



United States
Department of
Agriculture

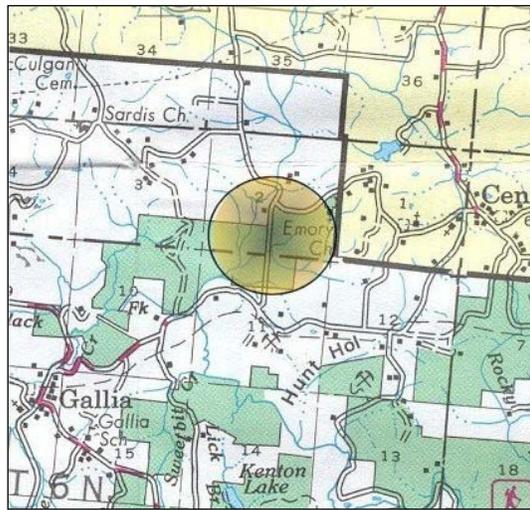
August 3, 2007

Type of Document: Decision Memo

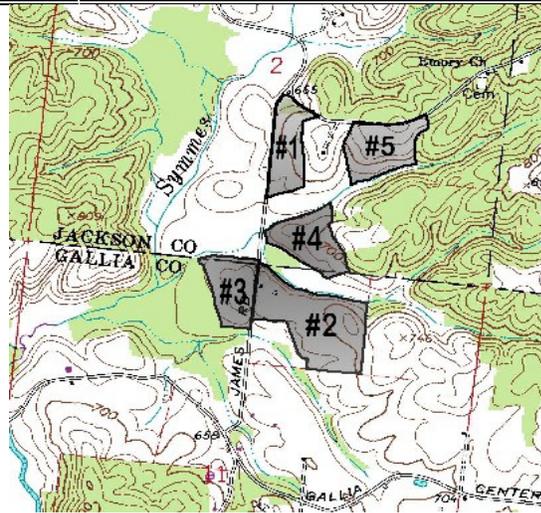
Project: Crider Pine Thinning

Administrative Unit: Ironton Ranger District
Wayne National Forest
USDA – Forest Service

Geographic Location: Gallia and Jackson County, Ohio



Map showing project area at the boundary of Jackson and Gallia Counties in the northeastern part of the Ironton Ranger District.



Topographic map showing location of individual proposed sale units.

I. Decision to be implemented

A. Description of Decision

I have decided to implement the Crider Pine Thinning project on the Ironton Ranger District of the Wayne National Forest. The project will thin approximately 66 acres of white pine and shortleaf pine plantations in T6N R17W Sections 2 & 11, Madison and Greenfield Township, Jackson and Gallia County, Ohio. Two thinning harvests will occur approximately five years apart to reduce the stocking of white or shortleaf pine and to increase hardwood regeneration and its survival in the understory. Less than .5 mile of temporary road will be constructed in Stand 3, of Compartment 403 and Stands 2,4,10, and 50, of Compartment 409. (See the map/table crosswalk on the next page.) No roads would be added to the Forest Road Inventory in this project. Approximately 5 landings requiring up to 1/4 to 1/2 acre per site (up to 3.5 acres of clearing) would be needed unless a roadway or existing natural opening can be used. We will close non-authorized roads, which are not public rights-of-way or in use by Forest permittees. Following the initial harvest, we will under plant native oaks (enrichment planting – Johnson, 2002). Planting as few as 100 seedlings per acre would greatly enrich the diversity of the stands.

Seedlings should be planted nearby or within rows of harvested trees to help insure they would not be in places likely for equipment to travel during the second thinning, causing significant damage to seedlings. White oak should be the primary species to plant, with black, northern red and chestnut oaks as secondary choices.

Table 1: Crider Pine Thinning				
Comp-Stand-(Map)	Acres	YOR	Forest Type	Activity
403 - 003 (5)	9	1972	32	White pine thinning
409 - 002 (2)	13	1972	3	White pine thinning
409 - 004 (3)	9	1972	3	Shortleaf pine thinning
409 - 010 (4)	22	1972	3	White pine thinning
409 - 050 (1)	13	1972	3	White pine thinning
Total	64			

Forest type 32 = shortleaf pine: a stand in which shortleaf pine is a majority of the commercial stocking.
 Forest type 3 = eastern white; a stand in which white pine is a majority of the commercial stocking.

