

Prescribed Fire: The Basics

Lindberg Park Prairie Trial Garden



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Greening Advisory Committee



FOR OUR PARKS. FOR OUR PLANET.

Prescribed Fire - Why?

- All nature in NE Illinois (*woodland, wetland, savanna, prairie*) REQUIRE periodic fire to maintain health
- 10,000 years of human/nature interaction
- No other management tool accomplishes everything that fire can



Prescribe Fire - Defined

- Fire set by trained personnel under specific weather conditions with specific safety standards to help achieve specific management objectives.



Prescribed Fire - Accomplishes

- Thatch reduction, allowing seeds to germinate
- Weed reduction or elimination
- Extends the growing season
- Promotes vigorous growth



Pale purple coneflower seeds germinate faster with smoke.

Excessive thatch can smother small spring ephemerals



Management Objectives

- Improve the Overall Health of the Prairie Trial Gardens
 - Reduce weeds (non-native plants, aggressive native plants)
 - Eliminate invader trees and shrubs
 - Spur more vigorous growth
- Demonstrate to and educate the community about using fire as a land management tool.



Safety Objectives

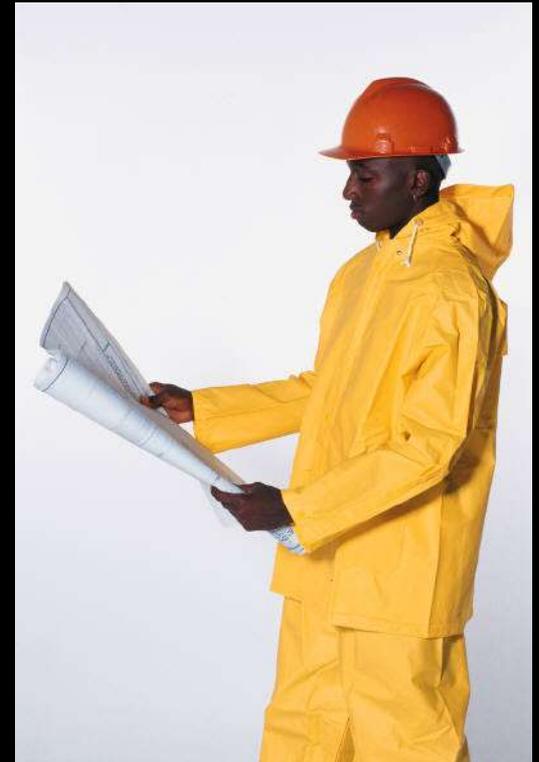
- Minimal smoke impact upon people, adjacent homes, roads, play areas, etc.
- Protect near-by trees from possible heat damage
- Allow safe public viewing
- Don't burn anything other than the trial gardens!



What propane tank?

Prescribed Fire – How?

- Create a Burn Plan or Burn Prescription: *Dictates under what conditions you will burn*
 - Wind speed and direction
 - Potential hazards
 - Ignition point
 - General weather conditions and forecast



Prescribed Fire – How?



Drip Torch to Ignite. A mixture of diesel (~70%) and gasoline (~30%).

Prescribed Fire – How?



Control: Back-pack water sprayer, flapper, rake, physical features (roads, trails, turf grass)

Use wind direction to aid in control

Prescribed Fire – How?





Lindberg Park, North Planting



The Burn Plan/Burn Prescription

- Potential Hazards: *none*
- Wind Direction: *West – ideal, NW or SW is ok*
- Wind Speed: *3 – 20 mph*
- Relative Humidity: *lower the better*
- Atmospheric Conditions: *clear skies, stable forecast*
- Staffing: *a minimum of 4 trained people*
- Lead Time: *1-3 days dry sunny weather before burn*
- Start Time: *apx. 10 am – Noon*
- End Time: *apx. 3 pm – 4 pm at the extreme*

Lindberg Park, North Planting



Mop Up

- Ignite any large unburned patches
- Do NOT ignite small unburned patches or individual plants
- Walk burn unit to ensure all flames are out



April 5, 2008 Prescribed Burn





April 20



April 27



May 4



May 11



May 18