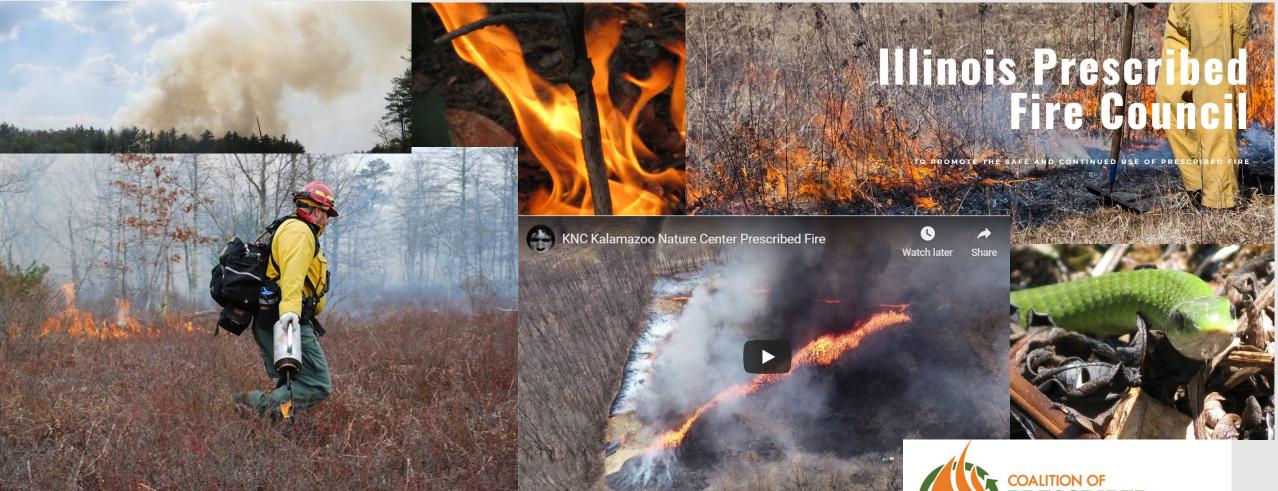
Bringing managed fire back to the land: prescribed fires protect lives, property and wildlife habitat. How can Prescribed Fire Councils help.





Northeast Region Cohesive Wildland Fire Management Strategy

Restoring Resilient Landscapes - Creating Fire Adapted Communities - Responding to Wildfires

The Three National Cohesive Strategy Goals

Goal #1 – Restoring & Maintaining Fire Resilient Landscapes

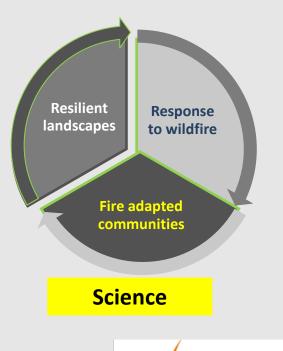
Goal #2 – Creating Fire Adapted Communities

Goal #3 – Responding to Wildfires











Northeast Region Cohesive Wildland Fire Management Strategy Restoring Resilient Landscapes - Creating Fire Adapted Communities - Responding to Wildfires

The Wildland Fire Problem...

- Is <u>not</u> just a federal issue
- Is not just a state issue
- Is <u>not</u> just a local issue
- Is <u>not</u> just a fire service issue





