



## SOUTHERN PINE BEETLE INITIATIVE (SPBI) [TREATMENT NAME] PRESCRIPTION

[Grantee Name]

[Address]

[City, State Zip]

[Name] County

Practice: [PRACTICE NUMBER - NAME]

Management Objectives for Treatment Area:

1. [Resource Name]: [Short descriptive objective]
2. [Resource Name]: [Short descriptive objective]
3. [Resource Name]: [Short descriptive objective]

Treatment Area Description:

[Narrative description of the treatment area, including physiography, past use, existing vegetation relative to practice components, soil types, site capability, and site suitability for the practice]

Component Number 1: [Component Name], code [number]

Extent Needed: [number] acres

Cost Share Rate: [xx]% of actual cost, payment not to exceed \$[dollars.cents] per acre

Maximum Cost-Sharing for this Component: \$[dollars.cents]

Month and Year Component Scheduled to Begin: [Month Year]

Month and Year Component Scheduled to End: [Month Year]

Specifications: [Narrative description of what the component is, when it will be performed, how it will be done, and materials needed for accomplishment]

Component Number 2: [Component Name], code [number]

Extent Needed: [number] acres

Cost Share Rate: [xx]% of actual cost, payment not to exceed \$[dollars.cents] per acre

Maximum Cost-Sharing for this Component: \$[dollars.cents]

Month and Year Component Scheduled to Begin: [Month Year]

Month and Year Component Scheduled to End: [Month Year]

Specifications: [Narrative description of what the component is, when it will be performed, how it will be done, and materials needed for accomplishment]

Component Number 3: [Component Name], code [number]

Extent Needed: [number] acres

Cost Share Rate: [xx]% of actual cost, payment not to exceed \$[dollars.cents] per acre

Maximum Cost-Sharing for this Component: \$[dollars.cents]

Month and Year Component Scheduled to Begin: [Month Year]

Month and Year Component Scheduled to End: [Month Year]

Specifications: [Narrative description of what the component is, when it will be performed, how it will be done, and materials needed for accomplishment]

**TOTAL COST SHARE NEEDED:      \$[dollars.cents]**

#### **OTHER GRANTEE REQUIREMENTS:**

1. Grantee will provide the Area Forester (AF) copies of receipts, invoices, canceled checks, and other evidence, verifying costs of practice installation. **Cost documentation must be submitted to the AF by the Contract End Date for timely reimbursement.** Cash receipts or receipts for in kind services are not eligible. Acceptable forms of payment are by check, cashier's check, and credit card.
2. Maintain the practice for at least 10 years following the calendar year of installation or establishment.
3. When chemicals are prescribed, use only federal, state, and locally registered chemicals and apply them strictly in accordance with authorized uses, directions on the label, and other federal and state polices and requirements.
4. Protect the area treated or improved from destructive fire and destructive grazing.
5. When burning is prescribed, conduct in accordance with state and local laws and regulations. Burning Permits from the Division of Forestry are required for open air burning from October 15 through May 15. Burning Permits are available by phone at a local Tennessee Division of Forestry office or online at <http://BurnSafeTN.org/>

#### **OTHER COST SHARE CONDITIONS:**

1. The grantee understands that one payment will be made as reimbursement for components numbered in the Prescription at the specified cost-share rate not to exceed set maximum amounts per unit (acre or stand). Partial payments will be considered only after receipt of written request explaining the special need and Grantee's intent to complete the remaining prescribed components.

**ATTACHMENT TWO**

2. Reimbursements will be made only for the number of units completed according to the Prescription as determined by the Tennessee Division of Forestry.
3. The maximum total cost-share amount paid through the Southern Pine Beetle Initiative during any twelve month period is \$10,000 per entity.
4. Only expenses incurred after the participant receives written approval from the Nashville Office are eligible for cost share assistance.
5. Part or all of the cost-share payments made through SPBI are excluded from the participant's income. See the supporting document, Tax Tips for Forest Landowners for the [recent] Tax Year, and a qualified tax accountant for more definite information.

**ELIGIBILITY:**

Eligible participants for Hazard reduction: Re-Establishing Stands Harvested or Killed by the Southern Pine Beetle (SPBI-1) or Risk Reduction: Improving an Existing Stand of Forest Trees (SPBI-2) including Release of Pine, Precommercial Thinning, and SPB Suppression are private individuals; joint owners; corporations (except wood-using industries) without publicly-traded stock; and non-profit organizations and groups such as Boy and Girl Scouts, churches, and youth organizations. Ineligible participants include lands controlled by federal, state, and local governments; wood-using industries or entities that derive more than 50 percent of their gross income from wood-using industries; corporations with publicly-traded stock; public utility companies; and commercial campgrounds, commercial hunting reserves, and commercial recreation areas.

