

Why We Need Prescribed Fire?

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Prescribed fire is defined as “a safe way to apply a natural process, ensure ecosystem health, and reduce wildfire risk.”

- Only you can prevent wildfires – Smokey the Bear**
- “Good fires prevent bad fires.”**



-Right fire, right place, right people

-The prescribed burn doesn't start with the drop of a match...

-More prescribed fire means fewer extreme wildfires



Fire Good...





United States Department of Agriculture

The Fire–Oak Literature of Eastern North America: Synthesis and Guidelines

Patrick H. Brose
Daniel C. Dey
Thomas A. Waldrop



Forest Service

Northern Research Station

General Technical Report NRS-135

July 2014

Prescribed Fires and Acres by Agency

Year		BIA	BLM	USFS	FWS	NPS	State/Other	Total
2015	Fires	245	334	2,995	727	160	32,802	37,263
	Acres	77,907	84,399	993,570	225,890	33,377	1,543,117	2,958,260
2014	Fires	288	429	3,021	899	196	12,211	17,044
	Acres	109,629	132,311	1,243,739	201,426	67,937	634,756	2,389,798
2013	Fires	202	328	2,497	530	154	15,053	18,764
	Acres	80,889	34,492	1,006,955	123,399	44,347	709,958	2,000,040
2012	Fires	201	304	2,719	1,001	203	12,198	16,626
	Acres	62,529	39,675	969,560	234,887	62,357	602,826	1,971,834
2011	Fires	321	383	2,890	840	213	4,025	8,672
	Acres	111,352	242,658	960,992	195,055	72,045	530,709	2,112,811
2010	Fires	403	431	3,766	1,069	251	11,007	16,882
	Acres	124,404	91,622	1,224,638	281,449	94,500	446,971	2,423,862



FY2016 TNC Fire Numbers



Record Year for US burning
154,577¹ acres, 700 US burns
306,033² acres, burn assists
(38 US states & Africa)
29 wildfires on TNC lands

¹ Record annual total

² Second highest annual total

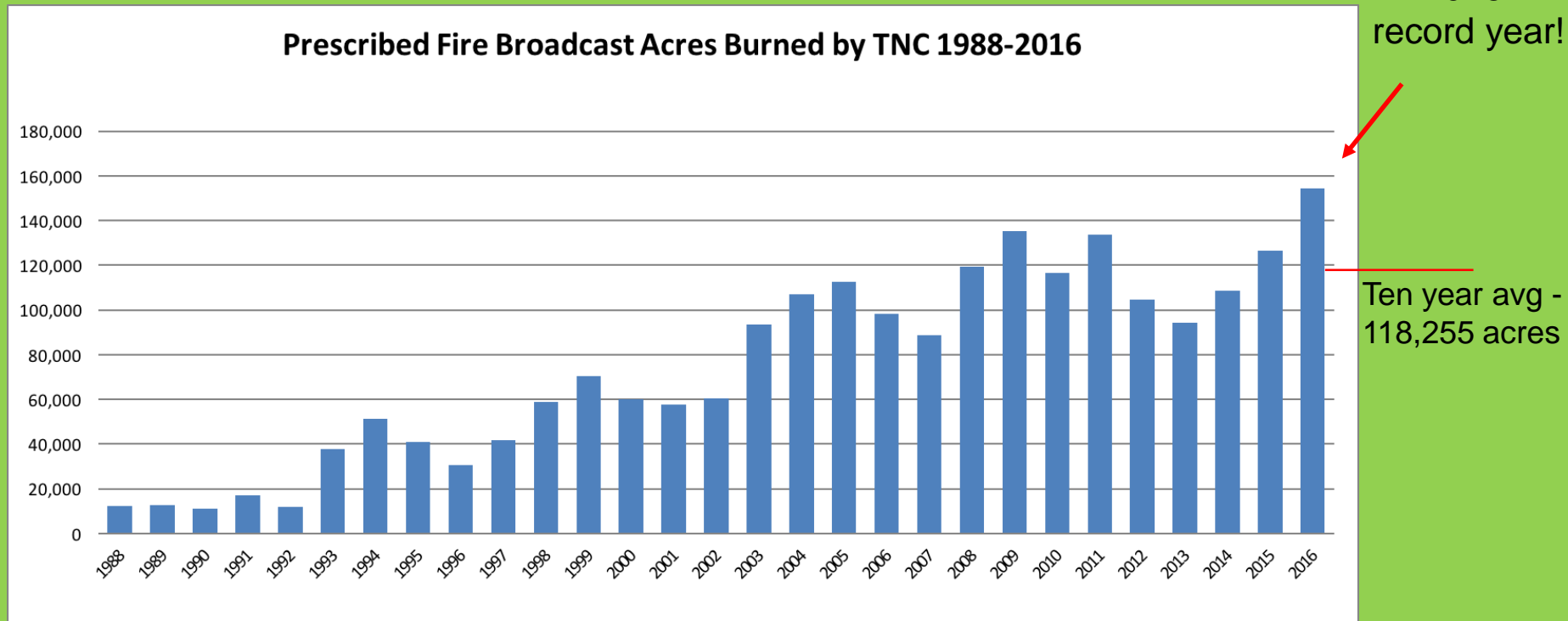
Data: B. Heumann and H. Montanye, Sept. 2016;
Photos: (Heumann) Florida 2016; Texas 2010.