Reframe Wildland fire paradigm: recreate a culture of fire in the NE

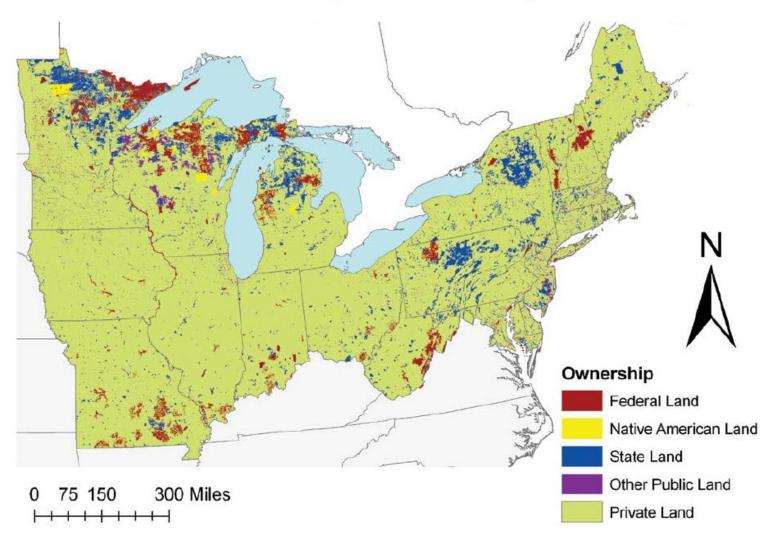
- Ecologically diverse: northern big woods, NJ pinelands to the tall grass prairie
- Some of largest and most destructive wildfires in NA: 1871, 1894, 1918
- How can we mitigate wildfires with prescribed fire as a management tool
- How can we cooperate through organizations to put more prescribed fire on the ground – obstacles and opportunities – a vision
- <u>The burden of intentional action has always been greater than that of</u> <u>inaction in wildland fire – we can manage risk with prescribed fire</u>



NE Context

- 20 states
- 41% of its citizens
- 76% privately owned
- 24% publically owned
- This is ultimately a *private lands* mission with state and feds support and example
- All stakeholders engaged

Land Ownership in the Northeast Region



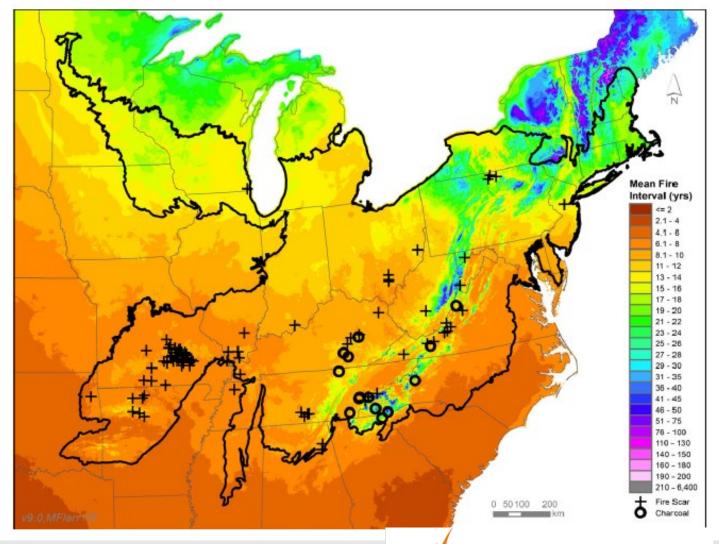
Produced by the U.S. Forest Service, Northeastern Area State and Private Forestry. MDH 9/15/11

Figure 2. Land ownership in the Northeast Region.



Historic Fire Frequency – 1650-1850 CE

- Broad evidence fire played a roll in formation and maintenance of ecological systems post Pleistocene glaciation
- Fire shaped the oak dominated systems of the NE that are now in peril.
- Without regular fire disturbance communities shift to mesic communities





Extirpation of Fire: Fire maintained communities recede

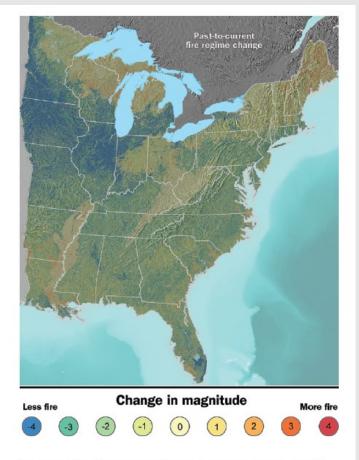


Figure 2. Past-to-current fire regime change map based on spatial analysis of past and current fire regime maps. Negative values represent temporal shifts toward less fire, whereas positive values represent shifts toward more fire. The departure from zero relates to the extent of fire regime change.