**SOUTHERN PINE BEETLE INITIATIVE PRESCRIPTION PREPARED BY:**

signature

date

[Name]

Area Forester

Tennessee Division of Forestry

**SUPPORTING DOCUMENTS:** *[list only those associated with the practice and given to the participant]*

1. [Title]
2. [Title]
3. [Title]

**[GRANTEE NAME] Prescription Map**  
**[Calendar Year/s & Practice/s] – [number] Acres**  
**Southern Pine Beetle Initiative (SPBI)**

Map created: [Month, Year]

By: [Name]

Base Map: [Month, Year, Type]

[Name] County Tennessee

Lat: N **xx° xx.xxx'**

Lon: W **xx° xx.xxx'**

[PASTE MAP]





## TENNESSEE AGRICULTURAL ENHANCEMENT PROGRAM [TREATMENT NAME] PRESCRIPTION

[Grantee Name]

[Address]

[City, State Zip]

[Name] County

### [PRACTICE NUMBER – NAME]

#### Management Objectives for Treatment Area:

1. [Resource Name]: [Short descriptive objective]
2. [Resource Name]: [Short descriptive objective]
3. [Resource Name]: [Short descriptive objective]

#### Treatment Area Description:

[Narrative description of the treatment area, including physiography, past use, existing vegetation relative to practice components, soil types, site capability, and site suitability for the practice]

#### Component Number 1: [Component Name], code [number]

Extent Needed: [number] acres

Cost Share Rate: [xx]% of actual cost, payment not to exceed \$[dollars.cents] per acre

Maximum Cost-Sharing for this Component: \$[dollars.cents]

Month and Year Component Scheduled to Begin: [Month Year]

Month and Year Component Scheduled to End: [Month Year]

Specifications: [Narrative description of what the component is, when it will be performed, how it will be done, and materials needed for accomplishment]

#### Component Number 2: [Component Name], code [number]

Extent Needed: [number] acres

Cost Share Rate: [xx]% of actual cost, payment not to exceed \$[dollars.cents] per acre

Maximum Cost-Sharing for this Component: \$[dollars.cents]

Month and Year Component Scheduled to Begin: [Month Year]

Month and Year Component Scheduled to End: [Month Year]

Specifications: [Narrative description of what the component is, when it will be performed, how it will be done, and materials needed for accomplishment]

Component Number 3: [Component Name], code [number]

Extent Needed: [number] acres

Cost Share Rate: [xx]% of actual cost, payment not to exceed \$[dollars.cents] per acre

Maximum Cost-Sharing for this Component: \$[dollars.cents]

Month and Year Component Scheduled to Begin: [Month Year]

Month and Year Component Scheduled to End: [Month Year]

Specifications: [Narrative description of what the component is, when it will be performed, how it will be done, and materials needed for accomplishment]

**TOTAL COST SHARE NEEDED:**     \$[dollars.cents]    

**OTHER GRANTEE REQUIREMENTS:**

1. Grantee will provide the Area Forester (AF) copies of receipts, invoices, canceled checks, and other evidence, verifying costs of practice installation. **Cost documentation must be submitted to the AF by the Contract End Date for timely reimbursement.** Cash receipts or receipts for in kind services are not eligible. Acceptable forms of payment are by check, cashier's check, and credit card.
2. Maintain the practice for at least 10 years following the calendar year of installation or establishment.
3. When chemicals are prescribed, use only federal, state, and locally registered chemicals and apply them strictly in accordance with authorized uses, directions on the label, and other federal and state polices and requirements.
4. Protect the area treated or improved from destructive fire and destructive grazing.
5. When burning is prescribed, conduct in accordance with state and local laws and regulations. Burning Permits from the Division of Forestry are required for open air burning from October 15 through May 15. Burning Permits are available by phone at a local Tennessee Division of Forestry office or online at [BurnSafeTN.org](http://BurnSafeTN.org).

**OTHER COST SHARE CONDITIONS:**

1. Participant labor is not an eligible cost for reimbursement under the Tennessee Agricultural Enhancement Program (TAEP).

**ATTACHMENT TWO**

2. The grantee understands that one payment will be made as reimbursement for components numbered in the Prescription at the specified cost-share rate not to exceed set maximum amounts per unit (acre, structure, or stream crossing). Partial payments will be considered only after receipt of written request explaining the special need and Grantee's intent to complete the remaining prescribed components.
3. Reimbursements will be made only for the number of units completed, according to the Prescription, as determined by the Tennessee Division of Forestry.
4. The total maximum cost-share amount paid for combined TAEP-1, 2, 3, and 4 forestry practices during any twelve month period is \$10,000 per entity.
5. Only expenses incurred after the participant receives written approval from the Nashville Office are eligible for cost share assistance.
6. Unless otherwise noted, the Grantee understands that cost-share payments made through TAEP will be included as ordinary income by the IRS. See the supporting document, [Tax Tips for Forest Landowners for the \[recent\] Tax Year](https://timbertax.org/) (<https://timbertax.org/>), and a qualified tax accountant for more definite information.

**ELIGIBILITY:**

Eligible participants for Afforestation & Reforestation (TAEP1) and Forest Stand Improvement (TAEP2) forestry practices include private individuals; joint owners; corporations (except wood-using industries) without publicly-traded stock; and non-profit organizations and groups. Participants must be Tennessee residents or be a business incorporated in Tennessee. Ineligible participants include federal, state, and local governments; wood-using industries or entities that derive more than 50 percent of their gross income from wood-using industries; corporations with publicly-traded stock; public utility companies; and commercial campgrounds, commercial hunting preserves, and commercial recreation areas.

