Ouachita National Forest

Management Activities in LeFlore County, Oklahoma Fiscal Year 2008

NATIONAL FOREST MANAGEMENT ACTIVITIES IN
LEFLORE COUNTY, OKLAHOMA
FISCAL YEAR (FY) 2008

This report addresses activities on the Ouachita National Forest, LeFlore County, Oklahoma. This annual report is prepared in compliance with the Winding Stair Mountain National Recreation and Wilderness Area Act of 1988 (PL-100-499). The Act states (Section 13, Timber Management Report):

> The Secretary of Agriculture shall submit . . . a report on the timber management program on those lands of the Ouachita National Forest located in LeFlore County, Oklahoma, each year after the enactment of this Act for a period of 20 years. Each such report shall include information on timber management practices, sale preparation, harvest levels, reforestation, forest pest and damage problems, multiple use mitigation practices, including wildlife enhancement, recreation, protection of scenery, vegetation conversion, roads, and vegetative cover along streams, roads, and trails. The report shall also include an economic impact statement of the Ouachita National Forest in LeFlore County, Oklahoma, on the timber industry and the tourism and recreation industry.

Oklahoma Ranger District offices in LeFlore County, Oklahoma are located at:

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(918) 653-2991

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NATIONAL FOREST RESOURCE ACCOMPLISHMENTS FOR FY 2008

RECREATION

The Winding Stair Mountain National Recreation Area is recognized for outstanding outdoor recreation opportunities, especially horseback riding, scenic driving, wildlife viewing, and hiking. The Talimena Scenic Byway traverses the national recreation area as it winds along the top of Winding Stair and Rich Mountains on its way into Arkansas. The Kerr Arboretum and Nature Center, a self-guided environmental education area is located here. Developed picnic areas, scenic overlooks, and historical interpretive exhibits can also be found along the drive.

Projects for 2009 and beyond include replacing the swimming area bathroom at the North Shore picnic and swimming area and adding a rest room building in the southeast area of the North Shore tent camping area. In the summer of 2009, work will begin on the Talimena Scenic Drive to upgrade the physical appearance of each vista stop. This work will be administered by the Oklahoma Department of Transportation. Future plans also include a new entry road for the Cedar Lake Recreation Area, with completion scheduled for 2010 or 2011.

SENIOR COMMUNITY SERVICE EMPLOYMENT PROGRAM

In LeFlore County, Oklahoma, the Ouachita National Forest served 2 individuals in the Senior Community Service Employment Program as enrollees who were sponsored by Experience Works for the program year (July 2007 – June 2008). This program provides valuable and cost effective support to all resource areas. Major accomplishments include work in recreation maintenance; staffing the Choctaw and the West End Visitor Information Stations; facilities and grounds maintenance; and vital clerical and visitor use services.

HERITAGE RESOURCES

The Ouachita National Forest Heritage Resource program conducted five archeological investigations on the Choctaw and Kiamichi Units of the Oklahoma Ranger District. Database and file searches, literature reviews, and map checks were undertaken for each of these. These projects encompassed 19.2 acres. Staff Archeologists and Heritage Resource Technicians accomplished this work. An additional 4,594.4 acres were examined by cursory archeological survey methods for proposed prescribed burns. One archeological site was documented within the LeFlore County portion of the forest.

WILDLIFE

Wildlife habitat improvements consisted of 40 acres of permanent opening maintenance and 898 acres of midstory removal. Two bluebird nest boxes were repaired and 10 bluebird boxes and 5 wood duck boxes were constructed and placed at Cedar Lake. Annual surveys and monitoring of terrestrial wildlife species were conducted on 208,767 acres. These included deer, bobwhite call counts, bobwhite brood surveys, turkey gobbler and brood surveys, nest box checks, bear scent station surveys, one breeding bird survey route, and 51 landbird monitoring census points.

