

Daniel Boone National Forest

Annual Fire Report

Calendar Year 2002

During CY 2002 the level of fire activity on the Daniel Boone National Forest was well below the 10-year average of 118 fires and 5,516 acres burned. Between January 1 and December 31, 2002, 61 wildland fires were reported involving 1,878 acres. Each of the six ranger districts reported fire activity, with the largest number of responses having been made on the London Ranger District. This district took action on 20 fires (33% of total fires).

During 2002 97% of all fires were human caused. Arson remained the primary cause, accounting for 46 fires (75% of all fires) and for 1,599 burned acres (85% of all burned acres).

Fires occurred according to the following seasonal breakdown:

Spring Fire Season	03/01 – 05/15	35 Fires	58%	1,501 Acres	80%
Fall Fire Season	10/15 – 12/15	2 Fires	3%	10 Acres	<1%
Off-Season	Jan – Feb	19 Fires	31%	355 Acres	19%
Off-Season	Aug – Sept	5 Fires	8%	12 Acres	<1%

During the calendar year there were 29 days when fires occurred. Of these, 14 were multiple fire days (more than one suppression action taken). Fire activity on these days accounted for 46 fires (75% of total) and 1,744 burned acres (93% of total).

Weather and Drought

Kentucky's spring fire season, February through May, was characterized by progressive weather systems. Upper level troughs would develop along the central California coast and moved east across the country. These type systems generally bring above normal temperatures and near normal to above normal precipitation to the lower Ohio Valley.

For the four months ending in May 2002, Jackson Kentucky recorded 18.54 inches of rain (1.53 inches above normal) and temperatures around 1 degree above normal. During the same period Lexington recorded 18.52 inches of rain (2.39 inches above normal). Temperatures in Lexington also averaged around 1 degree above normal.

During the summer the Bermuda High developed over the southeast United States. This forced weather systems to stay well north of eastern Kentucky. For the three months ending in August, Jackson's average precipitation was around 4.5 inches below normal and Lexington averaged nearly 6 inches below normal. Temperatures across eastern Kentucky ranged from 6 to 9 degrees above normal.

At the beginning of the fall fire season much of Kentucky was in a mild to moderate drought. Aided by numerous tropical storms, (T.S. Hanna 9/14, T.S. Isidore 9/26, and Hurricane Lili 10/3) above normal rainfall was recorded during the months of September, October, and November. Jackson recorded 13.48 inches of rain (2.33 inches above normal) while Lexington received 16.95 inches of rain (7.7 inches above normal).

Temperatures during the fall fire season averaged near normal with September around 4 degrees above normal and November nearly 4 degrees below normal.

An unusually wet December brought annual precipitation totals to above average statewide.

Forest Highlights

Prevention

For a two-week period during the fall fire season a Prevention Team was assigned to the Redbird Ranger District. The Team worked to raise overall awareness of the safety and health issues and costs related to arson-caused wildland fire. They sought to gain public support and to involve the support of community leaders in the efforts to stop arson. The Prevention Team also promoted the Governor's Summit on Wildland Fire and Arson.

The Robert E. Browning, Jr. award for CY 2001 for excellence in wildland fire prevention activities was given to Marie Walker, Forest Public Affairs Officer and Gwen Hensley, Visual Information Specialist. This dynamic team was recognized for their efforts to prepare and present effective prevention campaigns utilizing a broad array of formats and media sources.

The award honors the memory of Robert E. Browning, Jr. of South Carolina who died on Storm King Mountain on July 6, 1994. Candidates for the 2002 award are currently being solicited.

Training

Interagency training sessions and seminars offered by the Daniel Boone NF during 2002 included:

S-234 Ignitions Operations

Automatic Weather Station Maintenance

Forest Service employees also assisted the Kentucky Division of Forestry with instruction of:

I-200 Basic Incident Command System

S-205 Wildland Fire Management in the Urban Interface

S-290 Intermediate Fire Behavior

S-420 Command and General Staff

Forest personnel assisted other units hosting wildland fire courses including:

S-130 Firefighter Training

S-190 Introduction to Wildland Fire Behavior, Blue Grass Army Depot

S-420 Command and General Staff, Oklahoma City, OK

The Daniel Boone National Forest, Cherokee National Forest, Kentucky Division of Forestry, Tennessee Department of Forestry and the Great Smoky Mountains National Park combined efforts to plan a Wildland Fire Training Academy. The two-week Academy was to offer twelve training courses in Operations, Finance/Administration, and Plans. However, an early and intense start to the western fire season and the need for suppression and support resources resulted in the cancellation of the Academy. An Academy with a reduced class schedule is planned for January, 2003.