**TENNESSEE AGRICULTURAL ENHANCEMENT PROGRAM PLAN PREPARED BY:**

signature

date

[Name]

Area Forester

Tennessee Division of Forestry

**SUPPORTING DOCUMENTS:** *[list only those associated with the practice and given to the participant]*

1. [Title]
2. [Title]

**[GRANTEE NAME] Prescription Map**  
**[Calendar Year & Practice/s] - [number] Acres**  
**Tennessee Agricultural Enhancement Program (TAEP)**

Map created: **[Month, Year]**

**[Name]** County Tennessee

By: **[Name]**

Lat: N **xx° xx.xxx'**

Base Map: **[Month, Year, Type]**

Lon: W **xx° xx.xxx'**

[PASTE MAP]



# FOREST STEWARDSHIP PLAN



DEVELOPED FOR

P.O. Box

Tifton, GA 31793

Rhea County

Map: Parcel: 013.00

December 10, 2015

This forest stewardship plan was prepared for XXXX who has requested planning assistance in the management of his property located in Rhea County, as shown and described on the attached map. An inspection of the Lee property was made on November 9, 2015 and the following objectives for ownership and management were discussed.

Objectives for Ownership of the Land:

1. Manage for timber production
2. Provide habitat for wildlife

Objectives for Management:

1. Primary objective: Manage timber for future income
2. Secondary objective: Improve habitat for deer and turkey

Description of the Property:

The XXX property is located in Rhea County on Lone Mountain south of XXX Road. This area is currently used as a hunting lease with no significant timber harvest performed in the last 25+ years.

Presently the cover is upland hardwood mix with areas of young pine that regenerated from past pine beetle infestation. The topography is primarily the northwest slope of Lone Mountain and consists of moderate to steep slopes. The property continues to the ridge top with approximately 120 acres lying on the southeast slope. Most of the property is fairly rocky with cliffs running below the upper part of the mountain.

Soils:

The main forest soil type on this property is Gilpin-Bouldin-Petros complex at nearly 60% of the property. Gilpin-Bouldin-Petros complex is considered to not be prime farmland and therefore woodlands are a good suite for this area. The Gilpin-Bouldin-Petros complex soils have from moderate to extremely high risk of runoff while being well to excessively well drained. The Gilpin Loam at 16% is well drained with very high risk of runoff. Following state BMP's with regard to water bars and the seeding of skid trails and road is highly recommended for this area during any landscape activities. (See enclosed Pocket Guide Best Management Practices for Timber Harvesting in Tennessee)

#### Forest Health:

A diverse mix of insects and diseases exist within every forest; it is part of normal forest ecology. Typical insect and disease presence and activity are referred to as "endemic". It is common for trees to occasionally become weakened or die in any forest due to regular environmental stresses such as weather, competition with other trees, old age and other factors including endemic insect or disease populations. However, forest owners should be concerned when an endemic insect or disease population becomes numerous enough (epidemic levels) to cause significant tree damage or death. Your property has been examined for areas that are at risk of or have current harmful insect and disease activity.

There are areas infested with tree of heaven and Japanese stiltgrass that should be treated before or in connection with any management conducted in the area. Most of these invasive exist along the ATV trail that expands the length of the property. (See enclosures: PCA Fact Sheet: Tree of Heaven; PCA Fact Sheet: Japanese Stiltgrass)

Rhea County has recently been added to the quarantined area for ash and walnut trees. This meaning that wood products in this area are now being restricted and monitored in this area. More information can be found at <http://www.tn.gov/agriculture/topic/ag-businesses-plant-pests>. The ash component of this property makes up a small percentage of the total tree species and has not shown any visual effects of infestation. It is recommended that the trees be removed unless other factors would inhibit such action.

### Threatened and Endangered Species

The Endangered Species Act (ESA) was passed by Congress in 1973 to protect species of plants and animals that are in danger of extinction. The ESA also protects the habitat on which they depend. Under the ESA, plants or animals presently in danger of extinction are classified as "endangered." Those that are a bit more abundant, but still declining and which may disappear in the near future, are classified as "threatened." The ESA treats plants and animals differently. Animals which are listed as threatened or endangered are protected on both public and private lands. Listed plants, however, are protected primarily on public lands. There are in many instances state laws that protect certain plants not covered by the ESA. Most forestry related activities do not harm threatened and endangered species as long as best management practices are followed. However, situations may arise where there are conflicts between forestry practices and protection of these species. In most cases, there are workable solutions. The U.S. Fish and Wildlife Service is the federal agency with regulatory responsibility for the ESA. Information on federally threatened or endangered species can be obtained from the Service's field office in Cookeville. Information on state-listed threatened or endangered species is available from the Tennessee Wildlife Resources Agency and the Tennessee Department of Environment and Conservation, Division of Natural Heritage. The following threatened or endangered species have been identified within the specified buffer distance of the property based on data kept in the Tennessee Division of Environment and Conservation, Natural Heritage Inventory Database.

