

Prescribed Fire Councils: *Shared Challenges and Opportunities*



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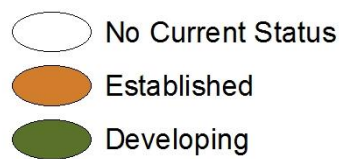
VirginiaTech
Invent the Future



COALITION OF
**PRESCRIBED
FIRE COUNCILS, INC.**

This morning

- Who the Coalition is...
- Shared Challenges
 - Local issues
 - National issues
- Shared Opportunities
 - Movements across the Coalition
 - Future networking



**COALITION OF
PRESCRIBED
FIRE COUNCILS, INC.**

www.prescribedfire.net



<http://www.prescribedfire.net/>

The Coalition's core mission is to **promote the appropriate use of prescribed fire** for enhancing public safety, managing resources, and sustaining environment quality. In addition, the Coalition **encourages and facilitates the organization of prescribed fire councils** in states that lack active councils. Partnering prescribed fire councils' efforts, which collectively represent twelve million acres of annual prescribed fire use, has created **a forum to voice and address issues of national concern**. The Coalition's work **facilitates communication** among interested parties in the field of prescribed fire, provides a **focal point for sharing ideas and information**, and **creates opportunities for prescribed fire collaboration**.



COALITION OF
**PRESCRIBED
FIRE COUNCILS, INC.**

Coalition Board Members



Liaisons



Rx fire challenges

- Why fire?
- If so, how often?
- Smoke
- Emissions
- When?
- Where?
- How?
- Legacies of fire exclusion
- Unknown unknowns



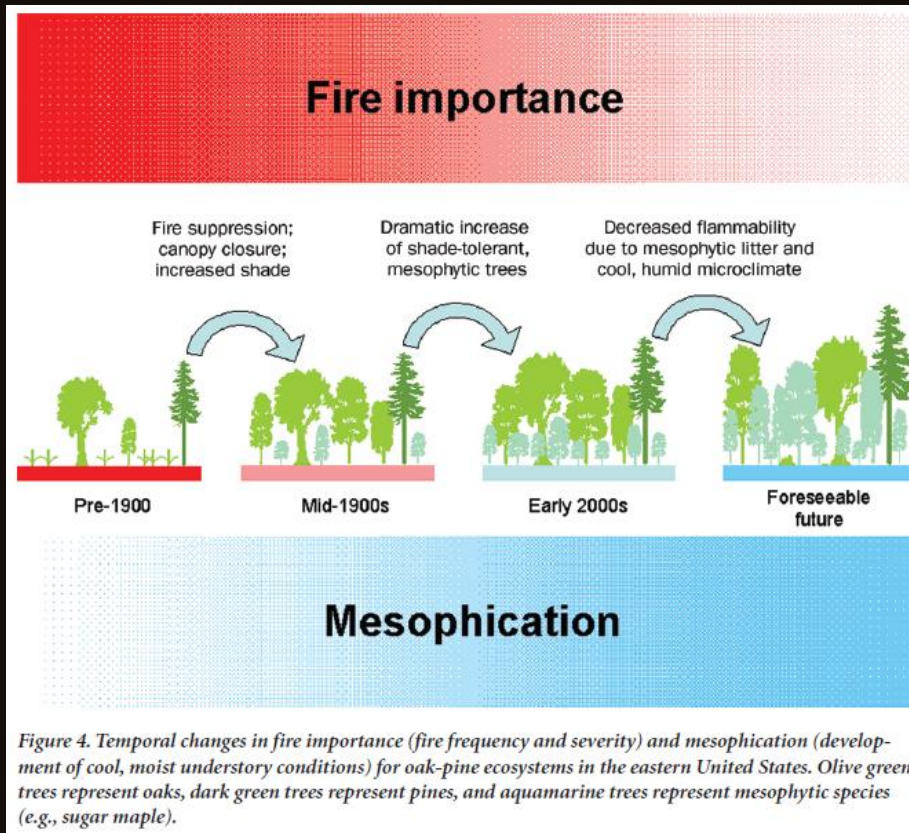
Smoke and Smoke

- Smoke
 - Visibility
 - Nuisance Issues
 - WUI*
- Emissions
 - PM_{2.5}
 - Ozone
 - C-based (CO₂, CO, CH₄)