One of the Forest's Senior Firefighters worked as a member of the Redding Interagency Hotshot Crew from April through October. Another employee completed a detail with the Lewis and Clark Interagency Hotshot Crew (T) from May through October. The Forest's Developmental Fire Prevention Specialist completed the Basic Academy of R-5's Wildland Firefighter Apprentice Program.

Kentucky Interagency Coordination Center

During 2002 the Kentucky Interagency Coordination Center continued to update and improve its web site located at: <http://www.southernregion.fs.fed.us/boonefire>. Fire weather information including Fire Weather Watches and Red Flag Warnings are posted on the web site on a daily basis during spring and fall fire seasons and on an as-needed basis outside of the historic fire hazard seasons. This technology enables Cooperators to easily access critical daily weather and other pertinent fire information. The site also provides numerous links to information on fire activity, fire danger, training opportunities, and employment information.

The Kentucky Interagency Coordination Center held its 10th annual cooperators' meeting May 29 and 30 at the Southern Interagency Support Cache, London.

The following table reflects a total of all resource dispatches of overhead personnel outside the state of Kentucky in support of incidents within the Southern Area and to other Geographic Areas throughout the United States.

Agency	Number of Personnel
National Park Service	32
State	10
Forest Service	116
AD Employees (hired by the Daniel Boone)	18
Department of Defense	4
National Weather Service	6
US Fish and Wildlife Service	1

In some cases employees took multiple assignments during the year. The above totals reflect number of assignments, rather than individuals.

Agencies included in the above totals are as follows:

Agency	Unit
National Park Service	Big South Fork NRRRA
	Cumberland Gap NHP
	Mammoth Cave NP
	Abraham Lincoln Birthplace NHS
	Obed Wild and Scenic River
U.S. Fish and Wildlife Service	Clarks River NWR

State	Kentucky Division of Forestry
Forest Service	Daniel Boone National Forest
	Pine Knot Job Corps Center
	Frenchburg Job Corps Center
	Southern Interagency Fire Cache
	Land Between the Lakes NRA
Department of Defense	Blue Grass Army Depot
National Weather Service	Louisville NWS Office
	Jackson NWS Office
	Paducah NWS Office

Crew dispatches from member agencies within the Kentucky Interagency Coordination Center were:

Agency	Number of Crews
Job Corps	4
State	7
Interagency	5
National Forest	1

Fire Support and Mobilization

The Forest experienced one of the lowest occurrence fall fire seasons on record with response being made to only 2 fires involving 10 acres. A pattern of precipitation that brought showers and rain to eastern Kentucky on an average of every 3-4 days kept fuels moist and occurrence to a minimum level.

The battle against wildland fires took another format during with fall when the Kentucky Division of Forestry and partners including the Daniel Boone National Forest sponsored the Governors Summit on Wildland Fire and Arson, October 9 and 10, at Jenny Wiley State Resort Park, Prestonsburg. The Summit provided a forum for state, county and local officials along with concerned citizens and landowners, and a broad spectrum of land managers to examine Kentucky's fire problem and begin to formulate strategies to mobilize community resources to stop arson fires. Presentations at the Summit showed that the cost of arson fires is measured not only in burned acres and the expense of fire suppression but also by the increased risk exposures to firefighters and the public, degradation of air quality and other resources, and disruption of public services such as schools, health services, etc. Krs Evans, a former member of the Plumas Interagency Hotshot Crew who was injured while fighting an arson fire in eastern Kentucky in October of 2001 and his mother, Patricia Evans, were featured speakers at the Summit's luncheon. Their words bore powerful witness to the human cost of arson fires.

Law Enforcement Operations

The 2002 arson related fire occurrences were down significantly. Several factors are believed to be responsible for this downward trend. Significant amounts of rainfall occurred frequently throughout the fall fire season that aided in slowing the rate and occurrence. Intensive Law Enforcement efforts from the previous fall also contributed to the reduction of arson fires in 2002.

