18" diameter) shag bark hickory, black and white oak. Elm, black walnut and bitternut hickory are scattered throughout. An under story of elm, hickory, ironwood and mixed oak is present.

Management Recommendations – Even Age

Crop tree release will be done in 2017 with emphasis on oak and black walnut.

Stand 12: 5.1 acres

Site Description -

This site is upland with a slight southern slope along Donnellson Unit Road.

Woodland Description-

The area is small sized (4-12" diameter) red pine. Elm, cherry, ash and mixed oak are scattered throughout. An under story of elm, cherry, honeysuckle and mixed oak is present.

Management Recommendations – Even Age

Maintain health of the pines with routine visual inspections. Re-inventory in 2017.

Stand 13: 1.9 acres

Site Description -

This site has a slight westerly facing slope going into a drainage ditch.

Woodland Description-

The area is small to medium sized (6-14" diameter) shingle oak, black walnut and honey locust. Elm are scattered throughout the stand. The under story is thick with multi flora rose and elm.

Management Recommendations – Even Age

Crop tree release will be done to release black walnut and weed tree eradication on locust will both be performed in 2017

Stand 14: 9 acres

Site Description -

This site is mostly a southwest facing slope.

Woodland Description-

The area medium sized (10-18" diameter) shag bark hickory, white and black oak. Elm, cherry and shingle oak are scattered throughout the stand. The under story is mainly mixed oak, hickory, cherry and elm.

Management Recommendations – Even Age

Crop tree release in 2017 will be performed with emphasis on managing for oaks.

Stand 15: 2.9 acres

Site Description -

This site is mostly a southeast slope surrounding a small ditch.

Woodland Description-

The area is medium sized (10-18" diameter) black and white oak. Elm, bitter and shagbark hickory are scattered throughout the stand. The under story is mostly elm, mixed oak and hickory.

Management Recommendations – Even Age

Crop tree release in 2017 will be performed with emphasis on managing for oaks.

Stand 16: 3.4 acres

Site Description -

This site is upland and is located along Donnellson Unit Road.

Woodland Description-

The area is medium sized (10-18" diameter) white pine elm and cherry. Post oak is scattered throughout the stand. The under story is mostly elm, and cherry.

Management Recommendations – Uneven Age

Maintain health of the pines with routine visual inspections. Re-inventory in 2017.

Stand 17: 5.8 acres

Site Description -

This site is upland and is located along Donnellson Unit Road.

Woodland Description-

The area is medium to large sized (10-24" diameter) white bur oak and bitternut. Cherry and elm are scattered throughout the stand. The under story is mostly elm, cherry, hickory, white and bur oak.

Management Recommendations –Even Age

Crop tree release should be done in 2027 in order to manage for oak.

Donnellson Unit Management Prescriptions

Compartment 3

Stand 1: 24.2 acres

Site Description -

This site is bottom land and is located along an old railroad track.

Woodland Description-

The area is small (2-12" diameter) elm, walnut, red and swamp white oak. Shag bark hickory, river birch, hackberry and basswood are scattered throughout the stand. The under story is mostly elm, hickory, hackberry and some oak.

Management Recommendations Even Age

Crop tree release on oak and black walnut in 2017 to help growth and regeneration.

Stand 2: 11.2 acres

Site Description -

This stand has a north facing slope toward a drainage area.

Woodland Description-

The area medium sized (12-18" diameter) white, red and black oak. Shagbark hickory and elm are scattered throughout the stand. Hickory and some oak make up the sparse under story.

Management Recommendations –Even Age

Re inventory stand in 2017.

Stand 3: 11.2 acres

Site Description -

This stand has a northerly facing slope with interpretative trail.

Woodland Description-

The area is medium sized (12-18" diameter) white, red and black oak. Elm and shagbark hickory are scattered throughout the stand. The under story is sparse but hickory, mixed oak and ironwood are present.

Management Recommendations Even Age

Crop tree release on oak in 2017 to help growth and regeneration.

Stand 4: 17.9 acres

Site Description -

This stand has a northwest gentle slope.

Woodland Description-

The area is medium sized (12-18" diameter) white, red and black oak. Elm, ash, shagbark and bitternut hickory are scattered throughout the stand. The under story is hickory, ash, mixed oak and ironwood.

Management Recommendations Even Age

Re inventory stand in 2017.

Stand 5: 5.4 acres

Site Description -

This stand is upland along Donnellson Unit Road by picnic area.

Woodland Description-

The area is medium sized (10-18" diameter) white pine. Elm and black walnut are scattered. While elm, locust and honeysuckle make up the under story

Management Recommendations Even Age

Maintain as visual corridor and re-inventory in 2017.

Stand 6: 11.2 acres

Site Description -

This stand is upland along Donnellson Unit Road by picnic area.

Woodland Description-

The area is medium sized (10-18" diameter) white pine. Elm and black walnut are scattered. While elm, locust ash and honeysuckle make up the under story

Management Recommendations Uneven Age

Maintain as visual corridor and re-inventory in 2017.

Stand 7: 1.7 acres

Site Description -

This stand is an east facing slope at the head of a ditch.

Woodland Description-

The area is medium sized (8-16" diameter) white, red and black oak. Elm black walnut and shag hickory are scattered. While elm, hickory and mixed oak make up the under story

Management Recommendations Even Age

Crop tree release with emphasis on oaks in 2017 should increase growth and regeneration.

Stand 8: 1 acres

Site Description -

This stand is an upland by Donnellson Unit Road and Highway 2.

Woodland Description-

The area is medium sized (8-14" diameter) red pine. Elm, ash and mixed oak are scattered. While elm, ash, honeysuckle and mixed oak make up the under story

Management Recommendations Uneven Age

Monitor for health issues and re-inventory in 2017.

Stand 9: 2.6 acres

Site Description -

This stand is an up land

Woodland Description-

The area is small sized (2-6" diameter) elm and black oak. Black locust, ash and mulberry are scattered. Honeysuckle is the under story

Management Recommendations Even Age

Crop tree release any oaks or desirable species in 2017. Weed tree eliminate the locust and elm at the same time.

Stand 10: 3.3 acres

Site Description -

This stand is an up land along Donnellson Unit Road.

Woodland Description-

The area is medium sized (8-16" diameter) red pine. Ash and elm are scattered. Ash and elm are the under story

Management Recommendations Even Age

Monitor for health issues and re-inventory in 2017.

