

# CY 2007 Annual Fire Report

## Forest: Daniel Boone National Forest

Include photos by copying and pasting them into the text area of the document, or send them under separate cover. Save report as "*name of forest-2007* fire report."

**1. Fire Season Highlights: Abnormal wildfire occurrence, major incidents, any item of significance. Include a quantitative description of the weather and seasonal severity.**

Narrative: A drought that began in November of 2006 and continued through the end of CY 2007 over most of the region impacted the Fire Weather Seasons as well as the months outside of the traditional Fire Seasons. Fire activity, especially during the first five months of the year, was above average. During 2007, 121 fires for 7,681 acres were suppressed on the DBNF, which was a significant increase from 2006, and was also above the average of 94 fires for 4,382 acres during the previous ten years.

Fuels were consistently dry and heavier fuels were as dry as they had been in years. Lightning starts are very rare in Eastern Kentucky and the Appalachian Mountains; however, 2007 saw a significant increase in lightning-caused fires. There were 14 lightning starts for 495 acres on the DBNF during CY 2007, while during the previous three years there had been a total of 5 lightning starts for 52 acres. Because of the drought conditions, both campfires and fireworks were banned Forest-wide. Despite this ban, escaped campfires also increased significantly, rising from 2 in the previous year to seven in 2007.

There were wildfires during every month of the year. Typically, summer is between the distinct fall and spring fire weather seasons and higher humidity and more moist fuels lead to little if any fire activity. However, during these busier than average summer months, more spot forecast requests were made than during the following traditional Fall Fire Season.

The drought was at its peak in mid October, when all of Eastern KY, including the Daniel Boone NF was in an extreme to exceptional drought. The exceptional drought affected the Redbird District as well as the southern portion of the Stearns District near the VA border, with the remainder of the forest in extreme drought. A Prevention Team was assigned to the Redbird District for several weeks before timely rainfall arrived. Rain began during the second half of October and continued for the rest of the year. Included in this was the rain of October 23<sup>rd</sup>, which produced one to three inches of rainfall across most of the area, though only a half of an inch or less fell along the VA border. This helped to moisten fuels prior to the height of the Fall Fire Season which is usually marked by arson starts near Halloween. Other rainfall events with widespread amounts of around one inch or more occurred on November 14th and 26th. None of these events during the fall were drought ending, but together they began to alleviate the drought through November and into December. As of the end of the year, extreme drought persisted in counties near the VA border; however, the areas experiencing moderate and extreme drought decreased during November and December. Although the DBNF experienced increased fire occurrence and acreage burned in 2007, no major incidents emerged. A Type 3 organization was in place at the Redbird District for several days during the spring to manage a group of fires which included the only Class G fire that occurred here during 2007.

Personnel changes impacted the Forest's Fire Management organization for the second year. Three of four District FMO positions were vacated, as well as the Forest AFMO/Coordination Center Manager position. Several firefighter positions were also vacant during the year, and the retirement of several key militia personnel occurred at the end of 2007

**2. Prescribed fire accomplishments (Note: data for fires and acres must be the same as that contained in NFPORS.) Include Rx training accomplishments here. Report Fire Use data and Rx data in separate tables (see following page):**

Narrative: Prescribed fire accomplishments through the end of FY 2007 did not meet the targeted levels, and were slightly less than half of the 2006 acres accomplished. When the drought began to moderate toward the end of November, prescribed burning resumed and several thousand acres were accomplished toward the FY 2008 target.

Fire Use Fires by Size Class – CY 2007									
Class	A	B	C	D	E	F	G	Total Fires	Total Acres
Fires	0	0	0	0	0	0	0	0	
Acres	0	0	0	0	0	0	0	0	0

Navigate through tables by pressing TAB to go forward or shift-TAB to go backward.

Or use the mouse to place the cursor in any shaded area, click and begin typing.

Prescribed Fire Data – 2007				
	Mechanical Treatment	Fire Treatment	Total Cost	Cost per Acre
BS				
SP				
R				
T&E				
WI		207	5175	25
Fuel Reduction	1105	8405	458910	48.26
Other				
Other				
Total Acres				

**3. Examples of Significant Improvement in the Cost Effectiveness of the Fire Management Program.**

Narrative:

**4. Noteworthy Instances of Cooperation with other federal agencies (civilian and military), states, industrial concerns, groups, or individuals. Include education and fire prevention information under this item. Include wildland fire training under this item.**

Narrative: The Daniel Boone NF once again collaborated with the Cherokee NF, the Big South Fork NRRRA, Region 4 of the USFWS, and the Kentucky and Tennessee Divisions of Forestry to present a week-long fire training academy at Bell Buckle, TN.

The Cumberland Ranger District continued to work with the University of Kentucky to conduct prescribed burn research on the Forest. Several students involved in this study have completed basic firefighter training, and are qualified for assignments on local wildfires.