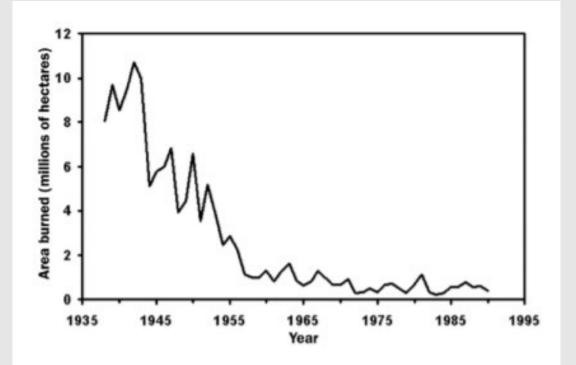


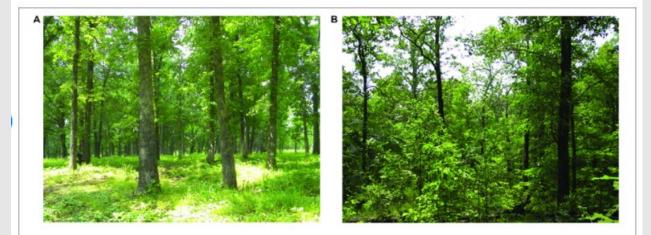
Figure 3. Area burned in the eastern United States (1938–1990) based on historic fire records held at the US Forest Service, Fire and Aviation Management, Washington Office, and compiled by Regina Winkler (R6 Information Technology Specialist). Area includes Minnesota, Iowa, Missouri, Arkansas, Lousiana, and all states eastward.



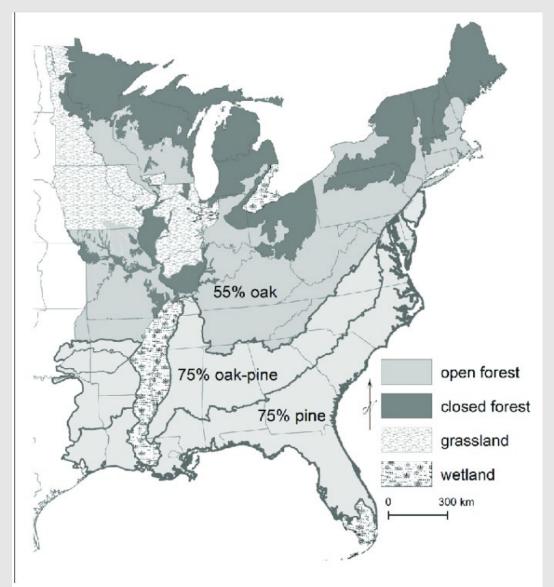
Hanberry et al 2020

Sustaining habitat

- Oak/Pine recruitment
- Habitat resources ET species mgt.
- Food resources Game mgt.
- Tomorrow's forest are moving away DFC



| Characteristic structure of open forests (panel A), which have an overstory tree layer and herbaceous layer, and closed forests (B), which have trees throughout the vertical profile to the canopy, replacing the herbaceous layer. Photos from stands in Missouri treated by prescribed burns (A) or without treatment (B), courtesy of C. Kinkead.

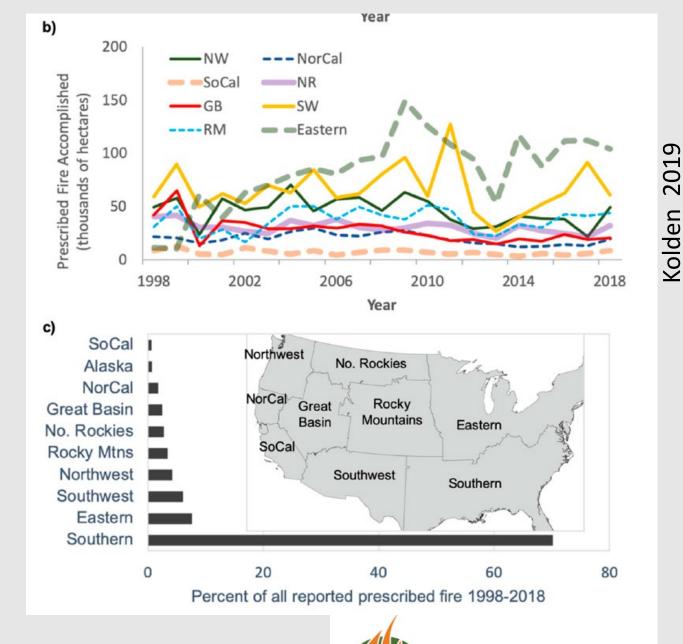


Estimated extent of open forests in the eastern United States based on historical tree surveys from 1620 to 1900. Variation was caused by environmental grammatical states based on historical tree surveys from 1620 to