THREATENED AND ENDANGERED SPECIES

Monitoring was conducted on 38,529 acres, and two cave gate locks were maintained. Annual surveys for Threatened, Endangered or Sensitive (TES) species were conducted, including pitfall trapping for American burying beetles, and surveys for Rich Mountain slitmouth snail Rich Mountain salamander, and Southern yellow lady slipper. Six biological evaluations were conducted for district projects within LeFlore County.

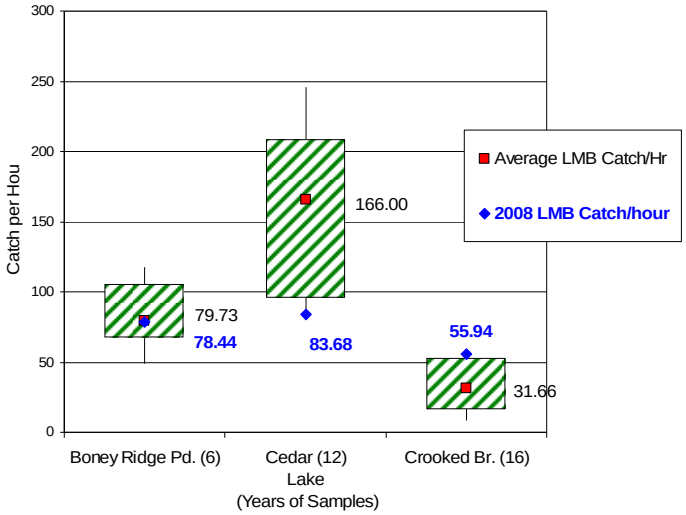
FISHERIES

Efforts to enhance fishing in Cedar and Crooked Branch Lakes and Bony Ridge Pond continued. Four fish attractors were put into Cedar Lake during the winter months. Liming for enhancement of the fertilization program was completed at Cedar Lake. Fertilization for fish production enhancement and reduction in aquatic weed beds were completed at Cedar Lake, Crooked Branch, and Boney Ridge. Plankton blooms were achieved at all three lakes/ponds, with Crooked Branch and Boney Ridge holding most consistently throughout the summer. Cedar Lake achieved only one bloom in early summer. Checks for bass and bluegill reproduction were done in all three lakes/ponds, plus Shale Pit Pond.

Bass reproduction, based on seining results, decreased significantly in Cedar Lake, Crooked Branch, Boney Ridge, and Shale Pit. Results from these seining surveys were far below the 3, 5, and 10-year averages for each pond. The Oklahoma Department of Wildlife Conservation stocked all four lakes/ponds with channel catfish and stocked Cedar Lake with fingerling Florida strain largemouth bass.

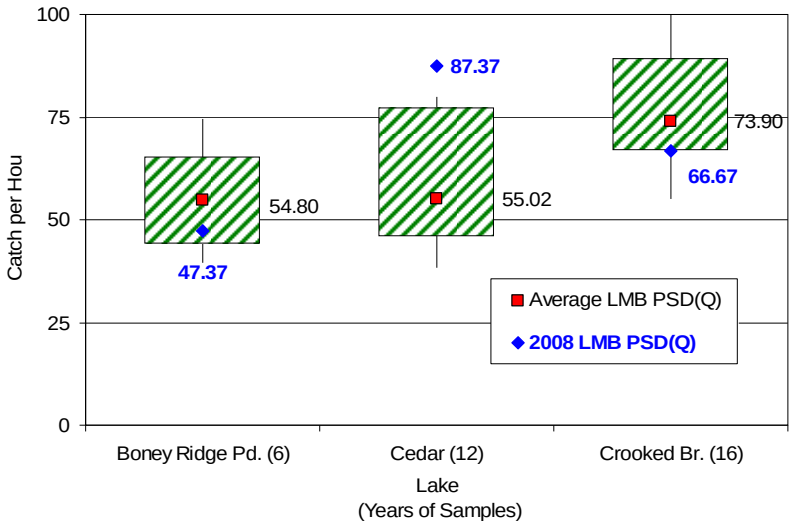
The adult fish populations in Cedar and Crooked Branch Lakes and Boney Ridge Pond were sampled with the Forest's electrofishing boat. The 2008 catch per hour for largemouth bass was considerably below average for Cedar Lake, about the same for Boney Ridge and above average for Crooked Branch (Figure 1). The thick bars represent the 25 to 75 percentiles of all catch per hour samples for the given waterbody, and the lines extend to the 10 and 90 percentile points.

