

Wisconsin Forestry Center - Prescribed Fire for Forest Management
Prescribed Fire and Interfering Vegetation

Managing Oak Woodlands with Prescribed Fire

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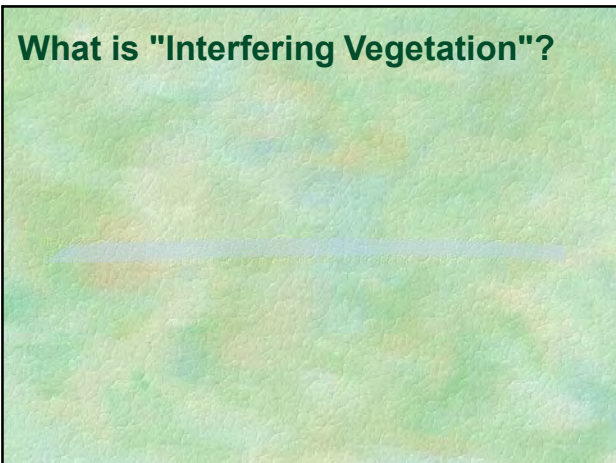
Overview

- What is "Interfering Vegetation"?
- Share my experience managing oak woodlands with fire
 - History
 - Oak Woodland Structure
 - Fire Effects



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What is "Interfering Vegetation"?



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What is "Interfering Vegetation"?

- Interfering with what?
- What is the objective?

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 - promote oak regeneration?
 - _____



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 - _____



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 - restore native vegetation?

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What is "Interfering Vegetation"?

- Interfering with what?
- What is the objective?
 - promote oak regeneration?
 - maximize timber yield?
 - restore native vegetation?
 - promote a stable, diverse, sustainable vegetation community?

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Regular low-intensity fire can improve oak woodland structure, reduce brush dominance and improve groundlayer diversity



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History

- Since the glaciers retreated over 10,000 years ago, our vegetation communities have been continually changing
- They have always been influenced by human activity
- They have always been influenced by fire



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Context



- My experience is primarily in Wisconsin's Driftless Region
- Rugged topography, variable aspects
- The concepts are applicable to oaks in other areas



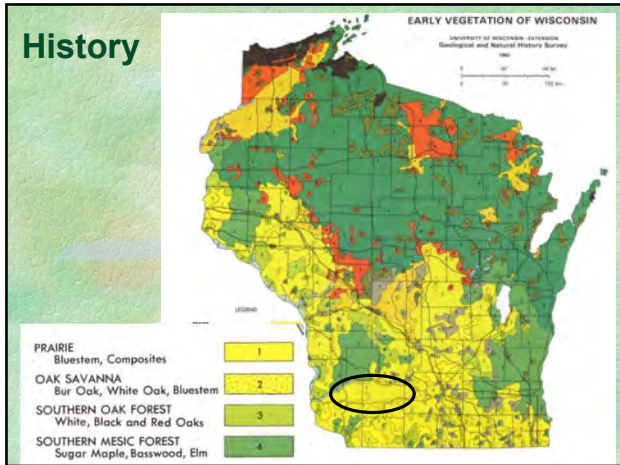
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Case Study Sites

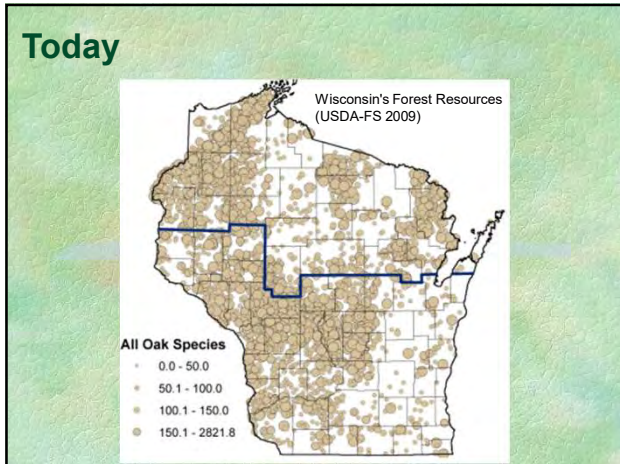
- Managed with fire past 8-20 years
 - Units typically burned every 1-5 years
- Combined with mechanical and chemical treatment



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Oak Woodlands in SW Wisconsin

- Mostly privately owned
- Agricultural matrix
- Highly fragmented
- Overgrown pasture
- Thick brush layer, poor ground layer

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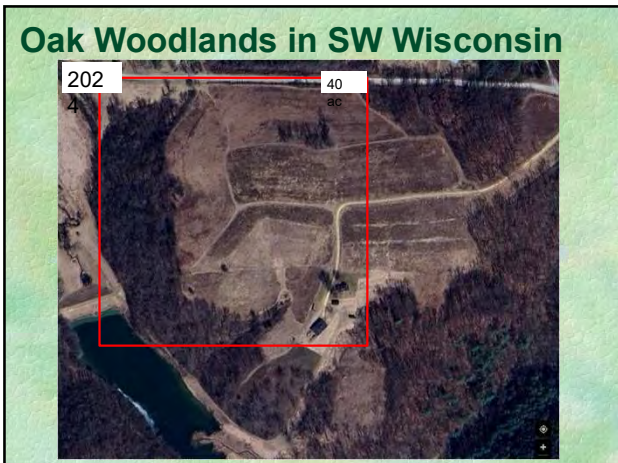
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Structure

- Historically – Prairie-Savanna-Woodland gradient
- Canopy Cover 30-80%
- Midstory open
- Groundlayer rich



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Fire in Oak Woodlands

- Generally Low-Intensity, <4' Flame Length

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Fire Effects

- Brush - Top-kill with resprouting
- Herbaceous invasives
- Competing trees – gradual mortality
- Timber scarring
- Groundlayer vegetation



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Regular low-intensity fire can improve oak woodland structure, reduce brush dominance and improve groundlayer diversity



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Questions?



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