Stand 11: 1.1 acres

Site Description -

This stand is Martin Pond that was refurbished in 2005-2007.

Woodland Description-

None

Management Recommendations Even Age

Continue working with fisheries on the continuing recreation.

Stand 12: 3.7 acres

Site Description -

This stand upland around Martins Pond.

Woodland Description-

The area is small to medium sized (4-16" diameter) white pine and black locust. Elm and mixed oak are scattered. Elm, mixed oak and honeysuckle make up the under story

Management Recommendations Even Age

Crop tree release any oaks and weed tree eradication will be done on elm and locust in 2017.

Stand 13: 4.2 acres

Site Description -

This stand is an up land along Highway 2.

Woodland Description-

The area is medium sized (8-20" diameter) white and red oak. Elm and honeysuckle make up the under story

Management Recommendations Even Age

Weed tree eradication will be performed on locust and under story plant in 2017 with usage of chemicals.

Stand 14: 24.9 acres

Site Description -

This stand is an up land along Highway 2.

Woodland Description-

The area is medium sized (8-20" diameter) white and red oak. Elm and honeysuckle make up the under story

Management Recommendations Even Age

Shelter wood harvest performed in 2017 to allow sunlight to regenerate oaks.

Stand 15: 23.6 acres

Site Description -

This stand is an up land site close to Donnellson Unit Road.

Woodland Description-

The area is small-medium sized (6-14" diameter) shagbark hickory and black locust. White and red oak are scattered throughout the stand. Mixed oak and hickory make up the under story

Management Recommendations Even Age

Crop tree release to manage oaks and weed tree eradication on locust in 2017.

Stand 16: 5 acres

Site Description -

This stand slopes to the east.

Woodland Description-

The area is small - medium sized (6-14” diameter) elm, black locust and cherry. Walnut honey locust hickory and black oak are scattered. The under story is hickory, elm and a few oaks.

Management Recommendations Even Age

Crop tree release to manage oaks and weed tree eradication on locust in 2017.

Stand 17: 5.3 acres

Site Description -

An up land stand along Highway 2.

Woodland Description-

The area is medium sized (10-20” diameter) white pine. Elm and black oak are scattered. There is not much of an under story do to the density of the prominent species.

Management Recommendations Uneven Age

Timely monitoring of stand for health reasons and it will be re-inventoried in 2017.

Stand 18: 5.4 acres

Site Description -

An up land stand along a hiking trail.

Woodland Description-

The area is medium sized (10-20” diameter) white pine. Elm and black oak are scattered. There is not much of an under story do to the density of the prominent species.

Management Recommendations Uneven Age

Timely monitoring of stand for health reasons and it will be re-inventoried in 2017.

Stand 19: 5.3 acres

Site Description -

An up land stand along a hiking trail.

Woodland Description-

The area is small to medium sized (4-16” diameter) elm and black locust. Black walnut, ash, shagbark hickory, cherry and red oak are scattered. The under story consists of hickory, ash, cherry and elm.

Management Recommendations Even Age

Crop tree release to manage oaks and weed tree eradication on locust in 2017.

Stand 20: 12.2 acres

Site Description -

This stand consists of a west facing slope along a hiking trail.

Woodland Description-

The area is medium sized (6-20" diameter) white and black oak. Ash, cherry, elm, swamp white oak, black and honey locust, shagbark and bitternut hickories are scattered. The under story consists of hickory, ash, cherry, mixed oak and elm.

Management Recommendations Even Age

Shelter wood harvest in 2017. Remove elm and locust in 2012.

Stand 21: 5 acres

Site Description -

This stand is a south west facing slope along a hiking trail.

Woodland Description-

The area is small to medium sized (4-16" diameter) ash, black locust, elm and shingle oak. Black oak, cedar, cherry and hackberry are scattered. The under story is, ash, locust, cherry, mixed oak and elm.

Management Recommendations Even Age

Some elm and locust were removed in 2006. Continue to remove locust and elm along with treating stumps with chemical. This will be an ongoing project but it is to be completed by 2010. The stand will be re-inventoried in 2017.

Stand 22: 2.2 acres

Site Description -

This stand is an up land site slightly facing North West along Hwy 2.

Woodland Description-

The area is medium sized (8-20" diameter) red pine. Elm, cherry, white and red oak are scattered. The under story is cherry, mixed oak and elm.

Management Recommendations Uneven Age

The plan is to maintain the visual corridor and watch for health issues. Re-inventory in 2017.

Stand 23: 8.9 acres

Site Description -

This stand slopes to the south west along Highway 2.

Woodland Description-

The area is medium sized (10-18" diameter) white pine. Cottonwood, cherry and elm, are scattered. The under story consists of cherry, mixed oak and elm.

Management Recommendations Uneven Age

The plan is to maintain the visual corridor and watch for health issues. Re-inventory in 2017.

Stand 24: 7 acres

Site Description -

This is upland along Highway 2.

Woodland Description-

The area is small sized (4-10" diameter) elm, black locust and ash. Shagbark hickory and silver maple are scattered. The under story is sparse.

Management Recommendations Even Age

Crop tree release any desirable species and weed tree eradicate any locust and elm in 2017. Under planting oak may be necessary.

Stand 25: 35.4 acres

Site Description -

This stand is mostly up land with a large drainage ditch running through.

Woodland Description-

The area is medium sized (10-20" diameter) shagbark hickory, red, black and white oak. Hard maple, cherry, elm and mocker nut hickory are scattered. The under story consists of cherry, mixed oak, hickory and elm.

Management Recommendations Even Age

Pre-harvest removal of elm and iron wood should begin in 2027 with shelter wood harvest being performed in 2037.

Stand 26: 23.3 acres

Site Description -

This stand is made up of a mostly southern facing slope.

Woodland Description-

The area is medium sized (10-18" diameter) shagbark hickory, white and red oak. Cherry and elm are scattered. The under story consists of hickory, mixed oak and elm.

Management Recommendations Even Age

Pre-harvest removal of elm and iron wood should begin in 2027 with shelter wood harvest being performed in 2037.

Stand 27: 9.3 acres

Site Description -

This stand is bottomland buffering a drainage ditch.

Woodland Description-

The area is small sized (8-20" diameter) shagbark hickory, elm and swamp white oak. Black locust, river birch and elm, are scattered. The under story consists of hickory mixed oak and elm.

Management Recommendations Even Age

Re-inventory this stand in 2017 when trees are more established.