Figure 1 - Largemouth bass catch per hour electrofishing.



Harvestability of largemouth bass, as measured by Proportional Size Distribution – Quality Size (PSD(Q)) was very high for Cedar Lake and a bit below average for Boney Ridge Pond and Crooked Branch Lake (Figure 2). PSD is the percentage of largemouth bass in the catch that are stock size and larger (200 mm (7.9 inches)) that are equal to or larger than 300 mm (11.8 inches).

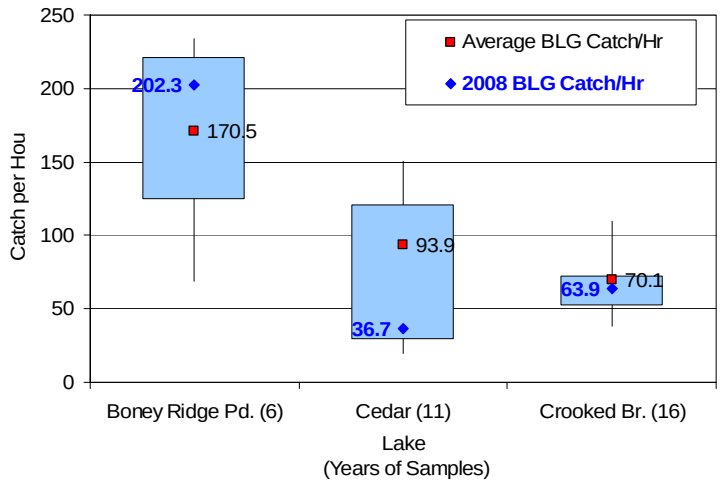
Figure 2 –Harvestability of quality-sized largemouth bass.



No trophy bass were caught at Cedar Lake in 2008. Based on results at these lakes and elsewhere, the spring sampling was too early in the season to have caught the largest female bass spawning.

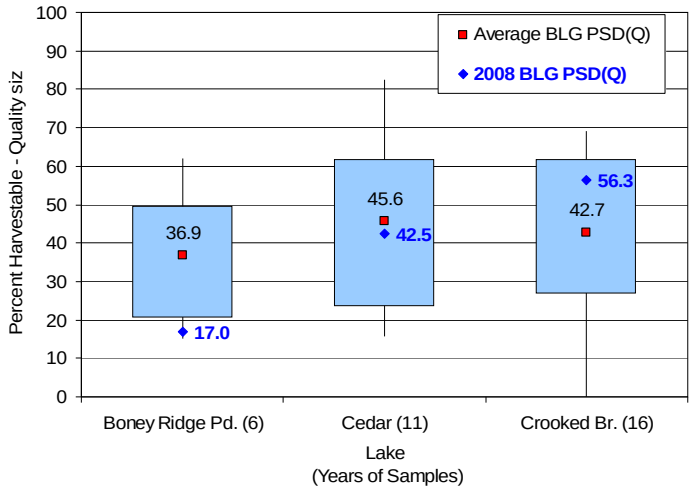
A high catch rate for bluegill at Boney Ridge Pond was achieved in the fall of 2008. The springtime catch rate was well below average for Cedar Lake (sampled too early for a good bluegill catch) and was closer to an average catch at Crooked Branch Lake (Figure 3).