Compartment 409, stand 4 is a shortleaf pine plantation. The shortleaf pine was planted in 1972 and has never been thinned. Compartment 409, stands 2,4,10 and 50 are planted white pine stands. These stands were planted in 1972, and pre-commercially thinned in 1982. A commercial thinning is proposed for all stands to reduce the current basal area to approximately 50 percent, following the first thinning. After the first cutting, the stand will still comprise a dominated white pine stand. Thinning the stands will encourage some hardwood and herbaceous understory, but because of the rapid growth rate of these white pine stands, the crown will quickly close in. The second thinning is designed to further reduce white pine stocking and encourage growth of native hardwood regeneration and under-planted oaks.

Healthy pines of both species and hardwoods will be retained as a priority. The harvest need not be from below as traditionally done to promote the rapid growth of dominant trees since an objective in this project is to promote the eventual reversion to a hardwood stand. A biological evaluation on stand condition by USDA Forest Service, State and Private Forestry Forest Health Protection (Elliott 2007) suggests that a crown thinning to target intermediate, co-dominant and dominant crown classes will create gaps and allow more light to penetrate the stand. Dominant pine trees can be removed as long as no more than 50% of the basal area is removed.

Other activities occurring in this project include:

1. Blocking and doing light erosion control maintenance on an old farm access road in the Project Area leading to Symmes Creek to prevent trash dumping and erosion.
2. Feathering tall vegetation around the existing opening in Stand 2 to improve edge habitat. Leave snags along the edges of this opening for potential bat roosting or raptor habitat.
3. Pruning the fruit-bearing orchard tree in this opening to improve its vigor.
4. Cleanup of trash dumps in the vicinity of the project area.

Activities approved in other decisions affecting this project area include:

Non-native invasive species identified within the project area would be treated per the April 2007 decision on the Non-Native Invasive Plant Control Project (USFS 2007a).

Application of standards and guidelines from the 2006 Forest Plan (USFS 2006)

- We will not cut during the non-hibernation season live trees or snags greater than or equal to 6” dbh with suitable bat roosting characteristics, except when a safety hazard. (from SFW-TES-10).
- Prior to implementing any project activity, establish the site-specific boundaries of the riparian corridor. Filter strip width along intermittent streams should be a minimum of 75 feet, measured horizontally from the edge of the aquatic ecosystem. Filter strip width has been mapped using GIS and will be adhered to in the field using GPS or distance measurements during sale layout (from GFW-ARR-5).
- No shagbark or shellbark hickory over 6 inches dbh nor any live trees of any species 6 inches dbh that are hollow, have major splits, or have broken tops, will be cut unless they are a safety hazard (from GFW-TES-9 and SFW-TES-10).

Mitigations as part of the Proposed Action

In order to protect biological resources, the following mitigations specific to this project will occur:

1. Dead pines will only be cut if they pose a hazard to workers.
2. The project area should be treated for non-native species before the project begins and then monitored bi-annually for new infestations that may start at and spread from the harvesting activities. All herbicide treatments should follow direction in the 2007 NNIS EA decision.
3. Minimize the spread of invasive species by cleaning off soil and vegetation from all harvesting equipment prior to entering the project area. Equipment cleaning could be done at any facility with a high pressure water hose. A high pressure air hose or stiff bristled broom could be used to remove soil, vegetation and seeds before equipment leaves the project site. Recommend that operator harvest the least- infested units first, to reduce spread (see Table 2 below). Monitor for NNIS listed in table 2 after harvest and treat if there is evidence of spread.
4. Disturbed areas should be re-seeded with a seed mix of non-invasive annual grasses and native species. Certified weed free straw should be placed over the seeded areas for mulch and protection from seed predators.
5. If any timber rattlesnakes are sighted during the project, the contractors are to avoid harming the individuals and are to report any sightings to the Forest Service Contracting Officer’s Representative and the District Wildlife Biologist.
6. Notify all contractors or other personnel at the onset of the project of the potential to encounter snakes and what steps they should take to avoid harm or harassment of any individuals.
7. Do not remove any trees adjacent to the seep in the shortleaf pine unit to protect habitat.
8. Disturbance at the power line will be minimized by designating access across the power line.
9. Do not cut any healthy butternut trees. Healthy butternuts have no evidence of cankers and are still producing fruit.
10. Avoid heritage sites as marked on the ground.