Stand 28: 17 acres

Site Description -

This site has a southwest facing slope.

Woodland Description-

The area is medium sized (8-20" diameter) white, black and swamp white oak. Honey locust, elm, cherry, shingle oak, bitternut and shagbark hickory are scattered. The under story consists of hickory, cherry, mixed oak and elm.

Management Recommendations Even Age

Crop tree release with emphasis on oak in 2017.

Stand 29: 6.5 acres

Site Description -

This stand is an upland along Donnellson Unit Road.

Woodland Description-

The area is medium sized (6-14" diameter) red pine. The under story consists of honey suckle.

Management Recommendations Uneven Age

The plan is to maintain the visual corridor and watch for health issues. Re-inventory in 2017.

Stand 30: 27.5 acres

Site Description -

Mostly up land with some north facing slope on the north side of the stand.

Woodland Description-

The area is medium sized (8-18" diameter) shag bark hickory, white, red and black oak. Cherry, elm, black walnut, ash and hackberry area scattered. The under story consists of mixed oak, hickory, elm, cherry and ash.

Management Recommendations Even Age

Re inventory the stand in 2017.

Stand 31: 19.9 acres

Site Description -

A bottom land site.

Woodland Description-

The area is medium sized (10-18" diameter) black walnut, hackberry and swamp white oak. Cherry, elm, hickory, white oak, ash and basswood area scattered. The under story consists of swamp white oak, hickory, elm, hackberry, cherry and ash.

Management Recommendations Even Age

Crop tree release on black walnut and swamp white oak in 2017 then re-inventory

Stand 32: 10.4 acres

Site Description -

Mostly up land with minor drainage ditch running through.

Woodland Description-

The area is small to medium sized (4-16" diameter) white and red pine. Cherry, elm, black walnut, shagbark hickory, black and red oak area scattered. The under story consists of mixed oak, hickory, elm, cherry.

Management Recommendations even Age

Clear out pines in 2017 to allow for native hardwoods to establish.

Donnellson Unit Management Prescriptions

Compartment 5

Stand 1: 12.3 acres

Site Description -

This stand is located on a site in the upland having east facing slopes.

Woodland Description-

Small to medium-sized (4-20 inch) shingle oak, black oak, and swamp white oak dominate the stand. Ash, elm, and cherry are scattered throughout the stand. The understory is mixed oak, ash, elm, and cherry.

Management Recommendations - Even Age

Crop tree release practices were completed in 2002. Re-inventory the stand in 2017.

Stand 2: 35.7 acres

Site Description -

Stand 2 is a mid-slope to upland site with mostly west facing slopes.

Woodland Description-

Medium-sized (8-18 inch) white oak, red oak, black oak, and shagbark hickory dominate the stand. Bitternut hickory, elm, and cherry are scattered. The understory is elm, mixed oak, hickory, and cherry.

Management Recommendations - Even Age

Re inventory the stand in 2017 to look at forest improvement progress.

Stand 3: 3.6 acres

Site Description -

This stand is an upland site near the road.

Woodland Description-

The stand is a tree planting with minimal survival. Some white pines and mixed hardwoods are present.

Management Recommendations - Even Age

Replant the area in 2017 with native hardwoods.

Stand 4: 3.4 acres

Site Description -

This stand is an upland area around a small pond.

Woodland Description-

Medium-sized (8-18 inch) white oak, and shagbark hickory dominate the stand. Shingle oak, bur oak, and black oak are scattered throughout the stand. The understory is oak and hickory.

Management Recommendations - Even Age

Conduct crop tree release activities in 2017 to manage for oak and hickory.

Stand 5: 2.8 acres

Site Description -

Stand 5 is an upland site with an east facing slope.

Woodland Description-

Small (4-10 inch) shagbark hickory, black oak, elm, and shagbark hickory dominate the stand. Cherry, eastern red cedar, and honey locust are scattered. The understory is elm, hickory, and oak.

Management Recommendations - Even Age

To encourage natural oak regeneration conduct crop tree release practices in 2017.

Stand 6: 0.0 acres

Site Description -

There is no stand 6.

Stand 7: 3.5 acres

Site Description -

This stand is located in the bottomland.

Woodland Description-

Medium-sized (10-16 inch) honey locust and elm dominate the stand. Swamp white oak, shingle oak, cherry, and shagbark hickory are scattered. The understory is multi-flora rose and dogwood.

Management Recommendations - Even Age

Use weed tree eradication methods to remove honey locust and elm and to allow for oak release.

Stand 8: 3.6 acres

Site Description -

This stand is an upland site with west aspect.

Woodland Description-

Shingle oak, black oak, and shagbark hickory are the dominant species and are of medium size (8-14 inch). Cherry, swamp white oak, eastern red cedar, and elm are scattered. The understory is elm, oak, and hickory.

Management Recommendations - Even Age

Conduct a crop tree release in 2017 to manage for oaks.

Stand 9: 26.1 acres

Site Description -

This stand is located on an upland site having a minor drainage.

Woodland Description-

Small (2-10 inch) shagbark hickory, cherry, and black oak dominate the stand. White oak, red oak, and elm are scattered.

Management Recommendations - Even Age

Conduct a crop tree release in 2027 to manage for oaks.

Stand 10: 4.0 acres

Site Description -

This stand is White Oak Campground.

Management Recommendations -

Manage for best possible recreational opportunity.

Stand 11: 18.4 acres

Site Description -

Stand 11 is an upland site with some minor slopes.

Woodland Description-

Medium-sized (12-20 inch) white oaks dominate the stand. Red oak, black oak, elm, and shagbark hickory are scattered. The understory is elm, oak, and hickory.

Management Recommendations - Even Age

Conduct a Shelterwood harvest in 2017 to manage for oak regeneration.

Stand 12: 27.2 acres

Site Description -

This stand is located on an upland site having some minor slopes.

Woodland Description-

Medium-sized (12-20 inch) white oak and black oak dominate the stand. Elm, walnut, red oak, and shagbark hickory are scattered. The understory is elm, oak, and hickory.

Management Recommendations - Even Age

Conduct a Shelterwood harvest in 2017 to manage for oak regeneration.

Stand 13: 1.9 acres

Site Description -

This stand is a building site where a storage barn is located.

Management Recommendations -

Maintain building condition.

Stand 14: 6.6 acres

Site Description -

This stand is positioned on the upland along the Donnellson Unit road.