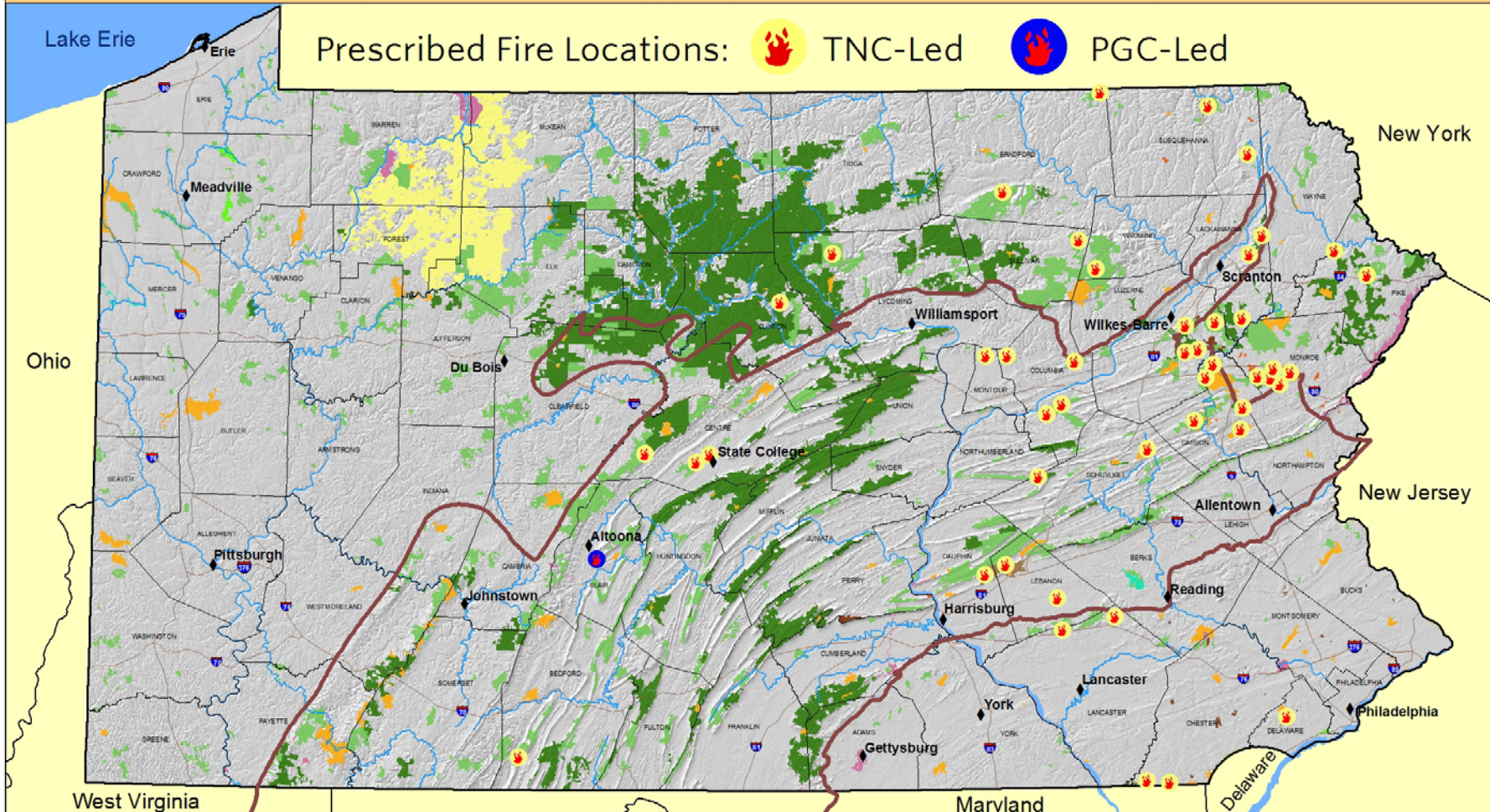
29 years of TNC burn reporting

154,577 total burn acres FY2016

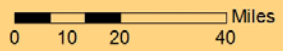
+22% from 2015



Pennsylvania Managed Lands



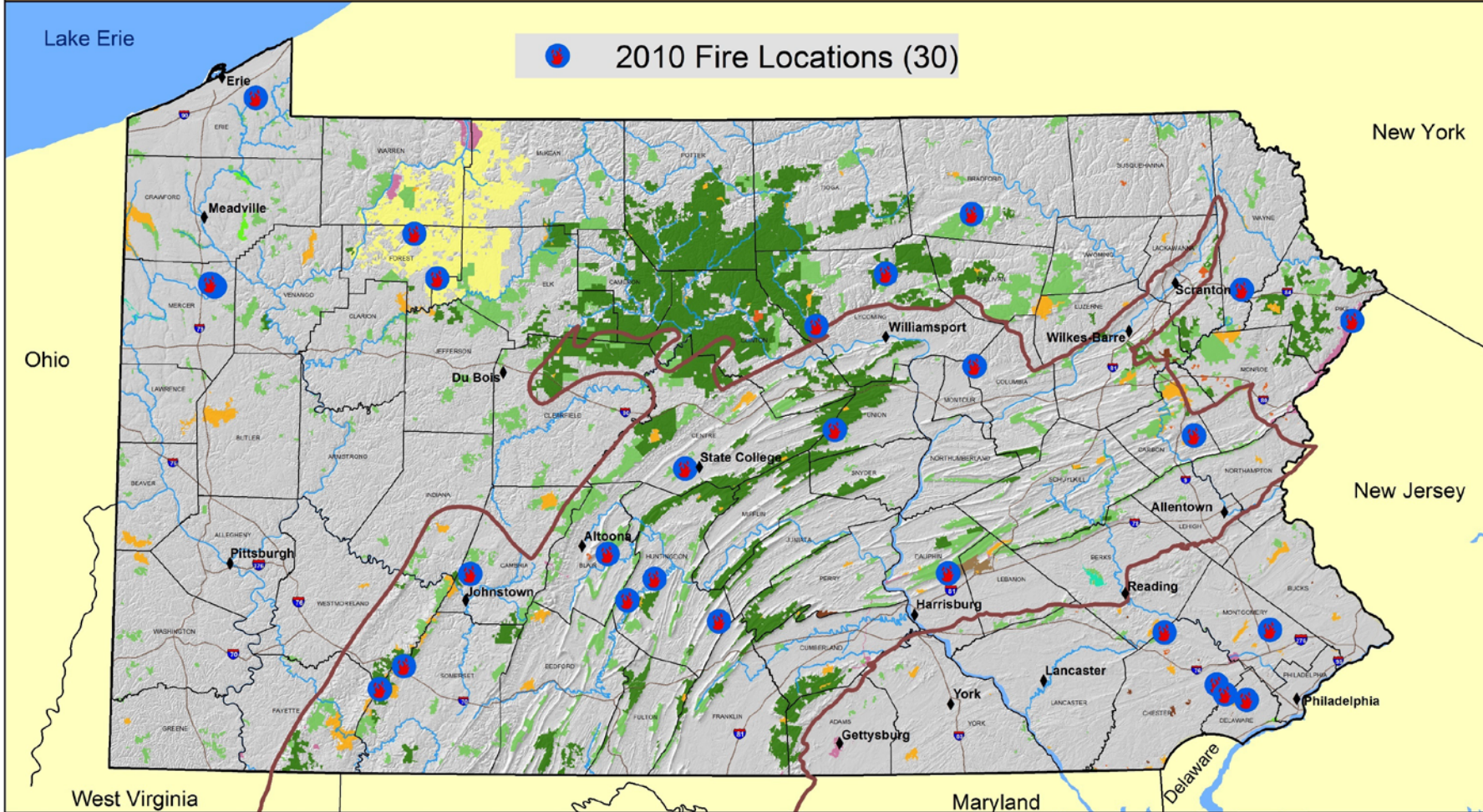
- | | |
|--------------------------|------------------------------|
| PA Bureau of Forestry | U.S. Forest Service |
| PA Game Commission | U.S. Fish & Wildlife Service |
| PA Bureau of State Parks | U.S. Army Corps of Engineers |
| Fort Indiantown Gap | National Park Service |
| Natural Lands Trust * | The Nature Conservancy * |
- * Only lands owned in fee (no easements) are shown.



