The Basics of Timber Burning

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Wearing a lot of hats
Native Fire in Timber/Woodlands

Native? What time frame is Native?

Before Native Americans - Lightning

Native Americans

First European Settlers

Midwest Transition from small farms – large farms
Woodland Fires vs Prairie Fires

- Mostly smaller flames than prairie fires
- Mop-up
- More mop-up = more work
- Building line or fire breaks may be easier
- Fire behavior on slopes.
- Mosaic Burn
- Shady area = Higher RH
- Needs to be dry
Why Burn in the Timber/Woodlands?

- Remove down dead material to open up the soil for more vascular desirable plants.
- Maintain healthy ecosystem (oak regen, etc)
- Remove litter, easier access to enjoy
- Wildlife benefits
- Look at your management goals
- Set back the invasive plant community
- “Is burning my best option?”
When to burn?

- Look at your management goals? Objectives
- Anytime conditions are right
  - Low RH = more complete burn, good breaks
  - Higher temp = warmer fuels
  - Rainfall = Very little
  - Winter, Spring, Summer, Fall
  - Look at undesirable plant life cycle.
  - No leaves on trees.
- Fuel Loading
- Experiment with different times
- Dangerous in a prairie, Good in a woodland.
Who should burn?

- Someone in good/decent physical and mental shape.
- Minimum burn personnel with 1 line of ignition = 4
- 2 lines of ignition = 7 personnel
- WITH GOOD FIREBREAKS!
- Volunteer
- Inexperienced Landowners should seek help
What to burn with? (Equipment)

- Fusees, Drip torches, Propane wands, etc.
- Flappers (swatters), rakes, shovel, burlap bag wetted down, chainsaw to cut line, other tools
- ATV with small sprayer (patrol)
- Truck with tank and small gas pump
- Tractor with sprayer
- Backpack blowers
- Two way radios
How to Burn?

Most of the time a Ring Fire Ignition

- Start in the downwind corner (anchor)
- Work the flanks (sides)
- Once good black, complete the head fire

Once the fire edges are secure, interior fire if need be, BE CAREFUL!
Ring Fire Example
A word about safety

- Consequences of fire
- Fire behavior can be extreme
- Don’t go interior, unless safe.
- Smoke
  - Always be looking for a safe place to get to. A river, stream, plowed field, the good burned black area. (L.C.E.S)
  - Where nomex clothing if available, other long sleeved natural fibers.
- Maintain coms with forces, Good Radios!
Safety Continued

Light and Variable winds!

Check forecast, get a spot weather forecast or pay attention to in-depth forecasts, not from the TV forecasters.

High winds (20ft wind speed)
Prairie -- 20mph or below
Woodlands -- 30mph or below
Depending upon stand density, a forest will reduce the prairie wind by half or more.
Special Hazards in Woodlands

- **Snags** - Dead trees still standing
  Why are these a concern?

  Fires running uphill, jackpots, heat output.
Backbone State Park
Damage to Desirable Species
Mosaic Burn
Use of Breaks, Natural Breaks
Good Firebreak?
Good Firebreak?
A simple set up
Results of Woodland Burn
Backbone Before

Garlic Mustard
Results

Natives came back!

Multi-Flora Rose

Jack in the pulpit, other ferns
Results
Results Burned Area
Fire is a useful, dangerous tool.

Fire is as important to the ecosystem as rain or snow.
Questions?

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