Buffer Distance: 4 mile(s)

<u>COMMON NAME</u>	<u>TYPE</u>	<u>HABITAT</u>
Eastern Woodrat	Mammal	Outcrops, cliffs, talus slopes, crevices, sinkholes, caves & karsts.
Eastern Small Footed Bat	Mammal	Hibernates in caves and mines; also uses abandoned buildings, bridges, and barns seasonally.
Menge’s Fame-Flower	Flowering Plant	Dry rock ledges
Yellow Jessamine	Flowering Plant	Dry openings
Small’s Stonecrop	Flowering Plant	Sandstone outcrops
Bald Eagle	Bird	Areas close to large bodies of water. Roosts in sheltered sites in winter. Communal roosts site...

TABLE OF EXISTING LAND USES

<u>Existing Land Uses</u>	<u>No. Acres</u>
Forestland	~ 760
Off-road Trails	~ 3
	<hr/>
TOTAL	762.9

Forest Management Prescriptions:

Separate descriptions of individual forest stands and recommendations for management of timber and other resources during the next 10-year period are presented below. A Stand Data and Management Prescription Summary which summarizes information and provides prescriptions for all forested stands during the 10-year management cycle 2015 - 2024 are also below.

## AREA NO. 1

~270 Acres

Description of Area: Area 1 is located on the southern part of the property and consists of large chestnut oak, red oak, scattered loblolly and Virginia pines, as well as a variety of other hardwood species. The average diameter at four and one-half feet above ground (DBH) is between 20 and 22 inches with the average height being 70 feet. This area is fully stocked with an average Basel area (BA), the unit of measurement referring to how the space occupied by the cross section of tree trunks, is 110. A small portion had some timber trespass during an adjacent timber operation and has already been addressed. Most of area one does not appear to have had any harvest history for the last 60+ years. This is evident by many large chestnut oaks that will only decline in quality with time. The trees in the northern portion of this area are already beginning to show evidence of decline and should be harvested.

Forest Management Prescription: A regeneration harvest should be performed on this stand. The area should be commercially harvested by removing all the merchantable timber from the site while leaving 10-20 foot buffers on the edges for wildlife cover and aesthetics. This prescription would capture the current value of the stand and allow the stand to regenerate naturally as a mixed hardwood stand. The new trees would have better form and result in a more valuable stand of timber for the future.

## AREA NO. 2

~135 Acres

Description of Area: Area 2 consists of the best timber on the property. There is a large white oak component that has good form and size in this area. Going up the hill to the east, large rock create a transition into a large chestnut oak component. Various other hardwood species are scattered throughout this area consisting of gum, maple, and others.

The average BA in this area is 100 with an average DBH of 16-18 inches and average height of 65ft. The trees below the rock will increase with time and should not be removed at this time. Harvest history in this area is estimated to be 40+ years ago.

Forest Management Prescription: Option 1: A regeneration harvest should be performed on this stand. The area should be commercially harvested by removing all the merchantable timber from the site while leaving 10-20 foot buffers on the edges for wildlife cover and aesthetics. This prescription would capture the current value of the stand and allow the stand to regenerate naturally as a mixed hardwood stand. The stand has good natural regeneration in the understory that should result in a valuable stand of timber for the future.

Option 2: A selective thinning should be performed to allow future crop trees to increase in diameter and height growth. In the selection of crop trees, emphasis should be placed on the proper spacing, species, and position in the crown canopy compared to other trees of the same age. Many of the larger oak trees should be harvested as well as the non-oak species trees. This would allow you to capture the value out of the mature trees as well as providing space for desired oak species to become established and grow. The degree of harvest should provide the crop tree crown with development space on at least three sides of the crown for about 10 years while retaining shade on the lower 2/3 of the tree to prevent sprouts from growing on the side of trees. Such sprouts reduce the quality and value of the wood.

### AREA NO. 3

~105 Acres

Description of Area: Area 3 consists of a large white oak component that has good form and size. Going east toward the crest of the hill, rocky substrate creates a transition to a large chestnut oak component. Various other hardwood species are scattered throughout

this area consisting of gum, maple, and others. The average BA in this area is 100. Harvest history in this area is estimated to be 40+ years ago. This area contains a possible timber theft on its eastern side.

Forest Management Prescription: Option 1: A regeneration harvest should be performed on this stand. The area should be commercially harvested by removing all the merchantable timber from the site while leaving 10-20 foot buffers on the edges for wildlife cover and aesthetics. This prescription would capture the current value of the stand and allow the stand to regenerate naturally as a mixed hardwood stand. The stand has good natural regeneration in the understory that should result in a valuable stand of timber for the future.

Option 2: A selective thinning should be performed to allow future crop trees to increase in diameter and height growth. In the selection of crop trees, emphasis should be placed on the proper spacing, species, and position in the crown canopy compared to other trees of the same age. Many of the larger oak trees should be harvested as well as the non-oak species trees. This would allow you to capture the value out of the mature trees as well as providing space for desired oak species to become established and grow. The degree of harvest should provide the crop tree crown with development space on at least three sides of the crown for about 10 years while retaining shade on the lower 2/3 of the tree to prevent sprouts from growing on the side of trees. Such sprouts reduce the quality and value of the wood.