Figure 3 – Bluegill catch per hour electrofishing



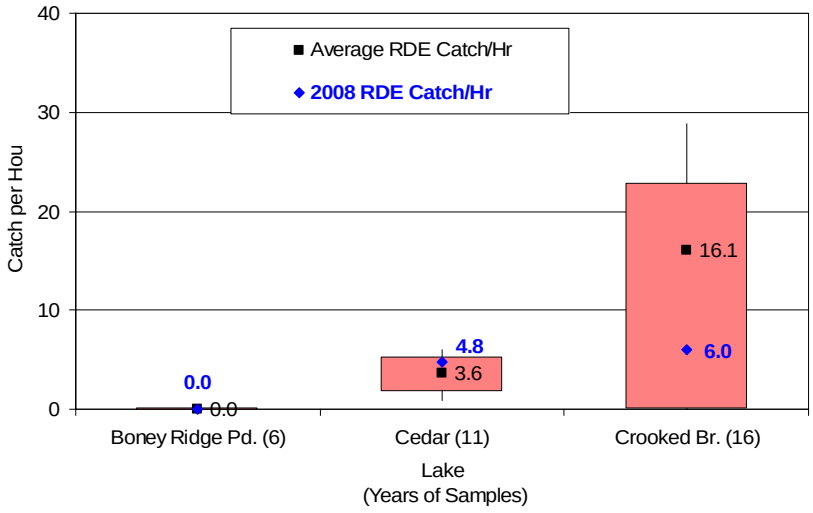
Bluegill harvestability as measured by PSD, with stock-sized bluegill being 80 mm (3.1 inches) and quality-sized bluegill being 150 mm (5.9 inches) and larger, was higher than average for only Crooked Branch Lake, nearly the same for Cedar Lake and well below average for Boney Ridge Pond (Figure 4). It appears that Crooked Branch was sampled while the larger adult bluegill were staging in shallow prior to spawning. The larger Boney Ridge bluegill had not yet schooled up in deeper cover with a larger percentage of smaller bluegill captured during the fall sampling.

Figure 4 – Harvestability of quality-sized bluegill.



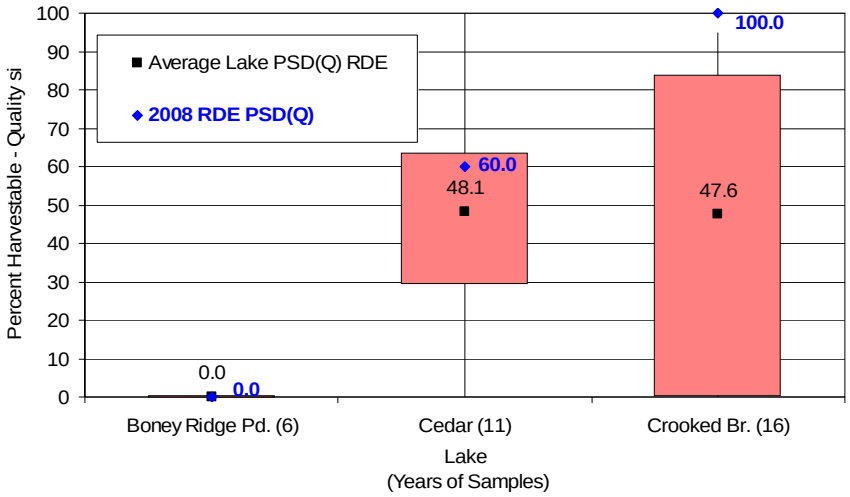
Redear sunfish catch rate were slightly above average for Cedar and below average for Crooked Branch lakes. Redears were not caught at Boney Ridge Pond (Figure 5).

Figure 5 – Redear sunfish catch per hour



PSD harvestability for redear sunfish utilizes a stock length of 100 mm (3.9 inches) and a quality length of 180 mm (7.1 inches). Redear harvestability was higher than average for Cedar Lake and quite high for Crooked Branch (Figure 6). Likely the larger redears at Crooked Branch were staging to spawn, explaining the greater harvestability percentage, plus the greater variability with small catch.

