

Monitoring Report
Fredericksburg and Spotsylvania National Military Park
Spotsy CH 1
March 14, 2008

Introduction: The area consists of seven fields for a total of 130 acres. Originally, 80 acres was to be burned, but due to the lateness of the day, only 50 of these acres were burned on March 14, 2008. The remaining acres were to be burned during the next available window. These fields are usually bush-hogged by park maintenance once a year. A new technique was started in the summer of '07, to bush hog the woody growth in the Landrum and Middle fields at least 2 times, so as to stress the shrubby trees repeatedly, so as to kill them. This will be repeated in '08, and if necessary, '09. The purposes of the burn are to reduce brushy fuels, open up and maintain vistas, and promote the growth of native tall grasses so that park maintenance will no longer need to use time, equipment, and fuel to maintain these open fields. Furthermore, this will allow park visitors to get a feeling for the battlefield as it was during the Civil War.

Description: The area to be burned is located in the Spotsylvania Courthouse Unit of Fredericksburg and Spotsylvania National Military Park in Spotsylvania County, Virginia. The unit is partially surrounded by blacktop road and is fuel model 1 and 3. The area consists of warm season native grasses, cool season exotic grasses, and shrub/scrub to a height of 2-4 feet. The fields had not progressed as far along in green up as the same time last year. The hazel alders (*Alnus serrulata*) were not in bloom and the mixed hardwood forest surrounding the unit was at 5-7% of green-up. Approximatley, 15% of the shortest grasses were green and a few Cricket frogs (*Acris crepitans*) could be heard in some of the wet areas of the fields. A few cherry trees (*Prunus serotina*) and pear trees (*Pyrus calleryana*) were observed to be in bloom while driving to the prescribed burn.

Briefing: A total of 19 personnel (see Table 1) were assembled at the Bloody Angle parking area at 0915. At 0930 am Burn Boss Gregg Kneipp went through introductions and gave a briefing. The spot weather forecast predicted mostly cloudy skies with 10-20% chance of precipitation. A maximum temperature of 71°F was predicted with a 20 foot wind speed Northeast at 6 mph becoming South late in the afternoon. Mixing height was predicted at 8,000 feet with Southern transport winds of 5-16 mph. Expected minimum RH was 39%.

Table 1. Burn Day Personnel.

Name	Position Qualification	Home Unit
Gregg Kneipp	Burn Boss / RXB2	FRSP
Bob Howard	Holding /CRWB	AD
Joe Temple	Holding/CRWB	RICH
Alex Lochard	Holding/FFT2	FRSP
Jessica Stern	Holding/FFT2	FRSP
Justin Phippen	Holding/FFT1-t	SHEN
David Ammen	Holding/FFT2	RICH

Craig Johnson	Holding/FFT2	FRSP
Leslie Winston	Holding/FFT2	RICH
Barry Krieg	ENOP/FFT2	RICH
Andrew Trivizas	ENOP/FFT2	RICH
Jeremy Stoddard	ENOP/FFT2	AD
John Stoddard	ENOP/FFT2	FRSP
Joe Jerrells	Ignition Boss/CRWB	SHEN
John Reifenberg	Ignition/FFT2	FRSP
Regina Carrico	Ignition /FFT2	FRSP
Kate Jensen	Ignition//FFT2	SHEN
Missy Forder	FEMO	SHEN

Burn Day Chronology March 14, 2008

0900- Personnel gather at the Bloody Angle parking for briefing.

0930- Briefing

Upton Field

1030- Test fire.

1035- Ignition begins in the southwest corner proceeding along the western and southern forested edge of the unit. A wetline is used for holding.

1045- Flame lengths .5-1 feet, ROS <1CHHR (very slow).

1100- Once the corner is burned out and a blackline is established, fingers are lit into the wind to create a controlled flanking fire to provide maximum residence time.

1115- Winds variable. FL 2-4.

1130-Windshift occurs to the East resulting in the slowing of ignition.

1140- Fire whirls observed.

1200- End ignition.

McCoull House Field

1230- Test fire

1235- Begin ignition northwest corner of field.

1245- Flame lengths 2-6 feet with erratic fire behavior. The sun came out and the winds shifted to out of the Southeast. There was an observed visual increase of Broom Sedge (*Andropogon virginicus*) and Little Bluestem (*Schizachyrium scoparium*) which contributed to the greater flame lengths and rates of spread.

1255- Fire UTV saves the day.

1300- Make sure good wetlines in place along woodline as ignition continues.

1345- End ignition.

Harrison House Field

1510- Test fire.

1515- Begin ignition along the Northeast corner of field.

1520- Ignite along Eastern edge of the forest and the Road.

1600- Flame lengths 2-4 feet, ROS <1CCHR.

1630- Wetline around cedar trees and snags in middle of unit.

1720- End ignition.

Weather: The weather for the burn was partly cloudy to sunny skies. Temperatures ranged from 52-71 °F. Relative humidity's ranged from 41-81% with the lowest reading at 1530. Winds were from the Northeast in the morning, but moved around the south by mid afternoon.

Fire Behavior: Flame lengths on the backing fire were generally 6 inches - 2 feet with flanking fire of 2-3 feet. The McCoull House field, was observed to have an increase in dead cured Broom Sedge (*Andropogon virginicus*) and Little Bluestem (*Schizachyrium scoparium*). Flame lengths of up to 6 feet and fire whirls were observed. Rates of spread observed were generally < 1 CHHR. A flanking fire into the wind was utilized to maximize the residence time of the flaming front and to stress the woody vegetation.

Table 2. Burn Prescription – March 14, 2008

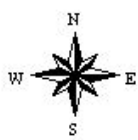
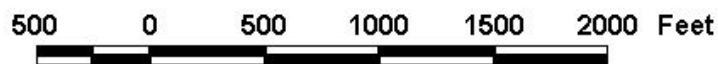
Weather	Acceptable Range	Optimum	Observed*
Temperature	30-70 F	50-60 F	52 - 71 F
Relative Humidity	20-70 %	20-30 %	41 – 81 %
Wind Direction	Any	N	variable
Wind Speed (midflame)	1-6 mph	1-4 mph	1 – 6 mph
Transport Wind Direction (range)	Any	N	S
Fuel Moisture 1 Hour	4-15%	6-8%	7-15%
10 Hour	5-25%	5-12%	10-18%

Table 3. Weather Observations - March 14, 2008

Time	Dry Bulb Temp F	RH %	Wind Speed MPH	Wind Direction	Skies
0930	52	81	1-3	East	P. Cloudy
1030	57	66	1-2	NE	P. Cloudy
1200	61	53	1-3	NE	P. Cloudy
1330	65	48	1-3	SE	P. Sunny
1430	69	43	2-6	SE	Sunny
1530	71	41	2-4	SE	Sunny
1630	66	49	1-3	SE	P. Sunny

Preparer: Missy Forder, FEMO, March 25, 2008

Fredericksburg and Spotsylvania National Military Park Spotsylvania Courthouse RX Burn, 2005



- Trail
- Roads
 - paved
 - unpaved
- Earthworks
- Bndy
- Burn Unit