**Persistent
& looming
threats**

Legacies of a smokeless past



Fuels have changed

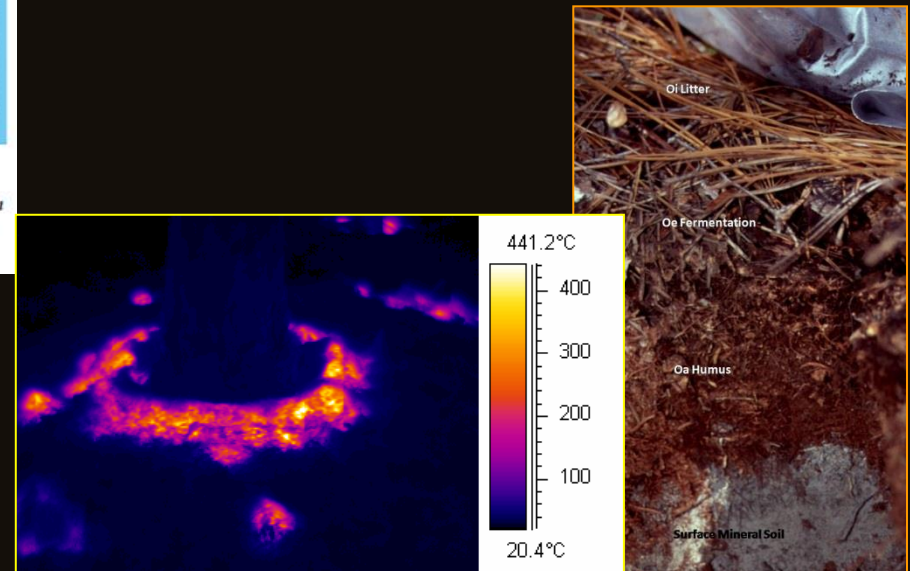
Restoring Fire to Long-Unburned *Pinus palustris* Ecosystems: Novel Fire Effects and Consequences for Long-Unburned Ecosystems

J. Morgan Varner, III,^{1,2,3} Doria R. Gordon,^{4,5} Francis E. Putz,⁵ and J. Kevin Hiers⁶

The Demise of Fire and “Mesophication” of Forests in the Eastern United States

Nowacki & Abrams 2008
BioScience

GREGORY J. NOWACKI AND MARC D. ABRAMS



How we burn

- Season
- Size of units
- Firing methods
- Target severity
- Target species?
- Non-natives
- Boundaries



**Challenge to
how we do what
we do**

Why, where, and how much?

Conservation Biology



Review

Reassessment of the Use of Fire as a Management Tool in Deciduous Forests of Eastern North America

GLENN R. MATLACK

Environmental and Plant Biology, Porter Hall, Ohio University, Athens, OH 45701, U.S.A. email Matlack@ohio.edu