Law Enforcement personnel investigated several arson fires that occurred on the Redbird Ranger District during 2002. Law Enforcement Officers and Special Investigators developed leads associated with the deliberate

burning of a Forest Service vehicle parked sat on the District compound. Through intensive interviews, LE personnel developed a suspect who later confessed to the vehicle arson. This subject also confessed to the attempted arson of a business and a residence. The vehicle arson case is awaiting federal court action. The attempted arson of the business and residence are awaiting state court action.

During the same week LE personnel investigated the burning of a log loader parked on a Forest Service timber sale. The loader was completely lost while two other pieces of equipment only received minor fire damages. No leads or suspects have been identified at the time.

Law Enforcement personnel investigated the burning of a Forest Service portal sign on the Redbird RD. No suspects or lead have been developed thus far. The case remains open.

Forest Service fire personnel assigned to a helitack crew were responding to a fire when they noticed a suspicious vehicle in the area of one of the smaller fires. A closer observation revealed that the subject was setting fires along a roadway. The helitack crew continued aerial surveillance of the subject until LE personnel arrived. The Kentucky State Police presented this case in state court with the subject receiving a two-year pretrial diversion.

Law Enforcement personnel investigated a fire that occurred on the London RD. The investigation produced two juveniles that admitted to causing the fire. Federal Officers presented this case in state court with the older juvenile receiving 60 days confinement and two years probation and the other juvenile receiving 150 hours of community service and two years probation.

Finally, the Mud Lick fires that occurred in 2001 proved to be the most costly as a firefighter was severely injured when a burned tree fell, striking the firefighter. A very intense and exhaustive investigation failed to produce any concrete evidence or identity of the responsible persons. The investigation did produce three juveniles and two adults responsible for other fires in the area. All are awaiting trial.

In conclusion, public involvement, aggressive Law enforcement and support by the court systems has and will continue to be a major deterrent to arson related fires across the Daniel Boone Nation Forest

Southern Interagency Fire Cache

The Southern Area Incident Support Cache (SAK) processed 470 issues during calendar year 2002. This represents 4065 line items with an inventory value of 2.2 million dollars. Returns totaled 2554 line items with a value of 1.0 million.

Several of the eight 250 person mobile cache vans, prepositioned throughout the Southern Area were deployed and returned to SAK for refurbishment.

Our customers included all of the State Coordination Centers in Forest Service Region 8, Bureau of Indian Affairs, Fish and Wildlife Service, National Park Service and many of the State Foresters.

SAK continues to provide support for Homeland Security via the National Park Service office in Luray, Virginia.

Cache employees supported the other geographic areas by accepting assignments in Forest Service Regions 6, 4 and 2.

Notable Events, Cooperators

Mammoth Cave National Park

Mammoth Cave National Park completed the first prescribed fires in the park's history. Two projects were completed for a total of 100 acres under the direction of the Cumberland Gap Fire Use Module and the cooperation of the Great Smoky Mountain Fire Use Module, Big South Fork NRRRA, Daniel Boone National Forest, and the Kentucky Division of Forestry.

Obed Wild and Scenic River

On 7/20/02 at approximately 1000 hours personnel at the Obed Wild and Scenic River were notified of an oil well accident and resulting fire just north of the Clear Creek section of the park. The oil well had suffered a pressure problem and subsequently blew out the pressure relief valve. This caused a significant oil loss from the well. The oil ran down slope approximately 150 yards into the Clear Creek and Little Clear creek drainage near the Barnett Bridge section of the park. The oil well operator attempted to contain the oil, but was unsuccessful. During the oil containment process the oil ignited causing a 10 acre fire. Flame lengths in excess of 50 feet were reported and crowning around the well site was observed. Personnel from the county, state and NPS responded to the fire. The Tennessee Emergency Management Agency was notified to conduct operations for the oil spill and the NPS and TN DOF managed the wildfire incident. The fire was contained within a few hours but the oil well continued to burn with flames up to 100 feet coming from the site. A team of oil well fire specialist from Texas were called in to help control the well fire. Firefighters continued to monitor the area until the well fire was put out several days later. The National Park Service and other federal agencies continue to work with EPA to determine the long term effect of the oil spill and fire on park and state resources.