#### AREA NO. 4

~130 Acres

Description of Area: Area 4 has a steep southeast slope. The southern facing slope typically is drier than that of the northern slope and results in poorer quality of trees. Southern pine beetle killed many of the pine trees approximately 15 years ago in this area

resulting in a few open patches that filled in with mixed loblolly pine, Virginia pine, and hardwood saplings. Many of the hardwoods in this area are chestnut oak with a wide range of sizes and an average BA of 70. The trees in this area will not have much growth and should be harvested as desired and replanted in short leaf or loblolly pine. If you decide to plant please contact the area forester for possible cost share and for more information on planting specifics.

Forest Management Prescription: A regeneration harvest should be performed on this stand. The area should be commercially harvested by removing all the merchantable timber from the site while leaving 10-20 foot buffers on the edges for wildlife cover and aesthetics. This prescription would capture the current value of the stand and allow the stand to regenerate naturally as a mixed hardwood stand. The stand has good natural regeneration in the understory that should result in a valuable stand of timber for the future.

#### AREA NO. 5

~115 Acres

Description of Area: Area 5 is an upland hardwood stand with a good mixture of hickory, chestnut oak, gum, and other hardwood species. The average BA is 120. The average tree diameter is 12-14 inches DBH with an average height of 60 ft. This area has evidence of recent harvesting with stumps and species type indicative of a stand that had a select harvest performed 25+ years ago.

Forest Management Prescription:

Option 1: A selective thinning should be performed to allow future crop trees to increase in diameter and height growth. In the selection of crop trees, emphasis should be placed on the proper spacing, valuable species, and position in the crown canopy compared to other trees of the same age. This would allow you to capture the value out of the mature

trees as well as providing space for desired oak species to become established and grow. The degree of harvest should provide the crop tree crown with development space on at least three sides of the crown for about 10 years while retaining shade on the lower 2/3 of the tree to prevent sprouts from growing on the side of trees. Such sprouts reduce the quality and value of the wood.

Option 2: This stand should be allowed to grow for the next 10+ years then a regeneration harvest should be performed on this stand. The area should be commercially harvested by removing all the merchantable timber from the site while leaving 10-20 foot buffers on the edges for wildlife cover and aesthetics. This prescription would capture the current value of the stand and allow the stand to regenerate naturally as a mixed hardwood stand. The stand has good natural regeneration in the understory that should result in a valuable stand of timber for the future.

Recommended Harvest Plan:

It is my recommendation that a sustainable harvest plan should be implemented for this property. Using divisions something like that of the current hunting lease provided on the attached picture will assist in this process. This would provide at least 14 different divisions of approximately 50 acres each. Harvesting one division every 3 to 4 years at 14 divisions would allow a sustainable harvest cycle of 42 to 56 years. This could be a sustainable cycle by allowing most divisions to naturally regenerate while harvesting others and provide you with a 40+ year old mature stand of timber after the last division is harvested.

Referring to the provided property map I suggest performing harvests in the numbered order. I recommend using the established main ATV trail running through the property as a permanent haul road used during harvesting operations. This will allow access to other divisions while reducing damage to the regeneration of previously harvested divisions. Also, this will also provide the availability of multiple harvesting methods to be utilized if desired.

A sustainable harvest plan provides many different benefits. The plan will provide a continuous monetary income from the property for generations to come. It will provide diversity of habitat for wildlife that promote game species by providing new areas for foraging in addition to the hard mast existing in the older bordering areas. The use of natural regeneration will decrease the amount of money used in reestablishing a stand of timber. Allowing the forest to remain forested will ensure that you can capitalize on the tax incentive for having forested property. A sustainable forest is not only environmentally friendly to wildlife but provides a good perception to the general public.

### Wildlife Management Recommendations

#### 2.0 Acres

The primary objective of any wildlife management program is to provide food, water and cover. Most farms and woodlands contain cover and water, but lack herbaceous food production and soft mast production for the fall, winter and early spring months, which are critical months for most wildlife.

A good way to produce more wildlife habitat in a forested area is to create forest openings. I would suggest converting forested areas (1 to 2 acres in size) to a permanent wildlife food plot. One food plot per division from the existing hunting lease map should be created. These areas should be planted according to the recommendations below:

Wildlife shrubs should be planted around the edges of both plots to help incorporate more herbaceous foods and soft mast into the habitat. The forested area will need to be cleared and prepared for planting. (See the prescription below for Cool Season Grasses and Native Warm Season Grasses and shrubs to plant).

**Cool Season Grasses Prescription:**

These openings should be sown in crimson clover (8 lb. /acre) and winter wheat (30 lb. /acre) and should be planted in the fall to provide food and some cover for deer, turkey, quail, and grouse. The winter wheat/ ladino clover mix should be fertilized with a balanced fertilizer (6-12-12) at the rate of 250 pounds per acre and limed at approximately 2-4 tons per acre. For exact fertilizer and lime recommendations, follow results of soil tests through the Ag Extension Service or the Natural Resources Conservation Service, if available. If planted in the spring, Kobe lespedeza should replace the winter wheat at 8 lbs/acre. There are two ways to establish the mixture. The first and preferred method is to spray with a registered herbicide to kill the existing vegetation and seed with a no-till drill. The second method is to disc, broadcast seed, and cover by dragging. Cultipacking is recommended, if possible.