**+ other
“Fire
Deniers”**

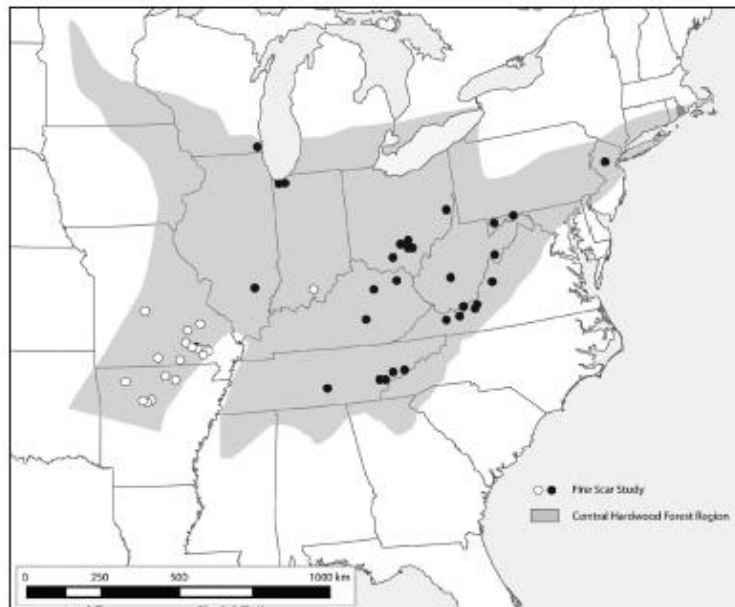
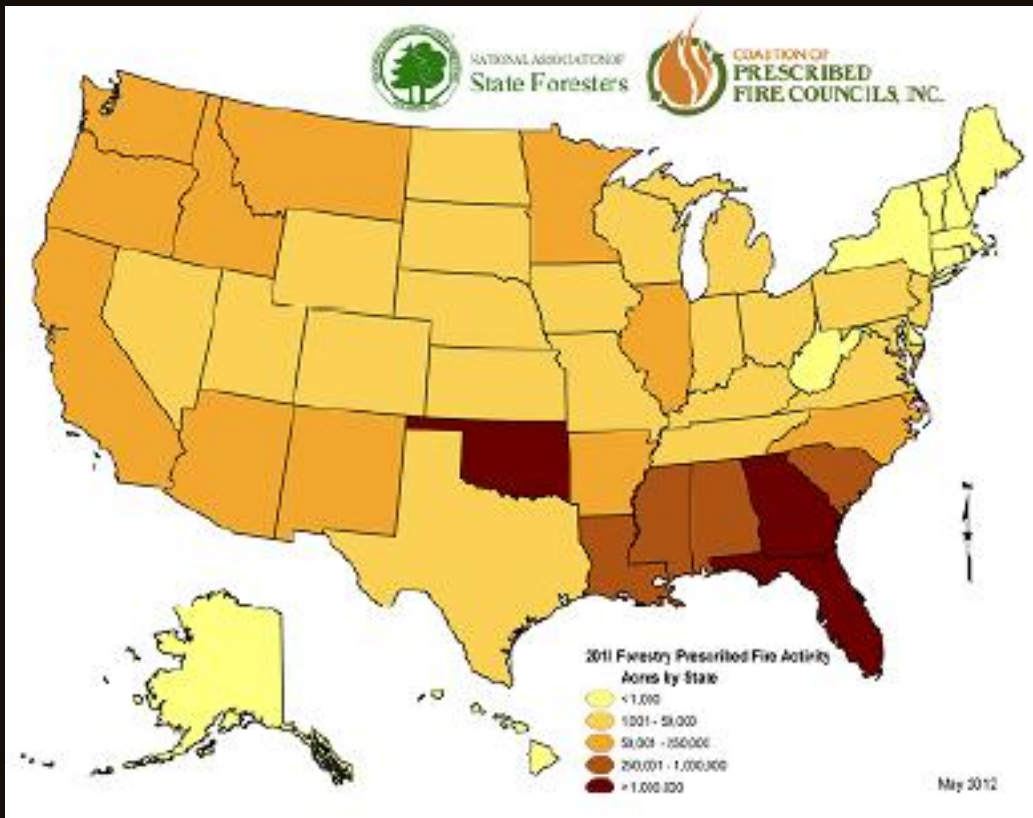


Figure 2.—Map of the Central Hardwood Forest Region (Fralish 2003, Fralish and Franklin 2002) and the location of sites with fire reconstructions based on dated fire scars in tree cross-sections. White circles represent temporally delineated fire history records that pre-date European settlement. Black circles represent all other fire scar records.



Patterns of Rx fire use (2012 Survey)



- Diminished
- Concentrated in the South
 - 80% of burning
- Stable or increasing (43* states)

Melvin. 2012. *National Prescribed Fire Use Survey*. NASF & Coalition of Prescribed Fire Councils. www.prescribedfire.net



Rx fire opportunities

- Working together
- Working smarter
- Broad(er) fire discussions
- Public knows stuff
- Conservation & restoration
- Advances in fire research

Beyond the Fireline...