The Prevention Team that was in place on the Redbird Ranger District during the fall provided an excellent training opportunity for Forest employees working toward certification as Prevention Team members.

During December, Forest employees presented basic firefighter training at Eastern Kentucky University, from which more than 20 students were qualified as firefighters in anticipation of the Spring Season.

**5. Personnel Employed on Fire Control Activities.**

**Form FS-5100-8 Instructions:**

Item 1. Regular appointed personnel: Entries should include those persons with full-time or WAE appointments.

- a. Include only those positions approved for 20 pay periods or more.
- b. Exclude those shown in item 1a; however, be sure they are full-time or WAE.
- c. Include any full-time or WAE employees in other functions (Range, Timber, Engineering, Job Corps, etc.).
- d. All others used on line or off-line suppression work. Exclude those entered in items 1a, b, and c.
- e. Total of 1a+b+c+d.

Item 2. Seasonal or short-term employees.

- a. Regular fire control (crews, firefighters, patrol, lookouts, etc.)
- b. Include those short-term summer employees employed on other functions.
- c. Do not include approved supplemental protection positions.
- d. Total of 2a+b+c.

Item 3. Include only casuals employed on fire suppression .

Item 4. Self-explanatory.

Item 5. Self-explanatory.

Overhead from other Forests or out-of-Region will not be entered, as they will be carried by their Forest.

USDA-Forest Service Personnel Employed on Wildfire Presuppression and Suppression Activities		Forest: Daniel Boone NF	
		CY: 2007	
ITEM NO.	ITEM	Number	
		SubTotal	Total
1. Regular Appointed Personnel			
a.	Full-time fire management (20 pay periods or more)	8	
b.	Part-time fire management	21	
c.	Others used on pre-suppression	7	
d.	Others used on suppression (exclude those reported under a, b, or c)	61	
e.	Total regular appointed personnel (a+b+c+d)		97
2. Seasonal or Short-term Personnel			
a.	Regular fire control (Crew, Firefighters, Patrol, Lookouts)	0	
b.	Others who spent time on fire control work (BD, KV, BR, R&T, etc.)	0	
c.	Emergency firefighters	0	
d.	Total emergency firefighters (a+b+c)		0
3. Total number of casuals employed on fire suppression (Each reemployment counts as an employment)			171
4. Number of casuals, included in Item 3, employed for first time (Estimate is adequate)		43	
5. Remarks (as necessary)			
Total			268

FS-5100-8

**6. Form FS-5100-9 – Land Ownership Protection Report (Summary of Acres by State).**

STATE	LAND PROTECTION REPORT – CY 2007								S&P LAND PROTECTED BY STATE AND FS	NATIONAL FOREST LAND PROTECTED BY OTHERS	
	INSIDE FOREST SERVICE PROTECTION BOUNDARIES										
	Protected by Forest Service										
	STATE AND PRIVATE				OTHER FEDERAL LAND	NATIONAL FOREST LAND	TOTAL				
	Fee	Offset	Reimburse Supp	Without Reimburse							
KY	NONE	NONE	NONE	NONE	NONE	707,000	707,000	NONE	NONE		

Narrative (Optional):



## 7. Summary of statistics from Individual Fire Reports, Form FS-5100-9

### Daniel Boone NF Wildfires by Size Class 2007

Class	A	B	C	D	E	F	G	Total Fires	Total Acres
Fires	25	40	42	6	7	1	0	121	
Acres	4	105.5	1871	1061	3339	1300	0		7860.5

### Daniel Boone NF Fires By Cause

CAUSE	FIRES	ACRES
Lightning	14	409.55
Equipment	2	120.10
Smoking	0	0
Campfire	7	72.65
Debris	1	.1
Railroad	1	.1
Arson	90	6937.75
Children	0	0
Miscellaneous	6	140.25
Total Fires and Acres	121	7680.50

Note: Total fires and total acres must be the same values for both the *Fires by Class* table and the *Fires by Cause* table. To insure accuracy use the accompanying Excel tables. They will auto-calculate as you type table.

Narrative (Optional): During CY 2007, suppression action was taken on 121 fires involving 7,681 acres on the Daniel Boone NF. This level was above the average of 94 fires and 4,382 acres for years 1997-2006. Each of the Forest's four Ranger Districts reported fire activity. The Stearns and Redbird reported 40 and 45 fires, respectively, while London had 24 fires reported and Cumberland had 12. Redbird recorded by far the most acres burned at 5,353 (70% of total). London followed with 1506 (20%), while Stearns recorded 634 (8%) and Cumberland 187 (2%).

During 2007, 88% of fires on the DBNF were human-caused. Arson remained the primary cause, accounting for 90 fires (74% of total) and 6,938 acres burned (90% of total). Lightning-caused fires were significantly increased in 2007, accounting for 11% of fires and 5% of acres burned, compared to 3% of fires and 1% of acres burned in 2006.