

Project Summary #40409
Salvage Harvest - Dead and Dying Black and Scarlet oak in Compartment 125

The Project

The project involves salvage harvest on approximately 225 acres in 13 stands in Compartment 125 to address dead and dying black and scarlet oak now infected with red oak borer. Please refer to the maps for location and specific stands.

Purpose and Need

Remove dead and dying oak trees in Compartment 125. There are dead and/or dying scarlet and black oak trees in several stands in Compartment 125 now infected with red oak borer.

Background

Large numbers of northern red, southern red, black and scarlet oaks are dying in central and northern Arkansas on the Ozark and Ouachita National Forests, and in southern Missouri on the Mark Twain National Forest.

Recent site visits to the Compartment 125 area found evidence of these older dead and dying trees in the area infected with the red oak borer. The red oak borer is a forest insect pest species that permanently damages the wood of living oak trees, such as black and scarlet oaks.



Red oak borers

The loss in grade can amount to 40 percent of the current tree value for factory grade lumber in terms of reduced quality caused by larval tunnels. About 38 percent of the oak wood used for lumber, cooperage, and veneer in the Eastern United States is affected.

Most oaks (*Quercus* spp.) in Eastern North America are attacked by the borer. The common hosts are northern red oak (*Q. rubra* L.), black oak (*Q.*

velutina Lam.), and Scarlet oak (*Q. coccinea* Muenchh.). Wood-inhabiting insects such as carpenter worms, timber worms, and carpenter ants use red oak borer tunnels to gain entry into oak trees. These and other pests extend and increase the damage begun by the red oak borer. Decay organisms also gain entry into oak heartwood through borer tunnels. Also, oaks do not readily resprout due to root rot.



Red oak borer damage

Woodpeckers are the most important recognized natural control agents of the red oak borer. Predation by formicid ants (*Aphaenogaster flemingi*) also provides some degree of natural control. However, the effectiveness of these natural predators is limited.

Control of the red oak borer is achieved by removing infested trees from timber stands by salvage harvest. Population reductions of 95 percent of red oak borer were achieved over a 5-year period using this approach. Salvage harvest controls reduce the chances of subsequent borer attack in residual trees.

Handtool and/or prescribed burning treatments over the next ten years would be used to address site preparation needs. Wildlife trees and snags would

be retained in treatment areas, as would flowering species such as dogwood and rosebud, for example. Debris would be kept out of stream channels, and cleared areas such roads and power lines.

Prescribed burning treatments would also reduce the potential threat of catastrophic wildfire to public and private lands. The surrounding area is considered an Urban-Wildland Interface area. An Urban-Wildland Interface area is an area where structures and other human development meet or intermingle with undeveloped wildland areas with fuels. Numerous homes occupied seasonally and year-round were constructed over the past few years within and in close proximity to the project area. Development density ranges from structures very close together to one structure per 40 acres. Salvage harvest on the estimated 225 acres, combined with prescribed burning treatments on the 1,340 acres within Compartment 125, would reduce the threat of catastrophic wildfire to both public and private land resources in the nearby area. Prescribed burning treatments would entail using multiple, periodic controlled burns over the next ten years to reduce and maintain fuel loading at an acceptable level.

Connected actions may include fire line construction, temporary road construction (less than ½ mile), and limited maintenance of existing roads (i.e., draining or gravelling mud holes).

Decision to be made

Whether or not to conduct salvage harvest activities treatments on specific Red and Scarlet oak stands in Compartment 125, and to prescribed burn the compartment.

Scoping Period

Comments will be accepted until close of business July 28, 2004

Target Date for Completion of Analysis and a decision

August 2004

Contact Person(s)

Bill Paxton, Resource Analyst, at 573-785-1475

E-mail: bpaxton@fs.fed.us.

References

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Salvage Treatment Stands
Compartment 125

Stand	Acres
4	15
5	16
6	10
8	6
9	24
16	29
18	15
19	26
26	21
27	13
28	22
31	19
92	9
Totals	225 acres