- Prescribed Burn Associations (PBAs)
 - Shared resources
- Rx Fire Councils
 - Tackling bigger issues
- Regional Fire Science Consortia



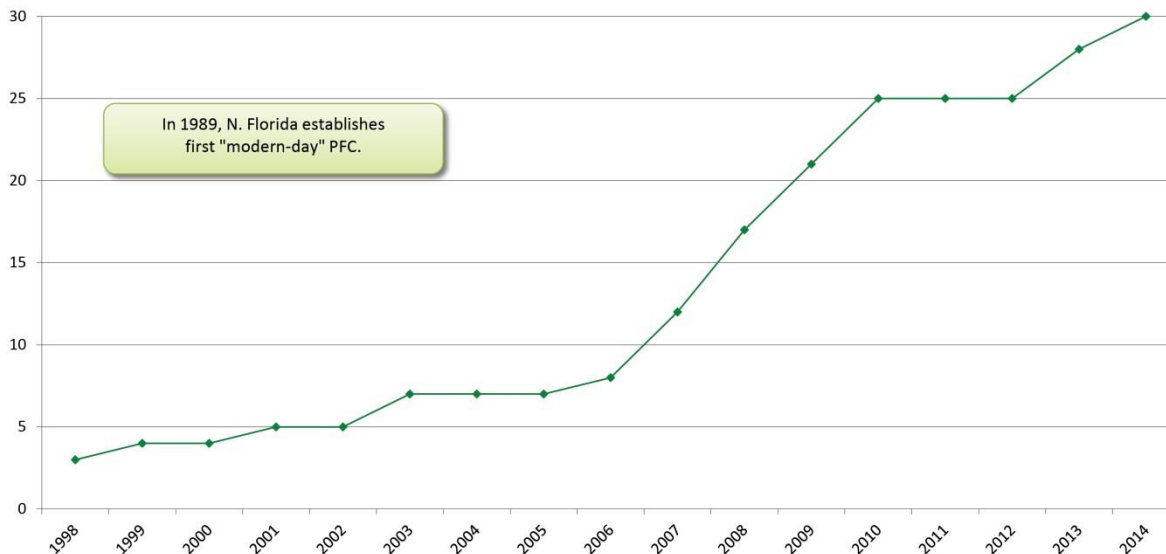
Spread of Prescribed Fire Councils



Oklahoma Prescribed Fire Council



Number of Prescribed Fire Councils by Year



South Florida 1975
 Central Florida 1989
 North Florida 1989
 Michigan 1999
 Georgia 2001
 South Carolina 2003
 Wisconsin 2003
 North Carolina 2006
 Alabama 2007
 Louisiana 2007
 Pennsylvania 2007
 Tennessee 2007
 Colorado 2008
 Illinois 2008
 Kansas 2008
 Kentucky 2008
 Mississippi 2008
 British Columbia 2009
 Northern California 2009
 Virginia 2009
 Washington 2009
 Arkansas 2010
 New Hampshire 2010
 New Mexico 2010
 Oklahoma 2010
 Southern Sierra Nevada 2013
 Missouri 2013
 Texas 2013
 Arizona 2014
 Oregon 2014

Fire Science Delivery



Restoring Fire to Long-Unburned *Pinus palustris* Ecosystems: Novel Fire Effects and Consequences for Long-Unburned Ecosystems
J. Morgan Varner, III,^{1,2,3} Doria R. Gordon,^{4,5} Francis E. Putz,⁵ and J. Kevin Hiers⁶

Reducing fire mortality resulting from duff moisture: the importance of duff moisture
J. Morgan Varner III, J. Kevin Hiers, Roger D. Ottmar, Francis E. Putz, and Dale D. Wade

Numerical p

CSIRO PUBLISHING
International Journal of Wildland Fire
<http://dx.doi.org/10.1071/WFL1017>

Impediments to prescribed fire across agency, landscape and manager: an example from northern California
Lenya N. Quinn-Davidson^{A,B,C} and J. Morgan Varner^B

Woodlands to Prescribed Fire
and William D. Tietje²



Collaboration across divides



*Fire is a uniting issue for many
in natural resources*



Council Impact & Effectiveness

Formal Metrics:

- *Affecting policy*
- *State recognition*
- *Burner liability*
- *Meetings*
 - *Attendance*
- *Training*
- *Burning workshops*
- *Burner “Certification”*



Not so fast...