Woodland Description-

Medium-sized (10-20 inch) white pines dominate the stand. Post oak, shagbark hickory, and elm are scattered. The understory is oak, elm, and hickory.

Management Recommendations - Uneven Age

Continue to manage for aesthetics and re-inventory in 2017.

Stand 15: 11.5 acres

Site Description -

This stand is an upland site adjacent to storage barn.

Woodland Description-

The stand is mostly native grasses and forbs with a small pond.

Management Recommendations -

Manage prairie for diversity and pond for good fishing.

Stand 16: 3.4 acres

Site Description -

This area is on an upland site near an old dirt road.

Woodland Description-

Small to medium-sized (6-10 inch) honey locust, elm, and shingle oak dominate the stand. Black oak, swamp white oak, and cherry are found scattered throughout the stand. The understory is oak, cherry, and elm.

Management Recommendations - Even Age

Conduct crop tree release practices in 2017 to manage for oaks.

Stand 17: 1.4 acres

Site Description -

Stand 17 is on an upland site.

Woodland Description-

A broadcast direct seeding of oak and walnut was completed on the area during fiscal year 2008.

Management Recommendations - Even Age

Maintain this stand as a tree planting in 2017.

Stand 18: 7.0 acres

Site Description -

This stand is located on an upland site.

Woodland Description-

Small (4-8 inch) honey locust, swamp white oak, and black oak dominate the stand. Ash and elm are scattered throughout the stand.

Management Recommendations - Even Age

Complete a crop tree release in 2017 to manage for oaks.

Stand 19: 18.1 acres

Site Description -

This stand is located in the upland.

Woodland Description-

The stand is an open prairie area.

Management Recommendations -

Continue to manage this area for a healthy prairie.

Stand 20: 0.4 acres

Site Description -

This stand is a pond located near the storage barn.

Management Recommendations –

Maintain this pond for best possible recreational opportunity.

Donnellson Unit Management Prescriptions

Compartment 6

Stand 1: 4.7 acres

Site Description -
This stand is positioned on the upland.

Woodland Description-
Small to medium-sized (4-12 inch) black oak and shingle oak dominate the stand. Eastern red cedar, cherry, and shagbark hickory are scattered throughout the stand. The understory is oak and hickory.

Management Recommendations - Even Age
Conduct crop tree release practices in 2027 to encourage oak and hickory regeneration.

Stand 2: 13.0 acres

Site Description -
Stand 2 is positioned on an upland with an east facing slope.

Woodland Description-
Red oak, white oak, and bitternut hickory of medium size (12-20 inch) dominate the stand. Shingle oak, walnut, shagbark hickory, and basswood are scattered. The understory is oak and hickory.

Management Recommendations - Even Age
In order to promote natural regeneration of oak species complete a crop tree release practices in 2017.

Stand 3: 3.2 acres

Site Description -
This stand is on a site in the upland with a west aspect.

Woodland Description-
Small (4-10 inch) shingle oak, ash, and eastern red cedar dominate the stand. Cherry, shagbark hickory, red oak, and elm are scattered. The understory is ash and cherry.

Management Recommendations - Even Age
Conduct crop tree release practices in 2017 to help the oaks maintain dominance and encourage regeneration.

Stand 4: 1.2 acres

Site Description -

This stand is an upland site surrounded by timber.

Woodland Description-

This stand is a tree planting consisting of white pine and encroaching hardwoods.

Management Recommendations - Even Age

To ensure hardwood component plant native hardwoods in 2017.

Stand 5: 5.4 acres

Site Description -

This stand is located on the bottomland.

Woodland Description-

Medium-sized (6-14 inch) walnut, box elder, and cottonwood dominate the stand. There are some scattered mulberries.

Management Recommendations - Uneven Age

Plant walnuts in open areas in 2017.

Stand 6: 31.5 acres

Site Description -

Stand 6 is an upland site with some minor slopes.

Woodland Description-

Medium-sized (6-18 inch) white oaks dominate the stand. Shagbark hickory, cherry, elm, and black locust are scattered. The understory is oak, hickory, and elm.

Management Recommendations - Even Age

Shelterwood harvest the stand in 2027 to increase oak regeneration.

Stand 7: 22.3 acres

Site Description -

This stand is located in the bottomland and acts as a buffer to Lick Creek.

Woodland Description-

Small to medium-sized (6-18 inch) elm, walnut, hackberry, and river birch dominate the stand. Cherry, shingle oak, ash, cottonwood, and honey locust are scattered. Elm, ash, and cherry make up the understory.

Management Recommendations - Uneven Age

Conduct selective management thinning practices in 2027 to manage for walnut regeneration.

Stand 8: 2.3 acres

Site Description -

This stand is located next to highway 2.

Woodland Description-

There are some encroaching oaks and hickories.

Management Recommendations - Uneven Age

The power company manages the stand.

Stand 9: 15.4 acres

Site Description -

This is an upland site with a gently sloping northeast aspect.

Woodland Description-

The stand is dominated by medium-sized (10-14 inch) white oaks. Black oak, red oak, and swamp white oak are scattered. The understory is oak and cherry.

Management Recommendations - Even Age

Complete a crop tree release in 2017 with an emphasis on oaks.

Stand 10: 4.5 acres

Site Description -

This stand is an upland site along a property border.

Woodland Description-

Shingle oak and black oak of medium size (8-16 inch) dominate the stand. Shagbark hickory, white oak, elm, and walnut are scattered throughout the stand. The understory is oak, elm, and hickory.

Management Recommendations - Even Age

To promote natural oak regeneration conduct crop tree release practices in 2017.

Stand 11: 3.4 acres

Site Description -

This stand is positioned on the bottomland.

Woodland Description-

Small (4-10 inch) black oak, river birch, and elm dominate the stand. Ash, bur oak, white oak, shingle oak, walnut, and cherry are all present but are found scattered. The understory is oak and elm.

Management Recommendations - Even Age

Conduct crop tree release practices in 2027 to manage for oak and walnut.

Stand 12: 4.9 acres

Site Description -

This stand is located in the bottomland.

Woodland Description-

Small (4-8 inch) swamp white oak, walnut, and elm dominate the stand. Cottonwood, eastern red cedar, shingle oak, and box elder are scattered.

Management Recommendations - Uneven Age

Conduct selective management thinning practices in 2027 to manage for oak and walnut.