Table 2: Non-Native Invasive Species Occurrences by Stand					
NNIS	Compartment and Stand Numbers				
	403_003	409_002	409_004	409_010	409_050
Multiflora Rose	x	x	x	x	x
Japanese Honeysuckle	x	x	x	x	x
Asiatic Stiltgrass				x	
Crown Vetch					x
Japanese Barberry				x	
Common periwinkle					

B. Purpose of Decision

This project is to improve the health and vigor of approximately 66 acres of white and shortleaf pine plantations in Jackson and Gallia Counties, Ohio. Many white pine plantations on the District are over-stocked and under stress because of the high density of trees. Mortality has occurred in some plantations from a complex of stresses including drought, pine bark adelgid, fungal pathogens, and bark beetles. White pine stands that are over-stocked are more susceptible and vulnerable to a variety of pests and diseases. The overstocked trees that are already in a weakened condition due to being overstocked will be more likely to die when the added stresses of these pests and diseases infect the trees. The resulting dead trees increase the amount of easily combustible fuels available should a wildfire occur in the area. Standing dead trees create a safety hazard to firefighters since they are more likely to burn and then fall, possibly onto firefighters in the area. Standing dead trees could also spread burning embers further to start new fires.

Thinning pine plantations improves the health of the stands by increasing resistance to insects and disease and allowing a fewer number of stems to grow stronger. Thinning also increases light to the ground, allows hardwood seedlings to establish and increases the growth of herbaceous vegetation. This improves understory plant diversity and the associated wildlife habitat (see Project File 2-4). Maintaining white pine stands to acceptable stocking levels will result in increased survival of individual trees, helping to prevent future wildfire hazards.

The Desired Future Condition for the Forest and Shrubland Mosaic Management Area from the 2006 Wayne National Forest Land and Resource Management Plan (USFS 2006) is that the forest should be a mix of forest communities, generally consisting of oak and hickory in the uplands and on drier hillsides. Yellow poplar, beech, maples, oaks, hickories, and other mesic species dominate moist slopes and bottomlands. Native pine communities occur in portions of this management area. White pine plantations are not considered native, and our goal is to maintain their vigor while encouraging them to revert to native hardwoods.

The Desired Future Condition for the Special Areas, including the Sardis Wetland, is based on the unique characteristics of terrain, climate, soil, water, flora, or fauna. All activities in these areas are to be consistent with the protection or maintenance of the unique characteristics for which an area was designated. The nomination report by Marilyn Ortt (Ortt 1994), recommended logging the small pine plantations when commercially mature, then allow them to under go natural hardwood succession (see Project File 2-5, 2-6, 2-7). This project is consistent with this recommendation to move these stands toward a more natural hardwood composition.

A detailed inventory of stand conditions including live and dead basal area and regeneration condition can be found in Project File 2-4.

Ecological Land Type

The desired future condition for these stands is based on the Ecological Land Type Phases (ELTPs) identified through field interpretation of datasets provided in the Ecological Classification System. Of the factors that influence the forest communities on the Wayne, landform and aspect were found to be the most important. ELTPs are grouped into Forest Types according to those comprising similar characteristics and attributes across the landscape (see Project File 2-4 and Map 3-5 in the Project File and on the fsweb site).

Prior to clearing for agricultural use, stands identified for harvest in this project are thought to have contained a mixture of Upland, Dry-mesic, Mesic and Riparian Forest Types. A more detailed description of these types and the species present can be found in Project File 2-4. A complete list of species present on the sites can be found in the Biological Evaluation for Botany, Project File 2-11.

