

## FINAL PERFORMANCE REPORT

**State:** Oklahoma

**Grant Number:** E-56-3

**Grant Program:** Endangered Species Act

**Grant Title:** Mid-story Thinning to Enhance Habitat for the Red-cockaded Woodpecker on the  
McCurtain County Wilderness Area

**Grant Period:** 17 September 2009 – 16 September 2010

**Project Statement Period:** 17 September 2009 – 16 September 2010

**Principle Investigator:** John Skeen, Oklahoma Department of Wildlife Conservation

### **Objective:**

Improve the quality of Red-cockaded Woodpecker habitat on that portion of the McCurtain County Wilderness Area that supports active RCW clusters and recruitment stands.

### **Abstract:**

The Red-cockaded Woodpecker occurs in a narrow range of habitat conditions and suitable habitat for this species is limited to mature pine woodlands and savannahs. In the Ouachita Mountains, which comprise the northwestern most extension of its range, the RCW is found in mature shortleaf pine woodlands and savannahs with a grassy understory dominated by bluestem species. Over the past century, the RCW population in the Ouachita Mountains has declined as a result of habitat degradation. Widespread logging in the early part of the twentieth century eliminated many of the mature pine stands which supported RCW clusters. Through the rest of the century, the remaining pockets of mature pine habitat declined in quality as a result of fire suppression and the subsequent increase in midstory vegetation.

In Oklahoma, the last known population of RCW's resides within the state-owned McCurtain County Wilderness Area (MCWA). Midstory closure and reduced recruitment of young shortleaf pines in this historically pine-dominated forest are two of the primary threats facing these remaining clusters. Since 1992, prescribed winter and spring burns have been conducted on portions of the MCWA in an effort to control young hardwoods and midstory encroachment. However, it has become apparent that while prescribed burning is an important tool for maintaining an open forest structure, burning alone cannot effectively alter the structure of an already established midstory. Since 1995, selected midstory hardwood trees have been cut manually to create open, pine woodland corridors linking active RCW clusters and recruitment stands. The creation of corridors, enhancement of foraging habitat, and the other Red-cockaded Woodpecker recovery efforts on the MCWA were important in stabilizing the population over a number of years. Recently, however, the RCW population has declined because of poor reproduction, possibly due to genetic problems. Efforts to alleviate this situation began in 2009 with the translocation of 5 pairs of RCW from the Sam Houston NF and will continue in 2010 with the planned translocation of 6 additional pairs to the area. Along with the translocations, additional midstory thinning is needed to improve foraging and nesting habitat conditions and promote increased woodpecker productivity.

Midstory thinning and habitat restoration on the McCurtain County Wilderness Area will complement on-going efforts by the Ouachita National Forest to restore approximately 50,000 acres in Management Area 22 to a shortleaf pine woodland/savannah habitat condition. This management will benefit locally rare species including the RCW, Bachman's Sparrow and Brown-headed Nuthatch which require open, mature pine woodland habitat. Improved habitat conditions at the landscape level (e.g. McCurtain County Wilderness Area and Ouachita National Forest) will support a much larger population size and improve the prospects for the long-term viability of RCW's in Oklahoma and the western Ouachita Mountains.

**Procedures:**

Potential areas for midstory thinning are delineated based upon their likelihood to support a shortleaf pine/bluestem woodland habitat and their proximity to active RCW clusters, foraging habitats, and recruitment stands. The areas chosen for thinning in this reporting period were on the area's east side in Sections 18, 23 and 24 T03S, R25E (Fig. 1).

Project personnel marked the boundaries for the thinning blocks and laid out access trails within the blocks. Most hardwood trees between 1 and 10 inches dbh were cut except for selected species, such as flowering dogwood, serviceberry and rusty black haw, which were specified to be left uncut. Any heavy slash was moved at least 3 feet from mature pines to reduce the fuel around these trees during prescribed burns.

**Findings:**

Thinning work in this segment began in September, 2009 on the area's east side and occurred in the shaded areas shown in Figure 1. It continued until March 2010 when funds were exhausted. This work was accomplished with 3 to 5 temporary chain saw operators employed by the Department. During this period, approximately 536 acres (Fig. 1) were thinned. The acreages of the areas were adjusted by subtracting what, if any, had been previously treated. Approximately 50 acres on the area's west side received additional thinning to further reduce the hardwood component in certain previously thinned areas. Since initiation of this thinning work, a total of 5,522 acres have been treated (Fig 2). Areas selected for midstory treatment in the next segment, shown in Figure 3, total 617 acres. Up to 60 acres in previously thinned areas, close to clusters, will be treated to further reduce their midstory hardwood dbh. During periods when high water prevents crossing Linson Creek, thinning will be done in the Contingency Area, located in the North West corner (Fig. 3).