They *support* us?

people connect to hope, not fear...



Northern California
Prescribed Fire Council

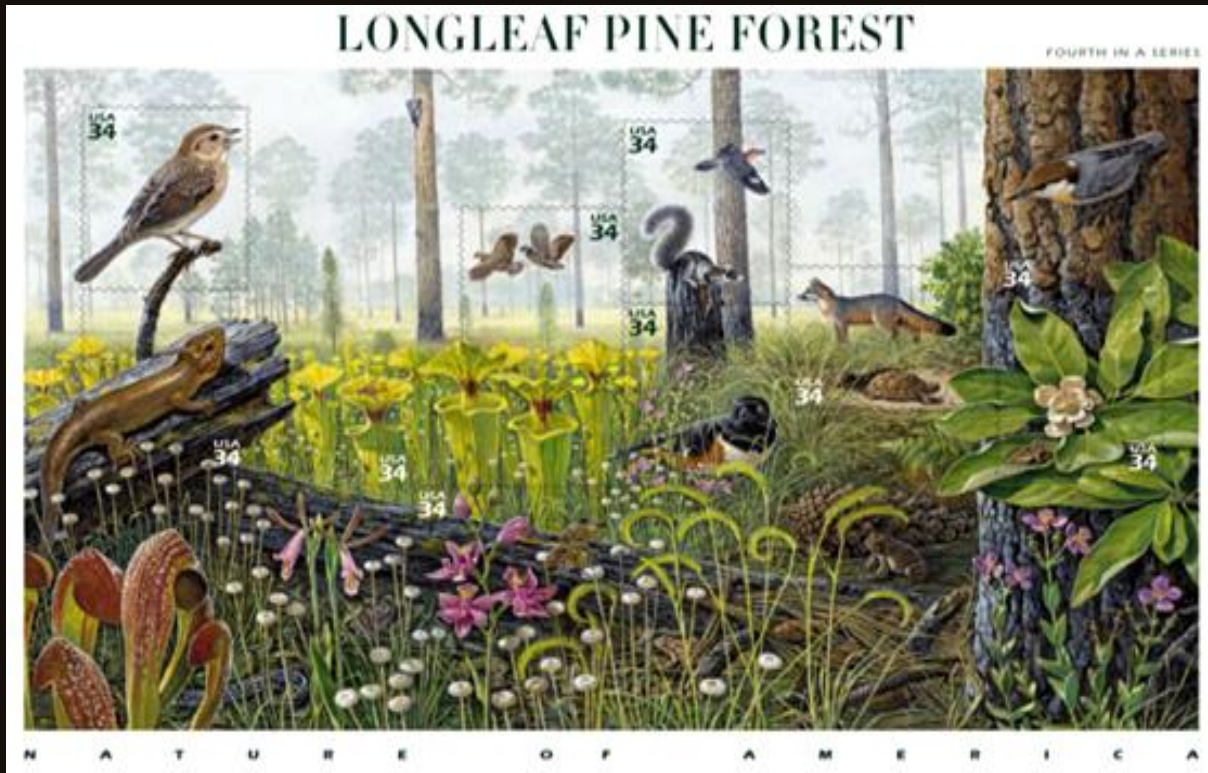
HEALTHY WOODLANDS



PRESCRIBED FIRE

norcalrxfirecouncil.org

Biodiversity Conservation & Ecological Restoration



Fire is an ecological imperative in fire-prone ecosystems

Keep doing this...