**Warm Season Grasses Prescription:**

The large abandoned field should be planted in Native Warm Season Grasses (NWSG) such as little bluestem, big bluestem or indiagrass or a combination of these. Switchgrass can be planted as an option also but should be planted by itself because it matures at a different time and consequently mowed at a different time of the season. A 30-foot wide strip of orchardgrass and ladino clover should be planted between the native grasses and the woodland and should be mowed in late summer. It will serve as a food strip as well as a firebreak when burning the warm season grasses. All are adapted to a soil pH of 5. These grasses will provide excellent forage for deer and superb nesting and brood habitat for quail and other bird species.

Planting and establishment of these grasses include double disking of the ground to prepare the seedbed, broadcasting the seed, and cover by dragging and cultipacking. The no-till method of spraying with a registered herbicide (example Roundup Ultra) drilling the seed is preferred. Please read and follow all directions on the label and. Planting depth is best at 1/4 to 1/2 inch, and the best time of planting is in the spring between

April 1 and June 30th. If planting is desired in the fall, it should be between November 1 and December 31.

One of the most important factors in the establishment of NWSGs is to keep down the competing vegetation for the first year or two. This may necessitate spraying with a chemical called *Plateau* or just simply mowing the weeds to a height of 6-12 inches, which will help to control the unwanted vegetation. Make sure the mower is kept above the NWSG seedlings because they do not need to be mowed, and the intent is to keep the weeds from overtopping and shading the grass seedlings. After establishment of these grasses, very little maintenance will be required except mowing or control burning every 2-3 years.

**Wildlife Shrubs Prescription:**

Sergeant crabapple, wild plum, persimmon and sawtooth oak seedlings are recommended to be planted around the perimeter of the opening or any woodland edges. The trees should be planted by alternating the species in one row and spacing them 10-12 feet apart and should be approximately 20-30 feet from the shade of the adjoining woodland. This will provide a valuable soft mast component and some hard mast which is available to wildlife through the winter. Crabapple planting stock can be purchased from the Warren County Nursery, The Boyd Nursery, and the Forrest Nursery, all in McMinnville. The recommended varieties are roselow, manchurian, and wild sweet crabapple, the latter being the best, but hardest to find. Wild plum can be found at the same nurseries. Persimmon and sawtooth oak can be purchased from the Tennessee Division of Forestry nursery through the area forester.

Other general practices that will enhance many native wildlife species include:

1. Leaving streamside management zones along lake and stream edges.
2. Leaving strips of trees connecting mature stands to serve as cover and wildlife corridors where areas have been or will be clear-cut within a few years of one another.

3. Maintaining stands of trees in different ages and size classes dispersed through the forest.
4. Leaving some mature mast-producing trees, such as oaks and hickories, which are important for squirrels, turkeys, grouse and deer.
5. Leaving snags and hollow den trees for cavity-dependent wildlife species, preferably in association with groups of mature trees.
6. Leaving stands that have tree species diversity as well as age class diversity across the forest.
7. Providing other herbaceous wildlife plantings in openings adjoining woodlands for cover. Long linear openings are preferred and better utilized by wildlife. Some seed mixes and shrubs for wildlife are listed in this prescription above.

Additional Recommendations for Management: The following recommendations, which apply, to the overall management of the property are also offered:

Boundary lines should be maintained by checking them at five-year intervals, and marking when the paint has faded to the point of being difficult to see. Paint specifically designed for this purpose should be used as the life of this paint is greater than regular house paint. Locating and remarking of boundary lines would best be done in the late fall and winter when leaves have fallen. This will allow the lines to be seen easier and help prevent future timber trespass occurrences.

A consulting forester should be used if any sales are made. A consulting forester can act as your agent in matters concerning a timber sale, and can ensure that all aspects of a

timber sale contract are carried out. A list of consulting foresters can be supplied the Tennessee Division of Forestry upon request.

Always insist that best management practices (BMPs) are used when forestry practices are conducted on the property. See the attached technical bulletin regarding BMPs for protection of soil and water resources.

Cost sharing is sometimes available for these plantings under the Wildlife Habitat Improvement Program (WHIP) which is part of the new Farm Bill. None of the cost-share programs obligate your land for open hunting or public access. Consult your local Farm Services Agency county office for information.

Cost share programs are also available through TWRA's "Tennessee Wildlife Habitat". Information can be found at the website <http://tnwildlifehabitat.org/assistance.cfm> under the Assistance tab.

Obtain a burning permit any time between October 15 and May 15 Monday through Friday 8:00 am – 4:30 pm. Permits are free. Call Smyrna Fire Tower at (423-775-0151) and they will issue a permit number over the phone, or go to [www.burnsafe.org](http://www.burnsafe.org) to obtain one on line if weather and wildfire conditions allow. You will also receive useful weather information and advice before burning.