Eastern GACC roll in rxfire 1998-2018

- East has been a leader
- Broad expansion and program development possible
- <u>Private lands</u> needs to drive with state and federal support
- What are some of the tools and issues we need to address to reduce barriers to execution





Changing the Fire Paradigm: wildfire to **proactive**:

- Out of control: <u>controlled</u>
- Emergency response: planned execution
- Life/property loss: reduced/managed hazard
- Expensive: cost-effective for benefit
- Accumulated nutrients: cycled nutrients
- Accumulated fuel: <u>consumed fuel</u>
- Old groceries: fresh groceries
- Unplanned atmosphere: <u>receptive atmosphere</u>
- Inevitable hazard at bad time: timed to minimize damage
- Lost habitat: renewed habitat mirrors evolved structure and condition
- Decadent rank habitat: <u>renewed healthy habitat</u> Resilience!





Prescribed Fire Councils: What do they do?

The mission of the Minnesota Prescribed Fire Council is to protect, conserve and expand the safe use of prescribed fire on the Minnesota landscape to meet both public and private objectives. As well as promote public understanding of prescribed fire and its purpose.

Universal Goals across prescribed fire councils:

- Promoting the safe and responsible use of prescribed fire
- Promoting the public understanding of the benefits of prescribed fire
- Promoting the development and utilization of prescribed fire practices to achieve desired environmental and ecological resource management goals
- Anticipating prescribed fire issues/concerns and proactively responding
- Providing a framework for communications related to prescribed fire objectives, techniques and issues
- Disseminating technical information on prescribed fire and its application
- Assisting in maintaining a system of certification for those that it applies
- Political advocacy for prescribed fire



Prescribed Fire Councils 10/20 states NE with PFC

Member Status

- 34 Member States
 - 39 PFCs
- 1 Inactive
 - Arizona
- 1 Nonparticipating
 - California Central Coast
- 3 in Development
 - o Idaho
 - Maryland
 - Massachusetts
- 4 Organizational Members



Our Intent at the regional scale is to: Maintain and support current prescribed fire councils and foster establishment of new prescribed fire councils in the NE

WINESOTA PRA WISCONSIN RESCRIBED Tibed Fire CO FIRE COUNC OUNCIL INDIANA FIRE COUNCIL Missouri Prescribed **Fire Council** OHIO PRESCRIBED FIRE COUNCIL Northeast Regional Prescribed Fire Council Coordinating Group ILS. INC.

NE PFC membership survey 2020

• Sent out invitation to State PFC leadership: 9/10 councils

Limitations, organizational sustainability, growth, messaging, training, monitoring and policy

- Council Administration and Council Funding
- Liability, Legislation
- Risk Management
- Fire Needs Assessments (FNA) and RX Fire Priority Setting
- Fire Training and Qualification Standards
- State Certified Burn Programs
- Education, Outreach, Communication needs



NE PFC membership survey 2020 results:

- ISSUE A: Council administration and Council funding:
- RECOMMENDATION: Coalition of Prescribed Fire Councils hire a regional coordinator to provide support to prescribed fire councils.
- ISSUE B. Liability, Legislation, Risk Management, Fire Needs Assessments (FNA) and RX Fire Priority Setting:
- **RECOMMENDATION: Upon completion of the** Northeast Quantitative Wildfire Risk Assessment (QWRA), **develop regional guidance for prescribed fire councils engaging with state forestry commissions to facilitate grass root movement toward legislation and liability coverage based on training standards (Georgia model)**



NE PFC membership survey 2020 results:

- ISSUE C: Fire Training and Qualification Standards, State Certified Burn Programs
- RECOMMENDATION: Develop a stakeholder group to create a tiered system of qualifications and certifications so that prescribed fire resources can work across landscapes and organizational structures from Federal to <u>Private interest</u>.
- ISSUE D: Education, Outreach, Communication needs
- RECOMMENDATION: Additional responsibility of regional coordinators or a national position to organize and distribute educational materials and public education efforts.