Fire Research to Help



We don't need any more research!
-[don't make eye contact]

The Demise of Fire and “Mesophication” of Forests in the Eastern United States

GREGORY J. NOWACKI AND MARC D. ABRAMS

Conservation Biology



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Journal of Vegetation Science **22** (2011) 1094–1104

Longleaf pine (*Pinus palustris* Mill.) fire scars reveal new details of a frequent fire regime

Michael C. Stambaugh, Richard P. Guyette & J. M. Marschall

Collaboration Across Divides

A mini-Conference for Prescribed Fire Councils



Coalition of Prescribed Fire Councils

Save the Date: Friday, October 24, 2014

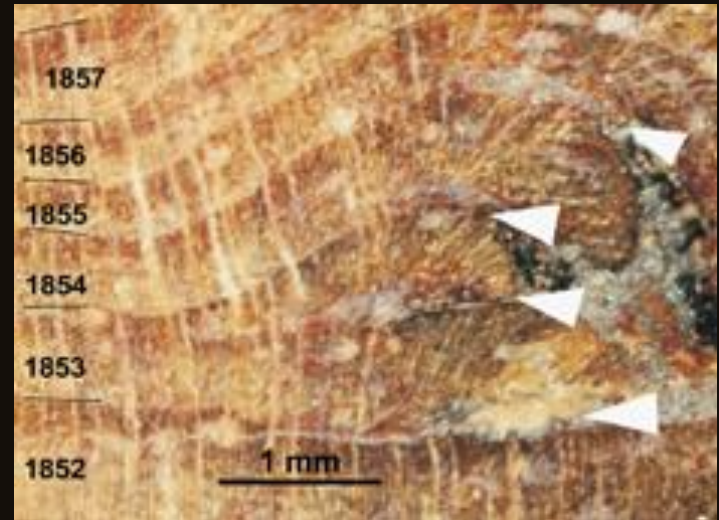
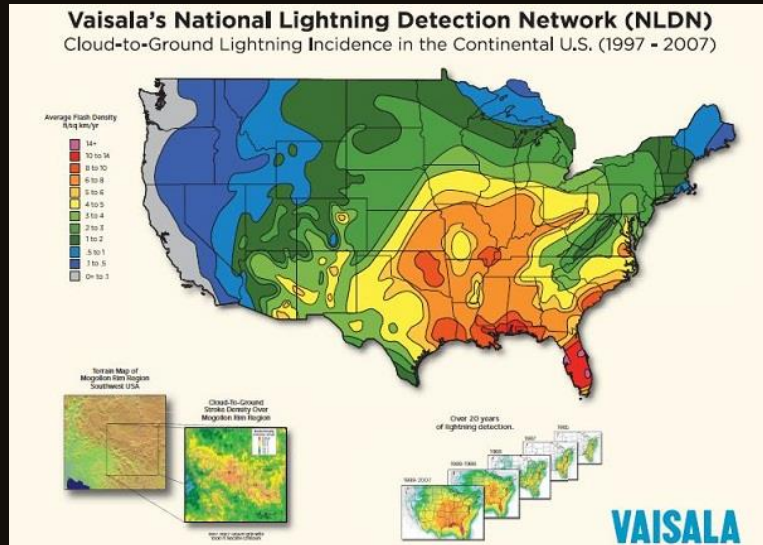
Mobile, Alabama