Protect the area from destructive wildfire. Firebreaks can be constructed and maintained to prevent a wildfire from damaging or destroying the stand. These firebreaks can be sown in seed mixes that are beneficial to wildlife.

Stewardship Plan Update: This forest stewardship plan should be updated in 2025.

FOREST STEWARDSHIP PLAN PREPARED BY:

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XXXX	Date
Tennessee Department of Agriculture	
Division of Forestry	
423-XXX-XXXX	

SCHEDULE OF RECOMMENDED STEWARDSHIP PRACTICES TO BE APPLIED  
DURING THE PERIOD 2015 THROUGH 2024

LANDOWNER: \_\_\_\_\_

<u>Practice No.</u>	<u>Prescription Summary</u>	<u>Year 1/ Scheduled</u>
1	Mark Boundary Lines	2015
2	Remove / Treat Invasive Plants	2016
3	Begin Sustainable Forest Management Plan	2016
4	Forest should be reexamined	2024

Practices scheduled are tentative; the landowner will be allowed reasonable flexibility concerning scheduling.

**MAP**

**2017 Grant Accomplishment Report**

**Federal Identification**

**Report Title**

**2017 Forest Stewardship and Rural Forestry Assistance Grant Accomplishment Report:**

*Tennessee*

**Reporting Period**

**October 1, 2016 to September 30, 2017**  
**(End of Year report)**

**State Forest Stewardship Coordinating Committee:**

<b><i>(Please answer Yes or No)</i></b>	<b><i>(Please answer Yes or No)</i></b>	<b>Please indicate date(s) Committee met.</b>
<i>Did the State Forest Stewardship Coordinating Committee meet during Federal Fiscal Year 2016?</i>	<i>No</i>	
<i>Are there representatives from the Forest Service, Soil Conservation Service, Agricultural Stabilization and Conservation Service, and National Institute of Food and Agriculture?</i>	<i>No representative for the Agricultural Stabilization and Conservation Service, or the National Institute of Food and Agriculture</i>	
<i>Are there representatives from: local government, consulting foresters, environmental organizations, forest products industry, forest land owners, land-trust organizations (if applicable), conservation organizations, the State fish and wildlife agency, the State Technical Committee?</i>	<i>There are representatives from each of these categories on the committee list.</i>	

**Miscellaneous Forest Stewardship/Rural Forestry Assistance**

<i>Do you have an active Forest Action Plan with Forest Stewardship and Rural Forestry Assistance components?</i>	Yes
<i>Did you receive full administrative funding during this fiscal year?</i>	Yes

**National Performance Measures**

**Regional Performance Measures**

<b>Regional Performance Measures</b>	<b>Target</b>	<b>Accomplishment</b>	<b>Comments</b>
<i>Number of Forest Management or Practice Plans approved</i>	700	1345	
<i>Acres of Forest Management or Practice Plans approved</i>	63,000	113,205.90	
<i>Number of landowners recognized as Certified Forest Stewards or equivalent</i>	5	5	
<i>Pounds of improved pine seed produced</i>	450	317	
<i>Pounds of hardwood seed produced</i>	3000	5,413	
<i>Numbers of pine seedlings produced</i>	5,000,000	4,178,000	
<i>Numbers of hardwood seedlings produced</i>	2,000,000	1,709,000	
<i>Acres of state-owned forest improved</i>	[enter]	Not available	

*If there is a significant difference between the target and actual accomplishment, please explain here.*

**Sub-Grant/Sub-Contract Information**

*(Please answer the questions in the table below. Specific details about the project should be in the Spending/Accomplishment or Program Priorities section.)*

<i>Did your state issue Sub-grants with FY 2016 Funds?</i>	<i>Yes</i>
<i>Number of Sub-grants Awarded</i>	<i>1</i>
<i>Dollar Amount of Sub-grants Issued</i>	<i>\$5,000</i>
<i>Sub-grants In-kind Match</i>	<i>N/A</i>
<i>Sub-grants Cash Match</i>	<i>N/A</i>
<i>Number of Sub-grants Active</i>	<i>1</i>
<i>Number of Sub-grants Completed</i>	<i>0</i>

**Document Legend**

Original Narrative in Blue

FY 2017 accomplishments in Brown

**Forest Stewardship and Rural Forestry Spending/Accomplishments**

The Division of Forestry will focus on internal subject matter training and GIS tool development, training, printing and support with a significant amount of the funds (\$80,500.00) \$125.00. Travel (\$19,747.00) \$210.86 to SGSF meetings and various other meeting opportunities will also be paid out of this grant. The remaining funds (\$135,925.00) \$16,916.24 will be used for salaries, supplies, and contractual.

The Division of Forestry also implements three reforestation programs that complement the Forest Stewardship program.