NE PFCCC moving forward 2021:

- Quarterly networking forums PFC driven with subject matter to their needs and questions around issues councils collectively face.
- February 17th, May, September, November networking forums that deal with specific interest outline and foster a <u>community</u> of prescribed fire management in the Northeast.
- Develop solutions and tackle opportunities together and benefit from lessons learned.
- Pool resources for opportunities larger that individual councils.



Questions: we would like your feed back on your most pressing spot fire!



Regional Wildfires of the NE and Midwest

- Some of the biggest and most deadliest fire events in NA
- Ecosystems of northwoods are susceptible to large catastrophic fire events

Year	Fire Name	State	Acres	Approx loss
1825	Miramichi and Maine	New Brunswick and Maine	3,000,000	160 lives lost Large acreage burned
1871	Peshtigo	Wisconsin and Michigan	3,780,000	1,500 lives lost in Wisconsin
1871	Great Chicago	Illinois	>3,000	250 lives lost 17,400 structures
1871	Lower Michigan	Michigan	2,500,000	169 lives lost 3,000 structures
1894	Hinckley	Minnesota	160,000	418 lives lost
1894	Wisconsin	Wisconsin	>3,000,000	Undetermined lives and structures lost
1903	Adirondack	New York	637,000	Large acreage burned
1918	Cloquet-Moose Lake	Minnesota	1,200,000	450 lives lost 38 communities destroyed
1947	Maine	Maine	205,678	16 lives lost
1988	Yellowstone	Montana and Idaho	1,585,000	Large acreage burned
1995	Sunrise	Long Island NY	5,000	



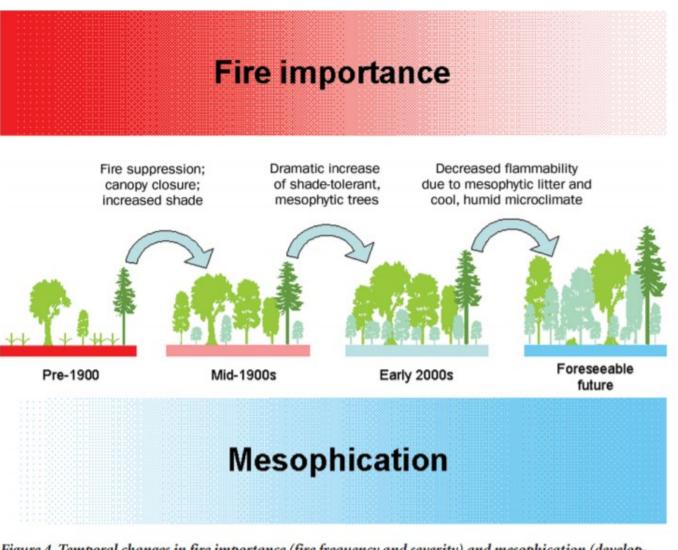


Figure 4. Temporal changes in fire importance (fire frequency and severity) and mesophication (development of cool, moist understory conditions) for oak-pine ecosystems in the eastern United States. Olive green trees represent oaks, dark green trees represent pines, and aquamarine trees represent mesophytic (e.g., sugar maple).

Northeast Regional Prescribed Fire Council Coordinating Group

COALITION OF PRESCRIBED FIRE COUNCILS, INC. What can we tackle at a regional scale to lower barriers of entry and facilitate more prescribed fire on the ground. What can PFCs do?

- Capacity
 - Education
 - Certification
 - Outreach
- Air quality
- Resources
- Priority
- WUI
- Liability