**Significant Deviations:**

None.

**Recommendations:**

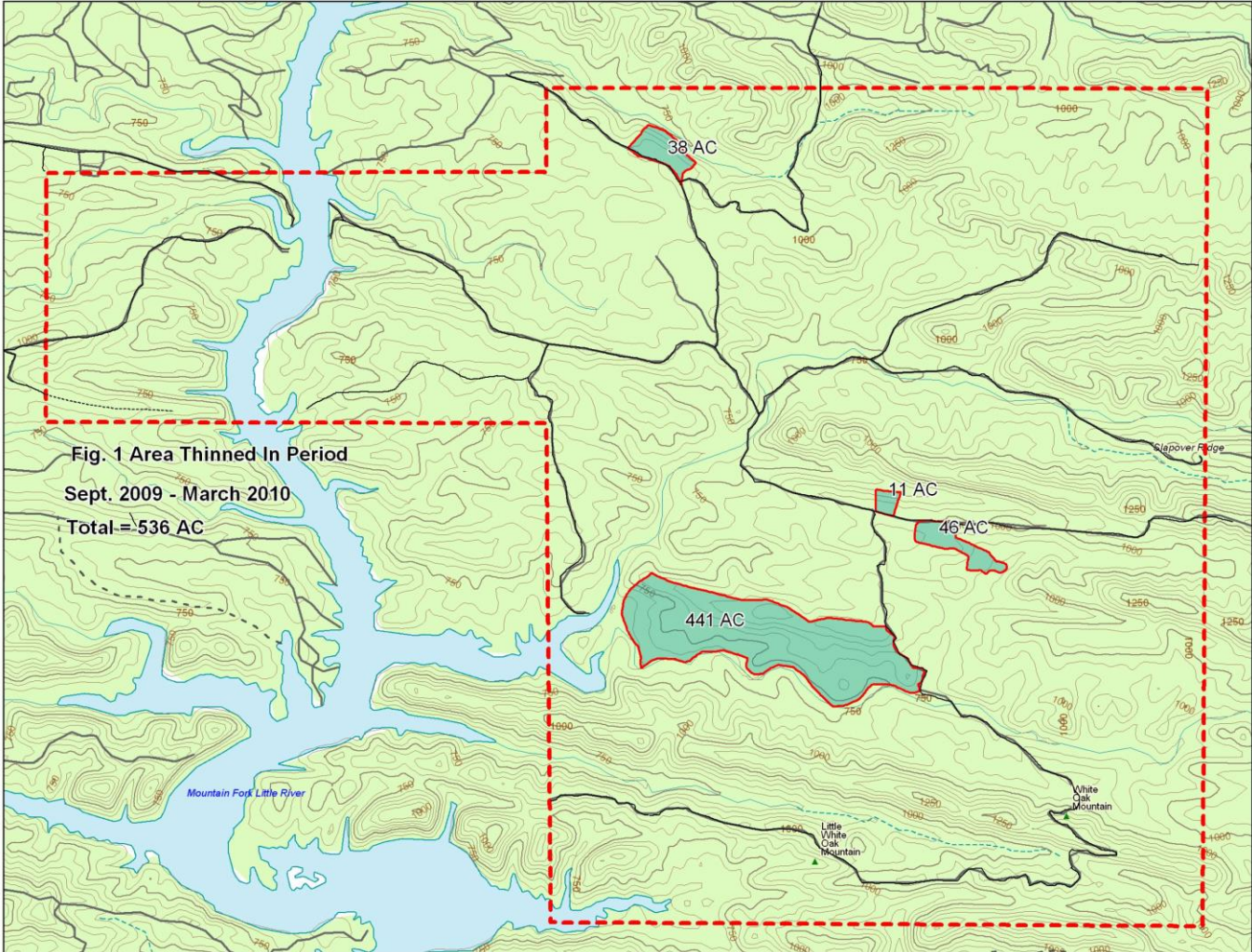
This job should be continued to enhance RCW foraging and nesting habitat on the MCWA.