- The Division, in partnership with Promark, a subsidiary of D’Addario will plant approximately 100,000 hardwood seedlings on private landowners’ properties that were paid for by this company
  - 29 landowners, 81,000 seedlings
- The Division, in partnership with Huber Engineered Woods, will plant approximately 240,000 pine seedlings on private landowner’s properties that were paid for by this company
  - 1 landowner, 33,000 seedlings
- The Division also has an allocation of \$330,000 of state funds from the TN Agriculture Enhancement Program rural (TAEPr) that are used as cost share for reforestation for private landowners.
  - 20 landowners, \$138,000.00 reforestation projects

No changes in the Scope of Work are anticipated, but the Forestry Division will submit a grant modification if the need arises. Savings or budget changes are not anticipated since Tennessee’s Stewardship and Landowner Assistance programs cost significantly (approximately 7.5 times) more than the USDA Forest Service’s allocation.

## **Program Priorities from Forest Stewardship or Rural Forestry Assistance related to Forest Action Plans**

### Priority 1:

Strategy 1.1.1. Diversify age and species composition through science based forest regeneration (page 83). Forest plans written by field foresters identify areas where additional diversification are appropriate and make recommendations for implementation of age and species diversification.

FY 2017- TDF wrote 1345 new or revised forest management plans that covered 113,205 acres.

### Priority 2:

Strategy 2.2.3. Increase proper use of BMP's (page 90). The Division continues to work with loggers to reduce stream zone disturbance and to incorporate include BMP's for riparian zones in management planning and prescription planning.

FY 2017- TDF partners with the University of TN and the Tennessee Forestry Association to conduct Master Logger trainings throughout the year and across the state. To date, 2,156 loggers have been trained since 2006.

### Priority 3:

Strategy 2.4.2. Implement Farm Bill and other initiatives that improve forested riparian buffers (page 92). Emphasis on riparian zones is included in all forest management planning where streams, rivers or other wet areas are encountered.

FY 2017- TDF partnered with the NRCS and the USFS in a Joint Chief project anchored in the Cherokee National Forest and focused on improving water quality through a diverse set of strategies. TDF contributes to the project by providing technical assistance to landowners and high quality seedlings to be planted along riparian areas.

### Priority 4:

Strategy 3.3.3. Diversity of age and species composition (page 95). The Division is gearing up to more actively participate in the range-wide shortleaf pine initiative.

FY2017- TDF has participated in at least two shortleaf pine initiative training sessions that have been facilitated by partners such as The Nature Conservancy and the University of Tennessee. These training sessions train both landowners and land managers in the planting, growing, and caring for shortleaf pine.

### Priority 5:

Strategy 3.4.1. & 3.5.1. Increase capacity to provide small and large forest landowners with land management planning (pages 98 & 99). All prescription, forest land and stewardship plans are aimed at increasing and/or enhancing the forests of Tennessee.

FY 2017- TDF is in the process of conducting a complete Forest Management program overhaul that will result in more relevant programmatic guidelines and more efficient plan writing capabilities. This project is not funded through the Stewardship grant but will impact its activities.

### Priority 6:

Strategy 6.1.3. Expand/support targeted educational opportunities such as Tennessee Healthy Hardwoods field days. In partnership with Univ. of Tennessee the Division will host the 12th annual THH days at two locations.

FY2017- TDF partnered with the University of Tennessee to conduct two Healthy Hardwood field days: April 22, and May 20

Priority 7:

Strategy 7.1.2. Incorporate wildlife friendly practices and activities into cost share programs (page 125). Shortleaf pine initiative is being incorporated into TN/s SPBI Cost share practices and other wildlife considerations are included in our prescription plans for reforestation where appropriate.

FY2017- The fourth annual ‘Saws and Claws’ meeting was held in the summer of 2017. The primary objective of these meetings is to provide opportunities for Tennessee Division of Forestry foresters, Tennessee Wildlife Resources Agency and NRCS biologists to share professional opinions and ideas on how to integrate forest management activities with wildlife habitat improvement. Secondary goals include each agency staff becoming more familiar with respective agency programs to better communicate to landowners opportunities to pursue their forest management objectives. This year the meeting focused on the providing consistency of forest management plans across all three agencies.

### **Commitments & Special Projects**

FY 2017- No special project

**Budget Information**

Budget Items by SF 424A Object Class Categories	Federal Original/Modify Budget	Federal Budget Actual Expenses to Date	Remaining Balance of Federal Funds
a. Personnel	77,951.25	84,580.94	-6,629.69
b. Fringe Benefits	41,973.75	34,427.82	7,545.93
c. Travel	19,747.00	210.86	19,536.14
d. Equipment	0.00		
e. Supplies	11,000.00	0.00	11,000.00
f. Contractual	5,000.00	0.00	5,000.00
g. Construction			
h. Other	80,500.00	125.00	80,375.00
i. Total Direct Charges (sum of a-h)	236,172.00	119,344.60	116,827.38
j. Indirect Charges	0.00	0.00	0.00
k. Totals (i + j)	236,172.00	119,344.60	116,827.38
l. Program Income			

**Has there been a Budget Modification to this Grant (Yes or **No**):**

**If yes, please include the modification number.**

**Describe how your state has provided match for the Federal Stewardship Grant Funds:**

Match is provided with resources from Tennessee’s wildland fire program within the consolidated payment grant umbrella.