Forest Health Considerations

The Ohio Division of Forestry has identified an increased susceptibility of white pine to insects and disease, leading to an increase in mortality as the overall health of the stand diminishes (see www.ohiodnr.com/forestry/health/whitepine.htm). See report in Project File 2-12. Decline and mortality in eastern white pine is being attributed to moisture extremes during the late 1990s, following by stress-dependent insects and diseases (see Project File 2-4). The lack of timely thinning may also be a factor. Affected trees are generally 20-40 years old and growing in groups or pockets within pure white pine plantings. Drought stress pre-disposes the trees to extremely heavy pine bark adelgid infestations, which can be so heavy that the trunks of trees appear white-washed and the cambium (growing layer) is subsequently damaged. Bark beetles are attracted to the stressed trees, causing a rapid decline and death in stressed trees.



High mortality occurring in Crider stands.

A report prepared by the US Forest Service Forest Health Management unit in Morgantown, WV, provided an intensive description of the conditions in each stand considered for treatment in this project. This report is contained in the Project File as 2-2 and is referenced extensively in Project File 2-4 as (Elliott, 2007). Elliott notes that single-species stands with competition for light, nutrients and growing space have irregular waves or mortality separated by times of relatively little mortality. The Crider stands are in a stage of cyclical decline associated with large populations of the pine bark adelgid and bark beetles, possibly due to increased stress from drought, windstorms, and competition (Elliott, 2007, pg 9).

C. Actions Considered but Dismissed

It was considered to 1) do a thinning from below, but leave the trees on site and 2) not thin these stands. Due to the increased likelihood for insects and disease to spread from the decaying trees to the healthy trees, the increased risk of wildfire due to heavy fuel loading, and the loss of potential contribution to the local economy, this alternative was not analyzed further. These stands would eventually break apart and convert to hardwood.

Additional potential management alternatives for each stand were addressed in Elliott, 2007 and were considered by the team while developing the proposed action.

II. Reasons for Categorically Excluding the Decision

Decisions may be categorically excluded from documentation in an environmental impact statement or environmental assessment when they are within one of the categories identified by the US Department of Agriculture in 7 CFR part 1b.3 or one of the categories identified by the Chief of the Forest Service in Forest Service Handbook 1909.15 sections 31.1b or 31.2, and there are no extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment.

I have concluded that this decision is appropriately categorically excluded from documentation in an environmental impact statement or environmental assessment as it is a routine activity within a category of exclusion and there are no extraordinary circumstances related to the decision that may result in a significant individual or cumulative effect on the quality of the human environment. The project is in compliance with the 2006 Wayne National Forest Land and Resource Management Plan. My conclusion is based on information presented in this document and the entirety of the Project File.

A. Category of Exclusion

This proposed activity falls with the categorical exclusion category 31.2, Number 12, which allows the harvest of live trees not to exceed 70 acres with no more than ½ mile of temporary road construction. The purpose of this category is to allow low-impact silvicultural treatments through timber harvest (Federal Register, Vol. 68, No. 145, July 29, 2003 Interim Directive effective July 29, 2003). This category allows incidental removal of trees for temporary roads, landings, and skid trails as determined by the Forest Service in the timber sale contract specifications.

B. Relationship to Extraordinary Circumstances

The mere presence of one or more of the following resource conditions does not preclude use of a categorical exclusion (FSH 1909.15, Chapter 30, Section 30.3). The degree of the potential effect

of a proposed action on these resource conditions determines whether extraordinary circumstances exist.

1. Threatened and Endangered Species or Their Critical Habitat

The Endangered Species Act requires that federal activities do not jeopardize the continued existence of any species federally listed or proposed as threatened or endangered, or result in adverse modification to such species' designated critical habitat. In accordance with Section 7(c) of this Act, five federally-listed species were considered during preparation of the biological evaluation. On-site visits were made to the proposed project site to assess the potential for any occurrences or for the availability of potentially suitable habitat. Only the species with suitable habitat present at the site and which could potentially occur at and be affected by the proposed action are addressed further in the biological evaluation (Project File 2-10). Lists of proposed, threatened or endangered species that may be present in the project area can be found in Project File 2-10, 2-11, and 2-13.