CY 2002 Statistics

Summary	
Total # of Fires	61
Total Acres	1,878
Forest Service Acres	1,576
Non-Forest Service Acres Protected by FS	302
Acres Outside FS Protection	0

Fires By District

District	# Fires	%	Acres	%
Morehead	4	6	9.5	<1
Stanton	3	5	187.1	10
London	20	33	1272.9	68
Somerset	9	15	66.7	4
Stearns	17	28	223.9	12
Redbird	8	13	117.8	6
Totals	61	100	1877.9	100

District Fires/Acres by Size Class

	Class A		Class B		Class C		Class D		Class E		Class F	
	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres
MOR			4	9.5								
STA	1	.1			2	187						
LON	1	.1	10	19.8	7	160	1	103	1	990		
SOM	2	.2	6	26.5	1	40						
STE	2	.4	12	49.5	2	34	1	140				
RED	2	.3	3	7.5	3	110						
Totals	8	1.1	35	112.8	15	531	2	243	1	990		
% Fires	13		57		25		3		2			
% Acres		<1		6		28		13		53		

Class A	Class B	Class C	Class D	Class E	Class F
≤ .25 Acres	>.25 – 9.9 Acres	10 – 99.9 Acres	100 – 299.9 Acres	300 – 999.9 Acres	1000 – 4,999.9 Acres

Fires by Cause

	Cause 1		Cause 2		Cause 3		Cause 4		Cause 5		Cause 6		Cause 7		Cause 8		Cause 9	
	#	Ac	#	Ac	#	Ac	#	Ac	#	Ac	#	Ac	#	Ac	#	Ac	#	Ac
Mor	1	0.5							2	7							1	2
Sta							1	.1							1	20	1	167
Lon													19	1271.9			1	1
Som									1	5			8	61.7				
Ste									2	25			14	192.9				
Red	1	5	1	6					2	40.5			5	72.3				
Totals	2	5.5	1	6			1	0.1	7	77.5			46	1598.8	1	20	3	170

By Cause – Forest Totals

	Cause	#	%	Acres	%
1	Lightning	2	3	5.5	<1
2	Equipment Use	1	2	6	<1
3	Smoking	0	0	0	0
4	Campfires	1	2	0.1	<1
5	Debris Burning	7	11	77.5	4
6	Railroad	0	0	0	0
7	Arson	46	75	1598.8	85
8	Children	1	2	20	1

9	Misc.	3	5	170	9
	Totals	61	100	1877.9	100

Detection Methods

Method	#	%
FS Lookout		
Other Lookout		
FS Patrol	1	<2%
Other FS Employee	11	18%
Planned Cooperator	19	31%
FS Permittee	1	<2%
FS Aircraft Observer	1	<2%
Other A/C Observer	2	3%
Others	26	43%
Totals	61	100%

Land Ownership Protection Report

State	S&P Offset	NF Land	Total	NF Land Protected by Others
Kentucky	1,090	699,575	700,665	882

Prescribed Burning Accomplishments

District	Objectives				Totals
	Timber Stand Improvement	Wildlife	Fuels-Mechanical	Fuels	
Morehead	64	15			79
Stanton				93	93
London		10		1988	1998
Somerset				2324	2324
Stearns				3697	3697
Redbird				1000	1000
Totals	64	25		9102	9191

Annual Wildfire Summary Report (FS-3100-08)

Area/Region: 08	State: KENTUCKY	Calendar Year: 2002
	KENTUCKY DIVISION OF FORESTRY	
Program: Cooperative Fire		
Protective Status: TOTAL ACRES PROTECTED - 17,037,798		
Wildfires/Acres Burned by Cause		
	Number of Fires	Number of Acres
Lightning	2	0
Campfire	11	317
Smoking	10	250
Debris	305	5,915
Arson	524	15,786
Equipment	30	465
Railroads	6	60
Children	16	70
Miscellaneous	72	678
TOTAL	976	23,542
Wildfires/Acres Burned by Size Class		
	Number of Fires	Number of Acres
Class A	69	18
Class B	539	1,405
Class C	306	9,341
Class D	52	7,662
Class E	9	3,916
Class F	1	1,200
Class G	0	0
TOTAL	976	23,542
Structures Saved and Lost		
Houses Destroyed	2	
Other Structures Destroyed	20	
Houses Damaged	2	
Other Structures Damaged	15	
Houses Saved	104	
Other Structures Saved	62	

