

Prescribed Fire: Improving Our Understanding and Use of an Imperfect Tool

Mechanical Shrub/Tree Removal Preceding Re-Introduction of Fire to Grasslands and Savannas

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Completed Restoration

Prairie Grasslands

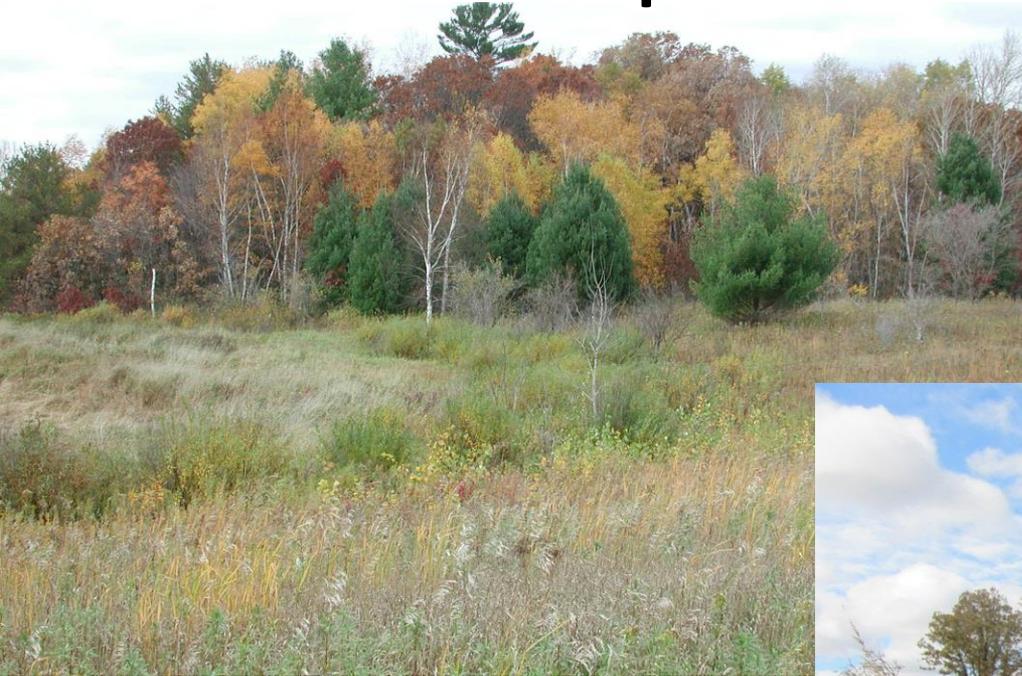


Completed Restoration



Prairie Grasslands

Completed Restoration



Oak Savanna

Completed Restoration

Oak Savanna



What to do?



1. Logging Phase



Logging Considerations

- Biomass utilization?
- Winter vs summer
- Tracks vs tires
- Choose your logger wisely
- Tree length skidding/chipping
- Protect designated species/ wetlands, etc
- Remove undesirable trees 2" dbh and larger
- Stumps cut to ≤ 3 " where practicable to facilitate subsequent restoration efforts (Hotsaws & shears)
- Choose your battle – be prepared to battle re-sprouting
- Blowdown

Post-Logging



2. Machine Piling Phase



Machine Piling Phase

- Optional but un-piled slash may be problematic with fire or other follow-up treatments
- Low ground pressure
- Tracks vs tires
- keep dirt out of piles
- Firewood utilization
- Rehab pile burn areas
- Snow – piles can remain in smolder stage for very long time

Post-Machine Piling



Post-Machine Piling



4. Brush Grinding Phase



Photo Courtesy of Lawson Ridge Native Landscaping

Brush Grinding Phase

- Conscientious operator mandatory
- Low ground pressure
- Low height to work under tree limbs (savanna)
- Articulated to work around trees
- Mulching vs rotary mower (chips vs shreds)
- Machine pile first to minimize mulch layer
- Horsepower - more is often better
- Might be able to grind stumps on firelines

Post Brush-Grinding



5. Seeding Phase



Seeding Phase

- May not be necessary
- Erosion control
- Increase surface fuels to re-introduce fire
ASAP – essential to abate woody re-sprouting
and stimulate prairie grasses/forbs
- Seed source?
- Temporary vs desired condition

6. Chemical Application Phase



Chemical Application Phase

- May not be necessary but plan for the worst
- Choose contractor wisely
- Proper chemicals and application rates
- May require multi-year treatments until surface fire intensity is adequate

Post-Chemical Application



Post-Chemical Application



2008



2008



2014







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CURRENT PROJECTS

Kostka WPA – Fall 2008/Now



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Kostka WPA – Fall 2008/Now