Work Plan Summary for Donnellson Unit Compartments 1,3,5,and6

Fiscal Year	Unit	Comp.	Stand(s)	Management Activity	Acres	Cost	Est. Board Foot	Revenue
2012	Donnellson	3	14,20	Pre harvest treatment	37.1	$5,936		
	Donnellson	5	11,12	Pre harvest treatment	39.6	$6,336		
2017	Donnellson	1	8,9,10,11, 13,14,15	Crop Tree Release	229.7	$27,564		
	Donnellson	1	3,4	Stand Conversion	11.3	$4,520		
	Donnellson	3	1,3,7,9,12,15, 16,19,24,28	Crop Tree Release	121.2	$14,544		
	Donnellson	3	32	Stand Conversion	10.4	$4,160		
	Donnellson	3	14,20	Shelter Wood Harvest	37.1		95,000	$28,500
	Donnellson	3	13,21	Weed Tree Eradication	9.2	$1,472		
	Donnellson	5	4,5,16,18	Crop Tree Release	16.6	$1,992		
	Donnellson	5	11,12	Shelter Wood Harvest	39.6		120,000	$36,000
	Donnellson	5	7	Weed Tree Eradication	3.5	$560		
	Donnellson	5	3	Tree Planting	3.6	$1,440		
	Donnellson	5	17	Tree Planting Maintenance	1.4	$56		
	Donnellson	6	2,3,9,10	Crop Tree Release	36.1	$4,332		
	Donnellson	6	4,5	Tree Planting	6.6	$2,640		
2022	Donnellson	1	7	Pre harvest treatment	40	$6,400		
	Donnellson	6	6	Pre harvest treatment	31.5	$5,040		
2027	Donnellson	1	17	Crop Tree Release	5.8	$696		
	Donnellson	1	7	Shelter Wood Harvest	40		96,000	$28,800
	Donnellson	3	25,26	Pre harvest treatment	58.7	$9,392.00		
	Donnellson	5	8,9	Crop Tree Release	29.7	$3,564		
	Donnellson	6	1,11,	Crop Tree Release	8.1	$972		

Donnellson	6	7,12	Selective Mgmt Thin	27.2	$3,264			
Donnellson	6	6	Shelter Wood Harvest	31.5			83,000	$24,900
Donnellson	1,3,5,6	All Stands	Re inventory	858.3				

Appendix B

Glossary of Forestry Terms

Acre: An area of land containing 43,560 square feet, roughly the size of a football field, or a square that is 208 feet on a side. A "forty" of land contains 40 acres and a "section" of land contains 640 acres.

All-aged: An uneven-aged stand that represents all ages or age classes from seedlings to mature trees.

Annual ring: Trees in climates where growths stops or slows during portion of the year will form annual rings which can be read to determine tree age and growth. The science of dendrochronology studies tree rings to infer knowledge about past climatic conditions, based on the fact that trees will form wider annual rings during seasons when growing conditions are favorable and narrow rings when not. Annual rings are highly visible in species that form less dense wood during favorable growing conditions early in the season and denser wood less favorable conditions later in the year. In some tree species this differentiation does not occur and annual rings are difficult to see. In tropical species, growth never, or seldom, ceases and annual rings may not be apparent.

Bark: The outer layer of the stems, limbs and twigs of woody plants. Often bark is characteristic of the species and can be used for identification.

Basal area: The cross sectional area of the base of any object. In forestry it means the cross sectional area of a tree at a point 4.5 feet above the ground line expressed in square feet. The sum of all the trees on an acre is a measure of the density of the population of trees growing on the acre and is useful for making forest management decisions. A helpful way to think of basal area is to imagine all the trees on an acre cut off with 4.5 foot stumps. Basal area on the acre could be measured by measuring and totaling the cross sectional area of all stumps. Fortunately, it is not necessary to cut trees to measure basal area. It can be calculated from tree diameter or can be easily measured with an angle gauge when certain relationships are known. Basal area will commonly range from 20 to 70 square feet per acre for poorly stocked stands to more than 200 square feet per acre for dense stands of conifers.

Biodiversity (biological diversity): The variety and abundance of species, their genetic composition, and the communities and landscapes in which they occur, including the ecological structures, functions, and processes occurring at all of these levels.

Board foot: A unit of measure wood 1" thick and 1 foot on each side equaling 1/12 cubic foot of wood. In practice, a board foot seldom contains 1/12 of a cubic foot due to loss from surfacing such as planning and sanding .For example, an 8 foot 2x4 would be said to have 5 and 1/3 board feet, but would actually be more like 4.08 board feet after losses from surfacing.

Bole: The stem or trunk of a tree; usually thought of as being that part without limbs, the merchantable part of the stem, the bottom part of the stem

Canker: An imperfection on the trunk, limb or twig of a tree caused by an organism that kills a part of the tree's tissue. Canker causing organisms sometimes exist in some sort of a balance with the host, never killing enough tissue to cause death. Cankers tend to weaken trees to eventually break.

Clearcut: A method of regenerating a forest in which all trees on a given area are cut. Clearcutting results in conditions which allow the greatest amount of sunlight to reach the forest floor, a desirable condition for the re-growth of certain valuable tree species which need a lot of sunlight to grow, such as oaks and walnut. Clearcutting also confers certain benefits for many wildlife species.

Competition: The struggle between trees to obtain sunlight, nutrients, water, and growing space. Every part of the tree, from the roots to the crown, competes for space and food.

Conversion: A change though forest management from one tree species to another

within a forest stand or site.

Coppice: All trees in the previous stand are cut and the majority of regeneration is from sprouts or roots suckers. Coppice selection-only selected stems of merchantable size are cut at each felling, giving uneven-aged stands. Coppice with reserves- reserve trees are retained to attain goals other than regeneration.

Cord: A unit of measure of wood that is equivalent to a pile of round wood 4 feet wide, 8 feet long and 4 feet high. A cord contains 128 cubic feet of wood and space.

Cover type: Expressed as the tree species having the greatest in a forest stand. A stand where the major species is oak would be called an oak cover type.

Crop: The vegetation growing on a forest area, more particularly the major woody growth having commercial value.

Crop tree release: Natural stands of trees start out with thousands of trees per acre. Planted stands may contain 500 to 1500 trees per acre. At maturity, due to constraints of space, nutrient availability and the increased size of individual trees, there can be only 50 to 70 trees per acre. Crop tree release is the practice of selecting the individual trees that are to remain in the stand until maturity and then removing the trees competing with them. Crop trees could be selected on the basis of any of the values associated with trees such as aesthetics or wildlife values, but are almost always selected on an economic basis. In Iowa selected trees would mostly likely consist of walnut and red and white oak.