Attached to the Longleaf Alliance Biennial Conference

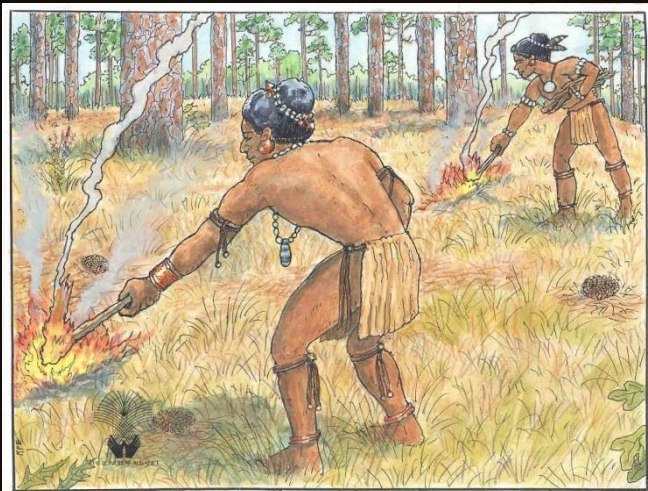


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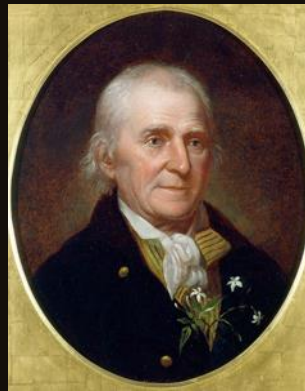
Fire used widely in the region



Stambaugh et al. 2011 *Journal Veg Science*



The Longleaf Alliance



Fires were...
Frequent
Pervasive

Versatility & Utility of Rx Fire

Utility:

Consumes fuel

Kills competitors differentially

Linked to plant and animal dynamics



Versatility:

Intensity

Season

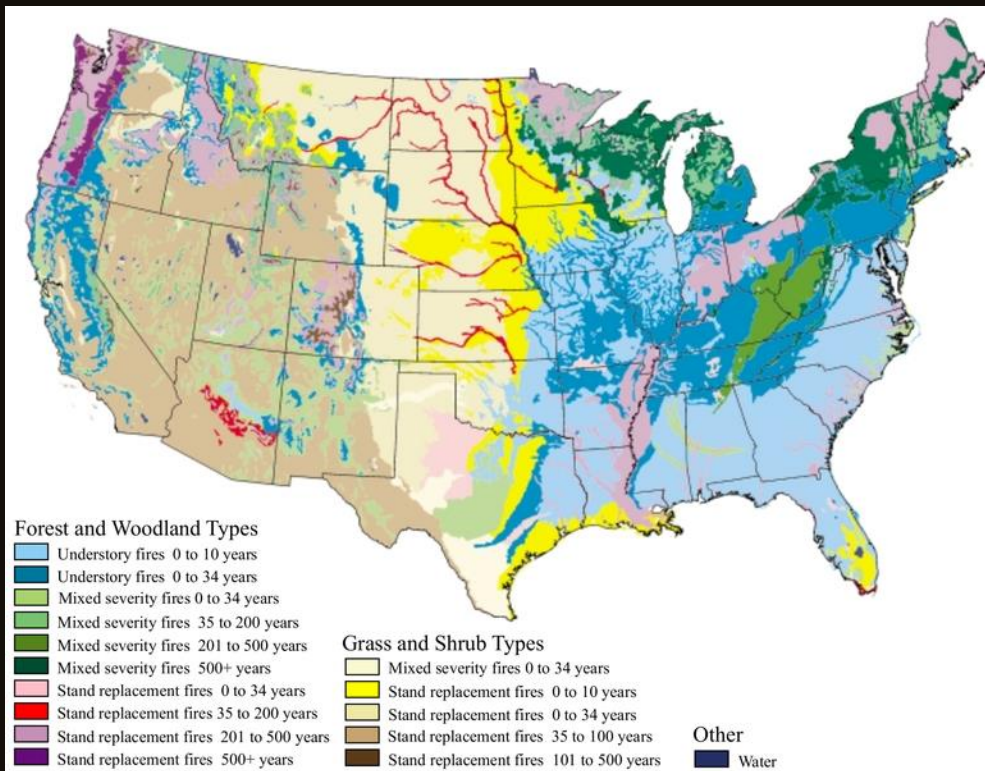
Size & shape

Combine with other treatments

Duration

Frequency

*Inexpensive**



Brown & Smith, 2000. *Wildland fire in ecosystems: effects of fire on flora*



Diversity of fire-prone ecosystems

Rx fire objectives

- Hazard reduction
- Remove logging debris (site prep)
- Improve habitat
- Promote grazing
- Perpetuate fire-dependent species
- Eliminate diseases + pests
- Improve access
- Reduce competition
- Aesthetics...