**Prepared by:** John Skeen, Senior Wildlife Biologist

**Date:** September 22, 2010

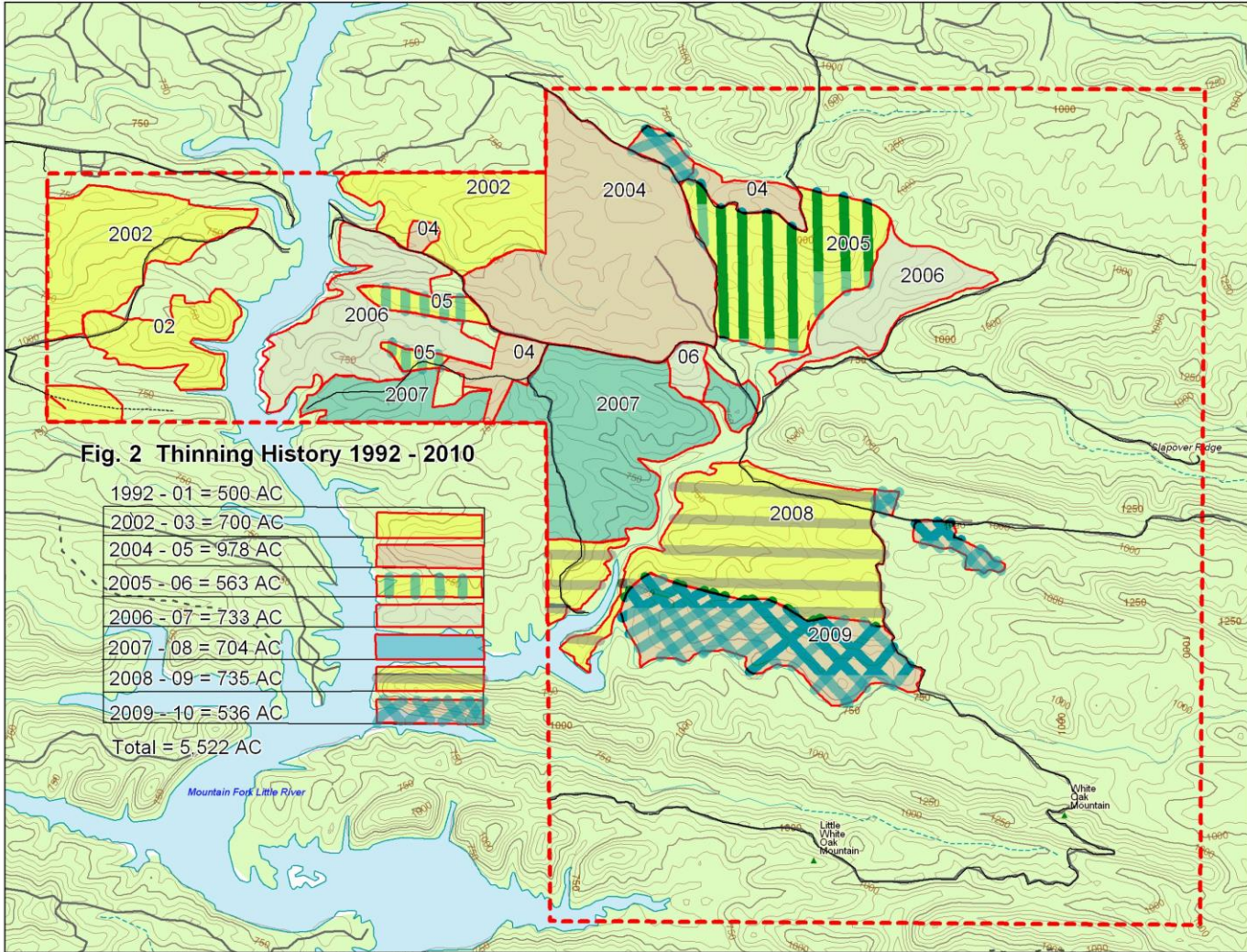
**Approved by:** \_\_\_\_\_  
Wildlife Division Administration,  
Oklahoma Department of Wildlife Conservation

\_\_\_\_\_  
John D. Stafford,  
Federal Aid Coordinator,  
Oklahoma Department of Wildlife Conservation