Selected trees would be straight with long, clear boles and would be the trees bringing the best dollar return upon maturity.

Crown: Refers to that part of the tree consisting of limbs, branches, twigs and leaves; in other words, the top of the tree.

Cruise: A survey of forest land to locate timber and estimate its quantity by species, products, size, quality, or other characteristics.

Cubic foot: A wood wolume measurement. A cubic foot of wood contains approxim ately six to 10 usable board feet of wood. A cord of wood equals 128 cubic feet.

Cull: Refers to a tree having no commercial value, usually from having rot, holes, large knots or being crooked rather than from being too small or of a non-merchantable species. It is important to note that a cull, though having no commercial value may have wildlife, aesthetic or other value.

Cultural practice: The manipulation of vegetation to meet objectives of controlling stand composition or structure, such as site improvement, forest tree improvement, increased regeneration, increased growth, or measures to control insects or disease.

D.B.H.: Stands for diameter at breast high. Always taken as 4.5 feet above the ground, that being a convenient height at which to measure a tree's diameter. For trees on a slope, dbh is taken at 4.5 feet from the ground on one of the two sides of the tree that is at right angles to the direction of slope.

Defect: An imperfection in a tree making it less desirable for some purpose. The term is commonly used to refer to some imperfection that will reduce the value of a tree or log for a product, resulting in reduced monetary value.

Den tree: A tree that has a hole in its stem that can be used as shelter by wildlife such as birds and mammals.

Disturbance: Any event, either natural or human induced, that alters the structure, composition, or functions of an ecosystem. Examples include forest fires, insect infestation, windstorms, and timber harvesting

Dominant (trees): individuals or species of the upper layer of the forest canopy.

Early successional forest: The forest community that develops immediately following the removal or destruction of vegetation in an area. Plant succession is the progression of plants from bare ground (e.g., after a forest fire or imber harvest) to mature forest consisting primarily of long-lived species such as sugar maple and white pine. Succession consists of a gradual change of plant and animal communities ove time. Early ssuccession forests commonly depend on and develop first following disturbance

eevents (e.g. fire, windstorm, or timber havest). Examples of early successional forest tree species are asspen, paper birch,and jack pine. Each stage of succession provides different benefits benefits for a variety of species.

Endangered species: A plant or animal species that is threatened with extinction throughout all or a significant portion of its native range.

Even-aged stand: A stand of trees composed of a single age class.

Floodplain Forest: Characterized by species such as silver maple, cottonwood, walnut, green ash, elm, hackberry and willows. This habitat factor will benefit wildlife such as songbirds and woodpeckers, furbearers, raptors, reptiles and amphibians on relatively level areas inundated by water periodically.

Forest: A forest is an ecosystem, an association of plants and animals. Trees are its dominant feature. They provide many of the benefits of forests like habitat, quality water, recreation, climatic amelioration and wood products. The plants and animals that make up a forest are inter-dependent and often essential to its integrity.

Forester: A professional engaged in the science and profession of forestry- note foresters are commonly credentialed by states or other certifying bodies, e.g., the Society of American Foresters, and may be licensed, certified, or registered indicating specific education and abilities; the requirements for credentialing differ and usually include earning a baccalaureate degree in forestry, sometimes equivalent experience, and usually passing a comprehensive examination.

Forest cover: All trees and other plants occupying the ground in a forest, including any ground cover.

Forest fire: An uncontrolled fire on lands covered wholly or in part by timber, brush, grass, grain, or other flammable vegetation.

Forest floor: The accumulated organic matter at the soil surface, including litter and unincorporated humus.

Forest inventory: A set of objective sampling methods designed to quantify the spatial distribution, composition, and rates of change of forest parameters within specified levels of precision for the purposes of management. The listing (enumeration) of data from such a survey- synonym cruise, forest survey- note inventories may be made of all forest resources including trees and other vegetation, fish, insects, and wildlife, as well as street trees and urban forest trees- see dynamic sampling, point sampling

Forest management: The practical application of biological, physical, quantitative, managerial, economic, social, and policy principles to the regeneration, management, utilization, and conservation of forests to meet specified goals and objectives while maintaining the productivity of the forest. Forest management includes management for aesthetics, fish, recreation, urban values, water, wilderness, wildlife, wood products, and other forest resource values.

Forest stand – A stand may loosely be defined as a contiguous group of trees sufficiently uniform in species composition, arrangement of age classes and general condition to be a homogeneous and distinguishable unit. A stand is usually treated as a basic silvicultural unit, but it seldom represents a natural ecological unit. Its composition and structure are most strongly affected by management, other disturbances and chance factors affecting seed distribution, germination and seedling survival.

Forest Stand Improvement: A practice in which the quality of a residual forest stand is improved by removing less desirable trees and large shrubs to achieve the desired stocking of the best quality trees or o improve the reproduction, composition, structure, condition, and volume growth of a stand.

Fully-stocked stand: A forest stand in which all growing space is effectively occupied but having ample space for development of the crop trees.

Game species: In this plan, game species include those terrestrial species that are hunted and trapped.

Gap: The space occurring in forest stands due to individual tree or groups of trees mortality or blown down. Gap management uses timber harvest methods to emulate his type of forest spatial pattern.

Geographic information system (GIS): Computer software used to manipulate, analyze, and visually display inventory and other data and prepare maps of the same data.

Group selection: A process of harvesting patches of selected trees to create openings in the forest canopy and to encourage reproduction of uneven-aged stands.

Hardwood: Hardwood as opposed to softwood is a relative term. Hardwoods are generally defined as the woods of deciduous trees, i.e., trees which shed their leaves in the winter.

Harvesting vs. silvicultural treatment: The meanings of these two terms are often confused by lay people and sometimes by professionals. Many silvicultural treatments involve harvesting, but not all harvesting is silvicultural treatment. Harvesting is a silvicultural treatment. Harvesting is a silvicultural treatment when its purpose is to shape the residual stand or to affect regeneration. Often the two purposes are accomplished simultaneously. Of course, harvesting can be done simply to remove an

existing crop, but this is not management and therefore the operation cannot be called a silvicultural treatment.

Landform: Any physical, recognizable form or feature of the earth's surface having a characteristic shape and produced by natural causes. Examples of major landforms are plains, plateaus, and mountains. Examples of minor landforms are ills, valleys, slopes, eskers, and dunes. Together, landforms make up the surface configuration of the earth.