Top 3 Impediments Limiting Prescribed Fire Use Northeast Ranking

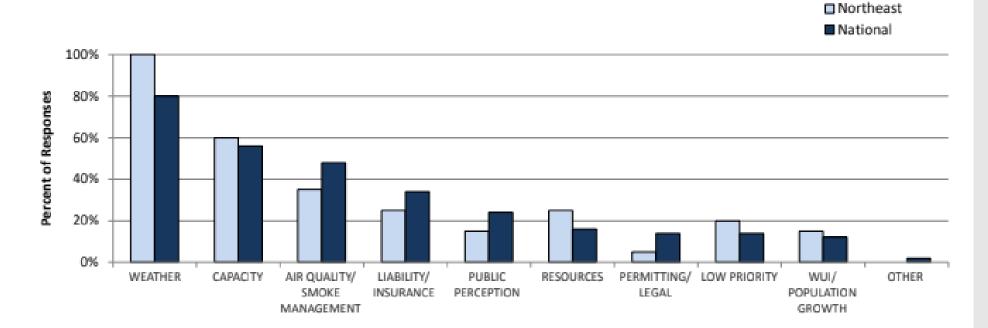


Figure 25. The Northeast ranked weather, capacity, and air quality/smoke management as the top three challenges. Every state in the Northeast (100%) identified weather as a top impediment.



Georgia Example-

County RESOLUTION In Support of Prescribed Fire

, Georgia

WHEREAS, the _____ County Commission recognizes the use of prescribed fire provides multiple ecological and economic benefits to the public,

WHEREAS, prescribed fire is a land management/public safety tool in the prevention of wildfires, reduces the liability and loss of private property and saves lives while it acts as a preventive measure saving taxpayers the cost of local government public safety and fire fighting officials from responding to wildfires which consume valuable tax resources,

WHEREAS, prescribed fire is a priority in the implementation of the State Wildlife Action Plan to improve wildlife habitat, it assists both public and private land managers in perpetuating fire-dependent ecosystems, its dependent game and non-game species and is a tool in managing endangered species,

WHEREAS, prescribed fire is a valuable tool used by land managers, timber growers and the Georgia Forestry Commission in reducing hazardous fuels, reducing the risk of destructive wildfires, preparing sites for both natural and artificial forest regeneration, improving access and controlling detrimental insects and silvicultural diseases,

WHEREAS, the Georgia General Assembly passed the Right to Burn Act in 1992, defining prescribed fire as, "Prescribed burning means the controlled application of fire to existing vegetative fuels under specific environmental conditions and following appropriate precautionary measures, which causes the fire to be confined to a pre-determined area and accomplishes one or more planned land management objectives or to mitigate catastrophic wildfires."

WHEREAS, many rural economies are dependent on the use of prescribed fire to manage for game species such as Whitetail Deer, Wild Turkey and Bobwhite Quail, whose hunting economy is vital to the State of Georgia,

WHEREAS, prescribed fire helps keep Georgia's forest healthy and those forest, in return, provide clean air and clean water,

WHEREAS, prescribed fire practitioners contribute to the air quality of Georgia as healthy forest contribute vital ecological services as "air shed contributors",

NOW, THEREFORE, BE IT RESOLVED THAT the _____ County Commission supports the appropriate and continued use of prescribed fire in Georgia,

AND, BE IT FURTHER RESOLVED THAT the _____ County Commission supports the Georgia Forestry Commission and Georgia Department of Natural Resources continue to provide educational and technical assistance to landowners in an effort to recognize the benefits listed above,

AND, BE IT FURTHER RESOLVED THAT the _____ County Commission urges Air Quality Regulators to work closely with all state agencies and landowners in a fair and balanced approach to smoke management,

This Resolution Adopted By the _____ this ___ day of _____

State of Georgia Counties with Resolutions Supporting the Use of Prescribed Fire



RESOLUTION PASSED



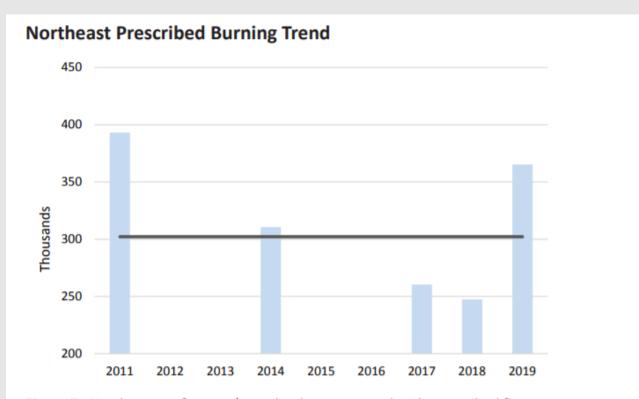


Figure 7. Northeastern forestry/rangeland acres treated with prescribed fire across survey years. The horizontal line represents the overall annual regional average of 302,158 acres.