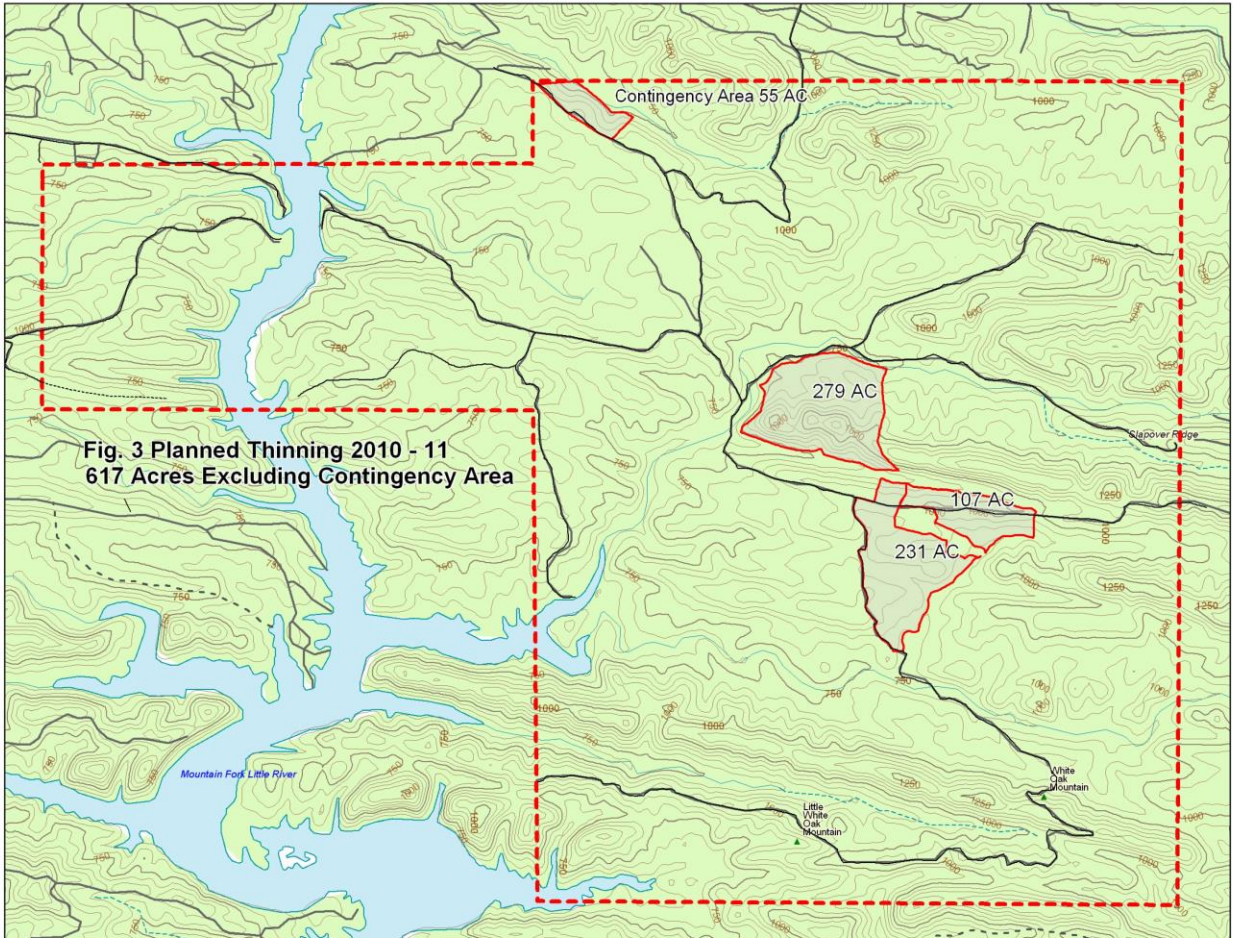
© 2002 DeLorme (www.delorme.com). 3-D TopoQuads ®. Data copyright of content owner.  
Scale: 1 : 50,000 Map Rotation: 0° Magnetic Declination: 0.0°E

4,000 ft



© 2002 DeLorme (www.delorme.com). 3-D TopoQuads®. Data copyright of content owner.  
 Scale: 1 : 50,000 Map Rotation: 0° Magnetic Declination: 0.0°E

4,000 ft



**Fig. 3 Planned Thinning 2010 - 11  
617 Acres Excluding Contingency Area**

© 2002 DeLorme (www.delorme.com), 3-D TopoQuads®. Data copyright of content owner.  
Scale: 1 : 50,000 Map Rotation: 0° Magnetic Declination: 0.0°E

4,000 ft