

Prescribed Burn Plan: Midwest Savanna Conservancy

Preserve: Tyler Unit County: Wisdom

Legal Description: _____ Provide map of the site and the burn units

Major Fuel Types: Oak leaves, forbs, some grasses and other fine fuels

Major Hazards: Two planted prairies surround Unit 12A and 12B, but these will already have been burned before the present burns are carried out. A telephone box near the bottom of Unit 18 must be protected. Poison ivy is present

Range of Acceptable Conditions for each burn unit

	<u>Unit 12A and 12B</u>	<u>Unit 8 and 10</u>	<u>Unit 18</u>
Wind direction, velocity (mph)	<u>any, 5-15</u>	<u>SW, 5-15</u>	<u>E preferred but S acceptable, 5-15</u>
Relative humidity	<u>20-40%</u>	<u>20-40%</u>	<u>20-40%</u>
Temperature (F)	<u>40-75</u>	<u>40-75</u>	<u>40-75</u>
Days since rain	<u>2-30</u>	<u>2-30</u>	<u>2-30</u>
Other			

Permits needed

State Pollution Control: none needed

State Forestry: Permit needed for daytime burn between January 1 and May 31, obtain from DNR Forestry. Permit not needed for after 6 PM burn.

County: no permit needed

Local: no permit needed

Notifications

Fire department: Wisdom Rural Fire Department, call on day of burn

State law enforcement: none needed

Local law enforcement: Inform Wisdom County Sheriff

Other officials: _____

Public relations

List individuals to be contacted, locate on map

1. Mr. and Mrs Warren Smith, adjoining property owners on Reese Road
2. George Murphy, neighbor on Wisdom Road
3. _____
4. _____

Media to contact: Wisdom Weekly Bugle (published on Thursdays)

Equipment Requirements

<u>Type</u>	<u>Number</u>	<u>Item</u>	<u>Source</u>
<u>Ignition equipment</u>	<u>4 (minimum)</u>	<u>drip torches</u>	<u>Midwest Savanna Conservancy</u>
	<u>10 gallons</u>	<u>drip torch fuel (2 parts diesel, 1 part regular gasoline)</u>	<u>Local filling station</u>
<u>Safety equipment</u>	<u>6</u>	<u>Backpack water pumps</u>	<u>Midwest Savanna Conservancy</u>
	<u>1</u>	<u>ATV with pumper unit</u>	<u>Midwest Savanna Conservancy</u>
	<u>4</u>	<u>swatters</u>	<u>Midwest Savanna Conservancy</u>
	<u>100 gallons</u>	<u>water</u>	<u>Field station</u>
	<u>6</u>	<u>2-way radios</u>	<u>Midwest Savanna Conservancy</u>
	<u>2</u>	<u>Controlled burn signs</u>	<u>Midwest Savanna Conservancy</u>
	<u>1</u>	<u>first aid kit</u>	<u>Midwest Savanna Conservancy</u>

Minimum crew size: 8 Source(s) of crew: MSC staff, trained and certified MSC volunteers

Fire bosses: Bill Bailey, Jim Smith, John Bedford

Sources of emergency assistance:

Fire fighting: Wisdom Rural Fire Department

First aid: call 911; nearest hospital is Wisdom County Hospital

Description of the Proposed Prescribed Burn

Prescribed Burn Justification:

Type of burn: Ecological management.

Management goals: Control invasive shrubs, stimulate growth of native species to increase flower production, prepare seed bed to permit germination of seeds and growth of seedlings

	<u>Unit 12A and 12B</u>	<u>Unit 8 and 10</u>	<u>Unit 18</u>
Vegetation type	90% oak savanna; 10% prairie	90% oak savanna; 10% prairie	40% oak savanna; 60% prairie
Acres	8.5	4.5	2.5
Notes	Mostly white oaks	Bur oaks	Prairie and open savanna
Aspect and slope	SE-facing, 20% slope	SW-facing, 30% slope	E-facing, 45% slope
Burn duration (estimated)	2.5 hours	1.5 hours	1 hour
Mop-up	1 hour	0.5 hour	0.5 hour
Total duration	3.5 hours	2 hours	1.5 hours

Fire behavior narrative:

Units 12A and 12B: A gravel road serves as fire break at the uphill end of this unit. A mowed fire break is on the downhill side and ravines are at the other two sides. Fire does not carry through the ravines. A backing fire will be lit on the uphill side, adjacent to the gravel road. The exact location will depend upon wind direction. Two drip torches will move in opposite directions along the fire break. As soon as a wide black line has been established, the burn will be conducted as a strip head fire burn, with drip torches being spotted at about 100 feet apart down the hill. Drip torch operators will be in contact with the burn boss by radio. Each drip torch operator will be accompanied by a person with a backpack water can.

Units 8 and 10. These two units are adjacent and are burned as one unit. A gravel road serves as a fire break at the uphill end. Mowed fire breaks are on the other three sides. Ignition will begin at the uphill end, adjacent to the gravel road, and two crews will work around the perimeter, backing fires will be lit downhill to create a black line. Once a good black line is available, the two crews will continue around the flanks to the lower fire break, where a head fire will be lit. It is desirable that most of this burn be carried out as a head fire.

Unit 18. This unit is open savanna with predominantly prairie grass. Because of its aspect, it does not burn well, and should be burned predominantly as a head fire. At the top of this unit a mowed fire break is present, as well as a rocky outcrop with very thin fuels.

Interior lighting. The goal is 90% or more burn coverage. If necessary, once each unit has been burned, return with drip torches and light any unburned areas. For safety, each igniter should be accompanied by a person with a backpack water can.

Contingencies (including safety zones, escape routes). Safety zones are in the blackened areas, the gravel road, and the already burned planted prairies. Vehicles can operate on the gravel road, which connects with a town road at the bottom of the hill. If escape occurs the pumper unit can operate on any of the mowed fire breaks and the 300 foot hose can be used.

Potential hazards to crew: The crew should be aware of any standing dead trees, since there is always a possibility of a tree falling, even though each has been fire proofed.

Mop-up: Brush piles and burning stumps can be left burning if they are along a safe border. Any burning piles/snags within 40 feet of a firebreak that has continuous fuel on the unburned side should be put out.

Smoke management. Because of the location of the burn units, there should be no problem with smoke on any nearby roads.

Evaluation: On the day after the burn, use GPS to construct a map of the burned area for import into ArcGIS. Make written notes on any unburned areas.

Prescribed burn plan prepared by: Bill Bailey

Plan reviewed and approved by: Arnold Jackson, Director, Midwest Savanna Conservancy