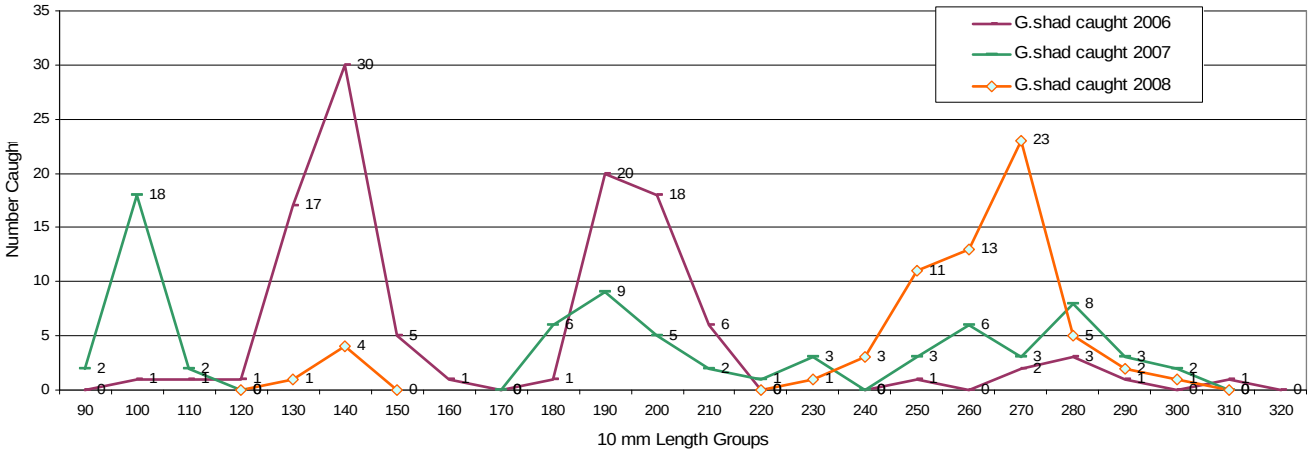
Figure 6 – Harvestability of quality-size redear sunfish



Game fish populations in all three waterbodies appear within acceptable ranges and variances are attributed to sampling efficiencies related to water temperatures and weather fronts/pressure changes.

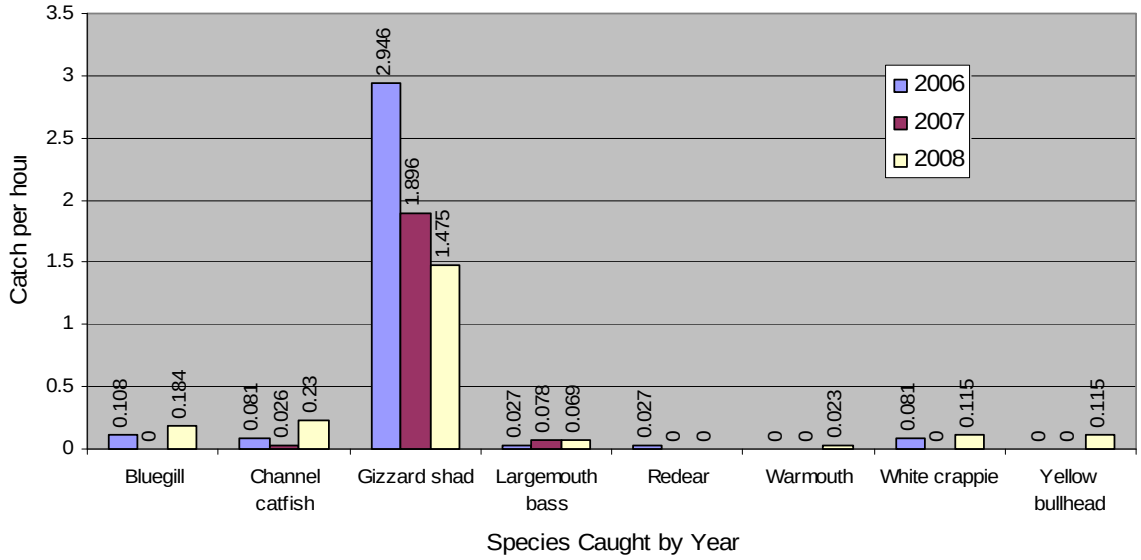
Due to concern that the gizzard shad population in Cedar Lake is expanding and could negatively impact the sport fishing, gill netting was conducted again in the fall of 2008 to monitor the gizzard shad population. The two 200-foot monofilament nets first utilized for shad sampling in 2006 were set again in 2007 and 2008. The gizzard shad length frequencies (Figure 7) indicate three year classes were caught in the nets in 2006. Three or more year classes were caught in 2007 and only two year classes were caught in 2008. It appears the 2007 gizzard shad year class is missing in the 2008 sampling, and the large peak of gizzard shad 250 to 280 mm in length probably represents fish from the 2006 year class. It may be that the gizzard shad of the 2007 year class were more heavily preyed upon by the bass because they were smaller going into the winter, thus reducing their numbers.