Landscape: A general term referring to geographic areas that are usually based on some sort of natural feature or combination of natural features. They can range in scale from very large to very small.

Leave trees: Live trees selected to remain on a site to provide present and future benefits, such as shelter, resting sites, cavities, perches, nest sites, foraging sites, mast, and coarse woody debris.

Management goals: Overall purpose for controlling (managing) the composition and structure of forest land. For example, to protect land from erosion, to maintain wildlife habitat, to grow wood for profit, etc.

Management objectives: Defined conditions for the property, or segments of property (e.g. stands or management units), that will achieve management goals. For example, maintenance of continuous forest cover may be the only objective if watershed protection is the primary goal. Another objective may be to grow tree species with highest yields in order to maximize returns from wood production.

Management plan: A plan outlining the objectives for individual management units and describing steps for achieving them. Silvicultural procedures are identified in broad terms, but detailed prescriptions are developed in the field.

Mast: Nuts, seeds, catkins, flower buds, and fruits of woody plants that provide food for wildlife.

Mature tree: A tree that has reached the desired size or age for its intended use. Size or age will vary considerably depending on the species and the intended use.

Merchantable timber: Trees or stands having the size, quality, and condition suitable for marketing under a given economic condition, even if not immediately accessible for logging.

Mesic: Moderately moist.

Multiple use: Using and managing a forested area to provide more than one benefit simultaneously. Common uses may include wildlife, timber, recreation, and water.

Native plant community: A group of native plants that interact with each other and with its environment in ways not greatly altered by modern human activity or by introduced organisms. These groups of native plants form recognizable units, such as an oak forest, prairie, or marsh that tend to reoccur over space and time. Native plants communities are classified and described by physiognomy, hydrology, landforms, soils, and natural disturbance regimes (e.g., wild fires, wind storms, normal flood cycles).

Natural disturbances: Disruption of existing conditions by natural events such as wildfires, windstorms, droughts, flooding, insects, and disease.

Natural regeneration: The growth of new trees from one of the following ways: (a) seeds naturally dropped from trees or carried by wind or animals, (b) seeds stored on the forest floor, or(c) stumps that sprout or roots that sucker.

Non-forest land: Land that has never supported forests, and land formerly forested where use for timber management is precluded by development for other uses such as crops, improved pasture, residential areas, city parks, improved roads, and power line clearings.

Non-game species: In this plan, nongame species include amphibians, reptiles, and those mammal and bird species that are not hunted or trapped.

Old-growth forests: Forests defined by age, structural characteristics**,** and relative lack of human disturbance. These forests are essentially free from catastrophic disturbances, contain old trees (generally over 120 years old), large snags, and downed trees.

Overstory: The canopy in a stand of trees.

Plantation: A stand composed primarily of trees established by planting or artificial seeding.

Pole or pole timber: A young tree or stand of young trees between 3.5 inches and 12.9 inches in diameter at a point 4.5 feet above the ground. In referring to a stand of trees the upper limit holds, however, when referring to processed round wood, pieces larger than 12.9 inches in diameter could be correctly referred to as poles.

Prairie: An extensive tract of level or rolling land that was originally treeless and grass covered. A prairie is generally characterized by deep fertile soil.

Prescribed burn: To deliberately burn wild lands in either their natural or their modified state under specified environmental conditions, which allows the fire to be confined to a predetermine area and produces the fire line intensity and spread required to attain planned resource management objectives.

Pruning: The practice of removing tree limbs so that a straight, bole, free of limbs, will develop. Several years after pruning the resulting wound will have grown over and the

wood that grows over the site of the former branch will be clear, that is knot free. Pruning is a component of FSI.

Recreation: Leisure activities involving the enjoyment and use of natural resources. This habitat factor will favor hunting activities while taking into consideration secondary activities such as wildlife watching, mushroom picking, photography, and hiking.

Recreation facility: The improvements within a developed recreation site offered for visitor's enjoyment.

Regeneration: The act of renewing tree cover by establishing generation usually maintaining the same forest type forest was removed. Regeneration may be artificial(direct seeding or planting) or natural (natural seeding, or planting).

Release (release operation): A treatment designed to free young trees from undesirable, usually over topping, competing vegetation.

Restoration: A new planting of seedlings, direct seeding, or regeneration of roots. This habitat factor will create new habitat that will be of higher quality for wildlife.

Riparian: Related to, living, or located in conjunction with a wetland, on the bank of a river or stream but also at the edge of a lake.

Riparian Buffer- Woodland next to streams, lakes and wetlands that is managed to enhance and protect aquatic resources from adjacent fields. This habitat factor will provide a woody cover buffer to enhance soil and water conservation while providing wildlife habitat.

Rotation age: The period of years between when a forest stand (i.e., primarily even-aged) is established (i.e., regeneration) and when it receives its final harvest. This time period is an administrative decision based on economics, site conditions, growth rates, and other factors.

Round wood. Wood products that are used in their original form, only being cut to length. Includes firewood, posts, and pulpwood and similar products.

Salvage cut: A harvest made to remove trees killed or damaged by fire, wind, insects, disease, or other agents. The purpose of salvage cuts is to use available wood fiber before further deterioration occurs to recover value that otherwise would be lost.

Sanitation cut: A cutting made to remove trees killed or injured by fire, insects, disease, or other injurious agents (and sometimes trees susceptible to such injuries).

Sapling: A young tree larger than a seeding but smaller than a pole. When a tree has grown to a diameter of a 3.5 inches in diameter at a point 4.5 feet above the ground it is no longer a sapling, having become a pole.

Sapwood. That wood found closest to the bark or outside of the bole and usually distinguished from heart wood by being lighter in color.

Savanna: Natural grassland, generally with a scattering of trees or shrubs.

Saw log: A log large enough to produce lumber or other products that can be sawed. Its size and quality vary with the utilization practices of the region.

Sawtimber: Trees that yield logs suitable in size and quality for the production of lumber.

Scarify: To break up the forest floor and topsoil preparatory to natural regeneration or direct seeding.

Seedling: A baby plant. In forestry the term usually used to refer to young trees that have grown beyond the stage where they have just emerged from the soil up to the point that they become saplings.
Seed tree: Any tree that bears seed; specifically, a tree left standing to provide the seed for natural regeneration.