Indiana bats are the only federally-listed species that may be affected by the proposed thinning project. In summary, white pines are not a native species in the project area, although short-leaf pine is known from southern Ohio. White pines are not particularly conducive to providing suitable roosting space for bats unless they are large-diameter, dead, dried out with exfoliating bark or splits present and located in a gap in the canopy. Live trees of this species tend to be limby and have a high level of resin. The Crider pine stands are crowded, the canopy is mostly closed, and the dead limbs below the crown reach across most open space, reducing flight space for bats under the canopy. This cluttered condition renders the stands non-conducive to both bat roosting and foraging activity.

The small pockets of white pine mortality resulting from the adelgid infestation (see Project File 2-02 and 2-10) may provide dead snags, which may be more suitable roosting habitat. It is unlikely that this habitat is significantly important to Indiana bats, particularly in a dominantly oak-hickory landscape, such as that found in southeastern Ohio.

The eventual progression of habitat from pure pine plantation to a mixed pine-hardwood habitat would be of benefit to Indiana bats by increasing the diversity of vegetation, improving conditions for the generation of insects for forage, and in the production of more suitable, future roost trees (see Project File 2-10 and 2-13).

In the analysis of impacts from this project, it has been determined that no individuals of any federally-listed or Regional Forester Sensitive Plant Species (RFSS) were found within the project area. The proposed action is not likely to affect these species due to the small amount of area that will be disturbed. The biggest threat to these species is the occupation of their potential habitat by non-native invasive species. Existing populations of non-native invasive species will spread, increase in abundance and threaten this habitat if they are not treated when the pine canopy is thinned or removed.

Thinning the pine trees will have a beneficial effect on the Indiana bat by allowing an understory more conducive to quality foraging and future roosting habitat. The creation of access and temporary haul roads may provide corridors through mature pine woodland that could benefit bats by creating travel corridors and reducing understory clutter, allowing bats more maneuvering space for foraging and travel. (Project File 2-13).

Surveys of the project area found potential habitat, but no individuals of federally protected plant species. Pine thinning is not likely to adversely affect the monkshood, small-whorled pogonia or running buffalo clover and it may benefit habitat for the clover and pogonia.

2. Floodplains, Wetlands, or Municipal Watersheds

There are no floodplains or municipal watersheds within the project area. Wetlands within the Sardis Wetland Special Area have been considered and will benefit from project activity which will control access and allow pine plantations to revert to native bottomland hardwood (see Project File 2-10 and 2-13). No streams will be crossed by project activity and filter strip guidelines were considered in project design.

3. Congressionally Designated Areas

There are no designated wilderness areas, wilderness study areas, or national recreation areas on the Wayne National Forest.

4. Inventoried Roadless Areas

There are no inventoried roadless areas (Roadless Area Review and Evaluation (RARE) II) on the Wayne National Forest.

5. Research Natural Areas

There are no research natural areas in or near the project area.

6. American Indian native religious or cultural sites

There are no American Indian sites in or near this project area.

7. Archaeological sites or historic properties or areas

Heritage sites within the boundaries of the sale units have been physically marked in the field for avoidance (see Project File 2-3). If these two sites are avoided, as per mitigations, the project will have no effect on heritage resources.

8. No other extraordinary circumstances related to this project were identified.

III. Public Involvement

This proposed project has been listed in the Wayne National Forest's published Schedule of Proposed Actions since October 1, 2006.

Invitations to comment on this proposed action to treat white pine plantations was done at the same time as the official notice and comment period required by 36 CFR 215. Requesting public comments in this manner meets the requirement in 36 CFR Part 215(a)(2) Notice, Comment, and Appeal Procedures for National Forest Systems, in which the deciding officer may determine the most effective timing for publishing the legal notice of the proposed action and opportunity to comment.