Figure 7 –Cedar Lake Gizzard Shad Length Frequencies from Gill Nets (2) for 2006 and 2007



The catch per hour is low for gizzard shad (Figure 8). Overall, the numbers of gizzard shad netted in the last three years are declining with the population shifting to more larger-sized gizzard shad that are less prone to mortality from predation.

Figure 8 –Cedar Lake Gill Net Catch per Hour per Year, Combined Nets



Of particular note in the 2008 gill netting effort was the live capture and release of an 18.95 pound channel catfish (Figure 9).

Figure 9 –Cedar Lake Gill Net Catch of 18.95 lb Channel Catfish

With only three years of data for two nets set only one night each year, insufficient data exists for significant interpretation of results. Trends in the gizzard shad population will continue to be monitored by gill netting in order to detect any over population or changes in abundance or length frequencies within the gizzard shad population.

RANGE

There were three grazing permittees and one active grazing allotment for National Forest lands in LeFlore County. There were no range improvements.

TIMBER AND VEGETATION MANAGEMENT

In FY 2008, 8,872.03 hundred cubic feet (ccf) or 4,436.02 thousand board feet (mbf) of timber were offered for sale in LeFlore County. Of this total, 8,819.80 ccf (4,409.90 mbf) were offered as green timber, and 52.23 ccf (26.12 mbf) were offered as salvage timber. By comparison, a total of 10,548.53 ccf (5,274.27 mbf) were offered for sale in FY 2007.

In FY 2008, 9,057.03 hundred cubic feet (ccf) or 4,528.52 thousand board feet (mbf) of timber were sold in LeFlore County. Of this total, 9,004.80 ccf (4,502.40 mbf) was green timber and 52.23 ccf (26.12 mbf) was salvage timber. By comparison, a total of 10,363.53 ccf (5,181.77 mbf) was sold in FY 2007.

The amount of timber harvested in FY 2008 from previous and current year sales totaled 9,236.76 ccf (4,618.38 mbf).

No major salvage events occurred in FY 2008 in Leflore County. All salvage volume offered, sold, and harvested was from incidental events or related to firewood removal.

ECOSYSTEM MANAGEMENT

Ecosystem analysis is the basis for project planning in the Ouachita National Forest, including LeFlore County. Analyses focus on comparing existing and desired conditions of the land and on identifying management actions or projects to achieve the desired ecological conditions to be produced. Consistent with priorities established by the Winding Stair National Recreation Area legislation, interdisciplinary teams conducting ecosystem analyses give strong emphasis to biological diversity, soil-air-water quality, scenic beauty, recreation opportunities, and historic-cultural resources.

Management strategies to achieve these goals include protection in the forms of wilderness, natural areas, and visual quality maintenance and active management practices such as partial cutting, natural regeneration, and prescribed burning. Some projects are aimed at restoring native grasslands, glades, and old growth forests conditions. Timber harvests designed to achieve ecological and visual goals (such as modified shelterwood and seedtree harvests that produce young growth and relatively open conditions required by many birds and mammals while maintaining mixed pine hardwood overstories) also result in economic benefits through the production of forest products.