Seed tree method: The harvest of all trees except for a small number of widely dispersed trees retained for seed production and to produce a new age class. Seed trees are usually removed after regeneration is established.

Selective harvest: Removal of single scattered trees or small groups of trees at relatively short intervals. The continuous establishment of reproduction is encouraged and an all-aged stand is maintained. A management option used for shade-tolerant species.

Selection harvest: A method of harvesting whereby individual trees are selected for harvest. A characteristic is that the form and appearance of the forest is maintained and the site is not exposed to sunlight and weathering. This scheme favors a tree species which tolerate shading such as maple and basswood. It also benefits certain wildlife species.

Shade tolerance: Relative ability of a tree species to reproduce and grow under shade. The capacity to withstand low-light intensities caused by shading from surrounding vegetation. Tolerant species tolerate shade, while intolerant species require full sunlight.

Shelterwood: A method of regenerating a forest whereby a portion of the stand is harvested and the rest of the stand is evenly distributed over the area to protect the site and provide seed to reseed the area. After the new stand is well established, the residual trees are harvested. This method is used to regenerate species not tolerate of shading.

Shelterwood harvest: A harvest cutting in which trees in the harvest area are removed in a series of two or more cuttings to allow the establishment and early growth of new seedlings under partial shade and protection of older trees. Produces an even-aged forest.

Silvics: The study of the life history and general characteristics of forest trees and stands, with particular reference to environmental factors, as basis for the practice of silviculture.

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

Silvicultural prescription: Specific steps prescribed to achieve specific management objectives. Examples: If the management objectives is to maintain an oak component in a mixed stand, the silvicultural prescription may include opening up the forest canopy to initiate the establishment of seedlings of shade-intolerant oaks. If undesirable species are dominating the canopy and a desirable species is becoming in the understory, the silvicultural prescription may be to remove over story trees to release the suppressed species. Thinning and planting are other examples

Single tree selection: individual trees of all sizes classes are removed more or less uniformly throughout the stand, to promote growth of remaining trees and to provide space for regeneration- synonym individual tree selection.

Site index: A measure of the productive quality of an area where trees grow. Site index is based on the height of dominant and co-dominate trees at age 50. That is to say, if the average height of dominant and co- dominate trees on a site was 70 feet at age 50, 70 would be the site index. Graphs are developed to enable determination of site index over a range of tree ages.

Site potential: Collective physical resources (e.g., soil moisture, nutrients, light, heat) available for plant growth. Different potentials facilitate growth of some species and limit growth of others. Consequently, site potential has a strong effect on plant community development.

Slash: The non-utilized and generally unmarketable accumulation of woody material in the forest, such as limbs, tops, cull logs, and stumps that remain in the forest as residue after timber harvesting.

Snag. A snag tree is a dead tree; commonly a tall, limbless tree left a logging operation. Though of little or no commercial value, they can be very valuable wildlife resources.

Softwood. Generally considered to be the wood of conifers, although the wood of some conifers is harder than some hardwoods. See the definition of hardwood for a further explanation.

Stand: a contiguous group of trees similar in age, species composition, and structure, and growing on a site of similar quality, to be a distinguished forest unit. One stand will usually have characteristics that will distinguish it from other stands. Difference could be species, average diameter , density and location.

Stumpage: According to Webster, the value of standing timber. Also, the timber itself or the right to cut it.

Succession: The natural replacement, over time, of one plant community with another.

Sucker: A shoot rising from below ground level from a root. Aspen regenerates from suckers.

Suppressed: The condition of a tree characterized by low growth rate and low vigor due to competition from overtopping trees or shrubs.

Sustainability: Protecting and restoring he natural environment while enhancing economic opportunity and community well-being. Sustainability addresses three related elements: the environment, the economy, and the community. The goal is to maintain all three elements in a healthy state indefinitely. Meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Thinning: A silvicultural treatment made to reduce the density of trees within a forest stand primarily to improve growth, enhance forest health, or recover potential mortality. Row thinning is where selected rows are harvested, usually the first thinning, which provides equipment operating room for future selective thinning. Selective thinning is where individual trees are marked or specified (e.g., by diameter, spacing, or quality) for harvest. Commercial thinning is thinning after the trees are of merchantable size for timber markets. Pre-commercial thinning is done before the trees reach merchantable size, usually done in overstocked (very high stems per acre) stands to provide more growing space for crop trees that will be harvested in future years.

Threatened species: A plant or animal species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

Tolerance (shade tolerance): A plant's ability to tolerate conditions under a forest canopy. Normally thought of as tolerance to low light conditions, but other understory conditions, such as root competition for water and nutrients, are also factors.

Two-aged stand: A stand with trees of two distinct age class separated in age by more than 20 percent of the rotation age.

Under plant: The planting of seedlings under an existing canopy or over story.

Under-stocked: A stand of trees so widely spaced that even with full growth potential realized, crown closure will not occur.

Under-story: The shorter vegetation (shrubs, seedlings, saplings, small trees) within a forest stand that forms a layer between the over-story and the herbaceous plants of the forest floor.
Uneven-aged stand: A stand with trees of three or more distinct age classes, either intimately mixed or in small groups.

Uneven-aged management: A planned sequence of treatments designed to maintain and regenerate a stand with three or more age classes. Uneven-aged (selection) methods will maintain a multi-aged structure by removing some trees in all sizes classes either singly, in small groups, or in strips-synonym all-aged methods

Viewshed: A physiographic area composed of land, water biotic and cultural elements which may be viewed from one or more viewpoints and which has inherent scenic qualities and/ or aesthetic values as determined by those who view it. Viewshed's are a habitat factor that will be primarily a "hands-off" area for aesthetics, proper soil and water conservation, along with providing special wildlife habitats.

Volume: Refers to the amount of wood in a tree or log. Expressed as board feet, cords or other measures.

Well-stocked: The situation in which a forest stand contains trees spaced widely enough to prevent competition yet closely enough to utilize the entire site.

Wolf tree: A generally predominant tree with a broad, spreading crown that occupies more growing space than its more desirable neighbors.

Woodland: A plant community in which, in contrast to a typical forest, the trees are often small, characteristically short-boled relative to their crown depth, and forming only an open canopy with intervening area occupied by lower vegetation, commonly grass.

Woodland edge: An area of habitat transition that consists of vegetation (herbaceous and woody) of different heights and densities. This habitat factor will favor early successional vegetation for wildlife benefiting from edge cover.