Copies of the draft Decision Memo were mailed to 147 individuals on June 18, 2007. The official comment period was June 21, 2007 to July 20, 2007. The draft decision memo and map were also available on the Wayne National Forest public website for this entire notice and

comment period. Four letters with comments were received. Responses to the comments received are attached to this final Decision Memo.

IV. Findings Required by and/or Related to Other Laws and Regulations

My decision will comply with all applicable laws and regulations. I have summarized some pertinent ones below.

This project complies with the **National Forest Management Act (1976)** through adherence to guidance in the **Wayne National Forest Land and Resource Management Plan (Forest Plan)**. Endangered, threatened and sensitive species have been considered in this analysis as required by the **Endangered Species Act**. Potential effects of this decision on sensitive species have been analyzed and documented in the Biological Evaluations for Wildlife (Project File 2-13) and for Plants (Project File 2-11).

This decision complies with Section 106 of the **National Historic Preservation Act** (Project File 2-3). This decision has considered whether projects would disproportionately impact minority or low-income populations as required in **Executive Order 12898: Environmental Justice**. The entirety of this document and the supporting Project File is in compliance with the **National Environmental Policy Act**.

My decision is based on a review of the record that shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk.

V. Administrative Review or Appeal Opportunities

Judge James K. Singleton, Federal District Court for the Eastern District of California issued an order on July 2, 2005, in the case of Earth Island Institute v. Ruthenbeck, case number CIV F-03-6386 JKS. In this ruling Judge Singleton struck down the provisions of 36 CFR Part 215 that excluded categorical exclusions from notice, comment and appeal. This decision is therefore subject to appeal pursuant to 36 CFR 215.

A written Notice of Appeal must be postmarked or received within 45 days after the date of publication of legal notice of this decision in the newspaper of record. The Notice of Appeal must be sent to:

*USDA Forest Service, Eastern Region
ATTN: Appeal Deciding Officer (ADO), Mary O. Reddan
626 E. Wisconsin Ave, Suite 700
Milwaukee, WI 53202-4616*

Or E-mail: appeals-eastern-regional-office@fs.fed.us ; Subject: Crider Pine Thinning Decision

Or Fax: 414-944-3963 ATTN: Appeal Deciding Officer, USDA Forest Service, Eastern Region

Normal business hours (for hand-delivered appeals) are 7:30 am – 4:00 pm, Monday through Friday. Electronic appeals should be in TXT, RTF, DOC, PDF, or other Microsoft Office-compatible formats. Appeals must meet the content requirements of 36 CFR 215.14.

VI. IMPLEMENTATION DATE

If no appeal is received, implementation of this decision may occur on, but not before 5 business days from the close of the appeal filing period. If an appeal is received, implementation may not occur for 15 business days following the date of appeal disposition.

VII. CONTACT PERSON

Further information about this decision can be obtained from District Ranger Gloria Chrismer during normal office hours (weekdays, 8:00 am to 4:30 pm) at the Ironton Ranger District, 6518 State Route 93, Pedro, OH 45659; Phone (740)534-6500; Fax: (740)534-6565.

VIII. SIGNATURE AND DATE

/s/ Gloria Chrismer
Gloria Chrismer
District Ranger
Responsible Official

August 03, 2007
Date

Bibliography

- Elliott, Thom. R, Turcotte, Richard M, Cumpston, A., and Montoy, N.L. January 2007. Biological Evaluation of the Crider Pine Project.
- Johnson, P. S., et al. 2002, The Ecology and Silviculture of Oaks, CABI Publishing, New York, p 282
- Ortt, M. March 1994. Sardis Wetland Special Interest Area Review, pgs. 92-93.
- (USFS 2006a) U.S.D.A. Forest Service. 2006. Land and Resource Management Plan for the Wayne National Forest.
- (USFS 2007a) U.S.D.A. Forest Service. April 2007. Non-native Invasive Plant Control Project, Decision Notice and Finding of No Significant Impact.
- (USFS 2007b) U.S.D.A. Forest Service. April 2007. Non-native Invasive Plant Control Project Environmental Assessment.