Ecosystem management research—a cooperative, long-term endeavor with the Southern Research Station and several universities—is an important, ongoing partnership effort. The five Phase II (stand scale) pine-hardwood research sites located in LeFlore County that received different kinds of partial cuts (harvest treatments) in 1993 have since received site preparation treatments. These stands and the 43 others (outside LeFlore County) treated as part of this study, are now undergoing post-harvest measurements and multi-resource monitoring.

LANDS

There were 7.25 miles of landline maintenance completed and no miles of landline location. In LeFlore County, the forest had a total of 44 special use permits and did not acquire any rights of way last FY.

MINERALS

Over 200,000 acres of National Forest land in LeFlore County have oil and gas leases. The Oklahoma Ranger District answered several inquiries about exploration for gas. One application for permit to drill was applied for, but cancelled by the company. One contract was issued to remove six tons of rock from the Kiamichi Ranger District in Oklahoma.

PRESCRIBED FIRE

There were 4,379 acres of prescribed burning accomplished in twelve prescribed burns conducted in LeFlore County. This figure includes 161 acres of burning for wildlife habitat improvement that provides additional benefit to the site's fuels.

OTHER FUEL TREATMENTS

Additionally, other activity acres not specifically planned for fuel treatment under the National Fire Plan (Non-NFP) were accomplished. Examples of these kinds of treatments include wildlife habitat improvement (including the 161 acres mentioned above), silvicultural activities, and timber sales that effectively reduce hazardous fuels by lowering condition class. There were 1,097 acres of non-NFP mechanical work done in this category of activities.

WILDFIRE SUPPRESSION

There were five wildfires that burned 22 acres of Forest Service lands and immediately adjacent private lands in LeFlore County. All five of these fires were human-caused, and investigation determined them to be arson (intentionally set fires). The Forest Service assisted local city fire departments, volunteer fire departments, The Bureau of Indian Affairs, Tribal governments, forest industries, and the state of Oklahoma with wildfire suppression.

WATER

In carrying out management programs, the Forest is committed to employing sound management practices (called Best Management Practices) that maintain and enhance water quality and soil productivity. In a continuous effort to improve Best Management Practices, monitoring is used to determine the effectiveness of these measures. Some activities that occur in LeFlore County in support of this commitment include testing water quality in swimming areas and conducting watershed restoration projects.

ECONOMIC IMPACT OF THE OUACHITA NATIONAL FOREST ON THE TIMBER INDUSTRY IN LEFLORE COUNTY, OKLAHOMA

The following is an estimate of the Ouachita National Forest's economic impact on the timber industry of LeFlore County in Fiscal Year 2008.

- 0.89 million cubic feet of timber were offered for sale.
- 0.91 million cubic feet of timber were sold.
- 0.92 million cubic feet of timber were actually harvested during the year.
- The harvest of timber generated $504,936.11 in National Forest receipts. There was no purchaser road credit in LeFlore County for FY 2008.

ECONOMIC IMPACT OF THE OUACHITA NATIONAL FOREST ON THE TOURISM AND RECREATION INDUSTRY IN LEFLORE COUNTY, OKLAHOMA

Since 1990, over 11 million dollars have been appropriated to enhance the recreational opportunities of the Winding Stair Mountain National Recreation Area and attract visitors to LeFlore County. Some of the major projects that have been carried out with these funds include the construction of the Cedar Lake Equestrian Camp; renovation of the Shady Lane, Sandy Beach, and North Shore Campground loops at Cedar Lake; major improvements to recreation sites on the Talimena Scenic Drive, including Winding Stair Campground, Horsethief Springs, Pipe Springs, and Old Military Road; development of new interpretive signs and clearing of vistas on Talimena Scenic Drive; construction of a new visitor center at the west end of the Talimena Scenic Drive; construction of a new district office and visitor center on U.S. Highway 59/270; and the construction or reconstruction of over 180 miles of hiking and equestrian trails.

Annually, thousands of people visit LeFlore County for the scenic landscapes, wild settings, clear streams, recreational opportunities, and available public land found on the Ouachita National Forest. The improved national forest recreation facilities and continued enhancements are expected to encourage more people to visit the area and have a positive economic impact on the tourism and recreation industry of the County.

Table 1. Resource management accomplishments on the Ouachita National Forest in LeFlore County, Oklahoma for FY 2008.

Activity	Unit of Measure	Accomplishments FY 08
RECREATION		
Developed Recreation Capacity	PAOT days	687,815
Dispersed Recreation Capacity	PAOT days	376,400
Camp/Picnic Area Administration	Areas	13
Wilderness Area Administration	Acres	15,968
Trail Construction	Miles	5
Trail Maintenance	Miles	86
Heritage Resource Survey	Acres	4,613.6
Heritage Resource Compliance Evaluations	Acres	5.0
WILDLIFE & FISH		
Waterhole Development	Structures	0
Nest Box Replacement	Structures	17
Pipe Gates Installed	Structures	0
TOTAL-Wildlife Habitat Improve.	**Structures**	**17**
Midstory Reduction	Acres	898
WSI Overstory/Mast Development	Acres	0
Prescribed Burning	Acres	0
Seeding and Planting	Acres	0
Permanent Opening Construction/Maintenance	Acres	40
Temporary Opening Construction	Acres	0
Wildlife Opening Rehabilitation	Acres	0
TOTAL-WL Hab. Imp. Non-Struct.	**Acres**	**938**
Lake Fish Attractors	Structures	4
Lake Spawning Beds	Structures	0
Stream Structures	Structures	0
Pond/Lakes Constructed	Pond/Lake	0
TOTAL Fish Improve. Structs.	**Structures**	**4**
Fish Improv — Nonstruct. (Lime, Fertilize, and/or Stock Lakes/Ponds)	Acres	105
Cave/Mine Gate Construction	Structures	0
TOTAL T&E Improvement Structures	**Structures**	**2**
TOTAL T&E Hab. Imp-Nonstructure	**Acres**	**0**
RANGE		
Number of Permittees	Numbers	3
Number of Head Months (HM)	HM's	360
Number Head Livestock	Number	60
Range Forage Improvement	Acres	0
Number of Active Allotments	Allotments	1

Table 1 (continued)

Activity	Unit of Measure	Accomplishments FY 08
TIMBER MANAGEMENT		
Timber Resource Inventory	Acres	6,230
Timber Offered (Million Cubic Feet)	MMCF	0.89
Timber Sold (Million Cubic Feet)		0.91
Harvest Method-By Acres Sold		
Clearcut	Acres	0
Seedtree	Acres	0
Shelterwood	Acres	26
Removal	Acres	0
Uneven-aged Management	Acres	626
Thinning	Acres	74
Salvage	Acres	1
Land Clearing (road row's, etc.)	Acres	20
Timber Harvested (Million Cubic Feet)	MMCF	0.92
Firewood Sold	Cords	82
Reforestation	Acres	
SOIL/WATER/AIR		
Air Visibility Monitoring	Sites	0
Ozone Damage Survey	Sites	0
Soil Inventory	Acres	0
Herbicide Monitoring (Water)	Sites	0
Swim Water Monitoring	Sites	1
Watershed Improve. Construction	Acres	0
Watershed Improve. Maintenance	Acres	2
MINERALS & GEOLOGY		
Minerals Administration	Cases	1
LANDS		
Landline Maintenance and Location	Miles	7.25
Land Purchase	Acres	0
Land Exchange	Acres	0
Rights of Way	Cases	0
FACILITIES		
Arterial/Collector Roads Reconstructed	Miles	0
Local Roads Reconstructed	Miles	1.51
Local Roads Constructed	Miles	0
FIRE		
Fuel Treatment [1]	Acres	4,749

PAOT—people at one time; HM—head month; AUM—animal unit month; MMCF—million cubic feet

[1] Fuel treatment acres are a combination of acres from Hazardous Fuels Reduction and Non-NFP prescribed fire based on NFPORS for FY08.