February 7, 2017



RX Fire Locations (2010)



- | | | | |
|--|--------------------------|--|------------------------------|
| | PA Bureau of Forestry | | U.S. Forest Service |
| | PA Game Commission | | U.S. Fish & Wildlife Service |
| | PA Bureau of State Parks | | U.S. Army Corps of Engineers |
| | Fort Indiantown Gap | | National Park Service |
| | Natural Lands Trust * | | The Nature Conservancy * |

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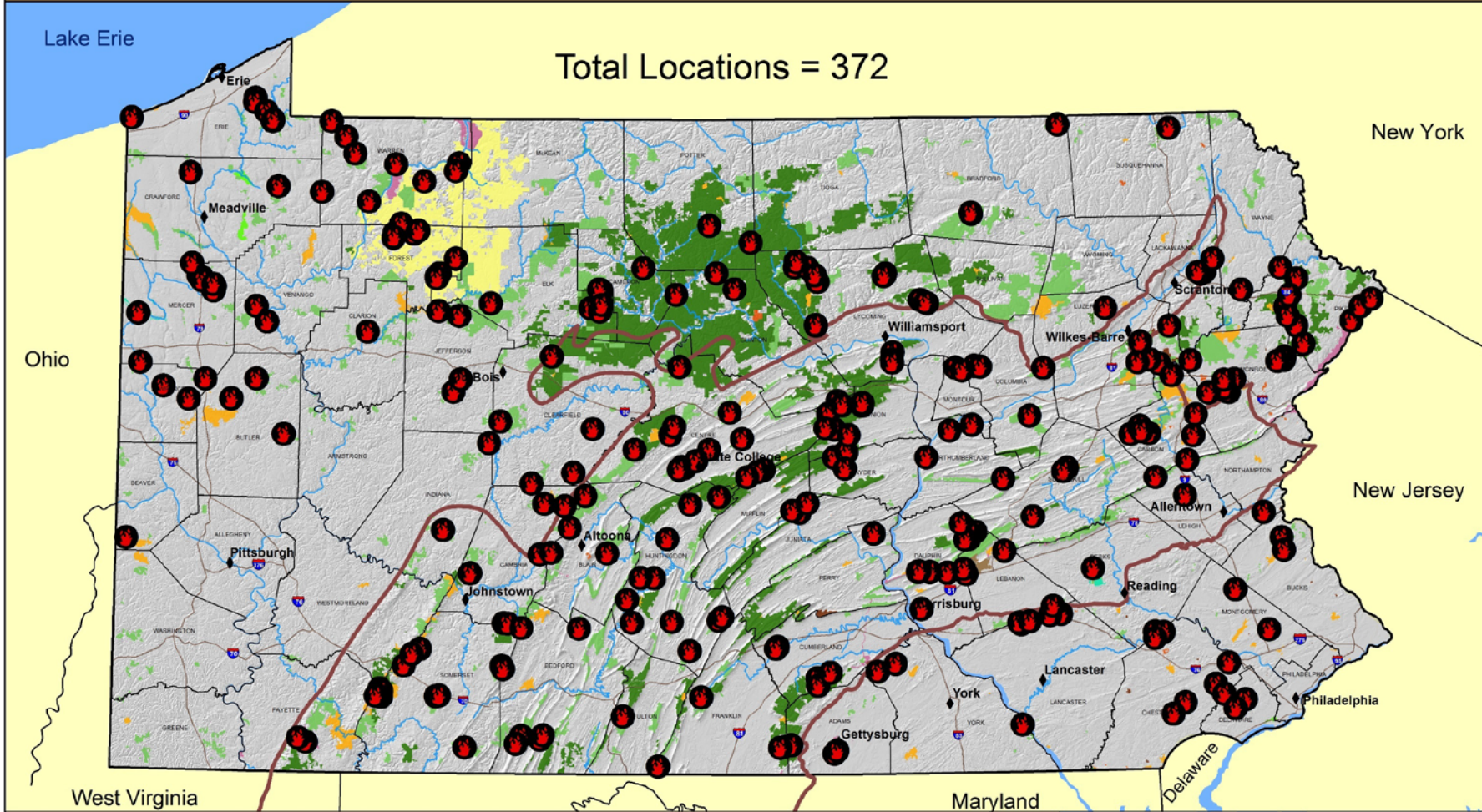
0 10 20 40 Miles



January 29th, 2016



RX Fire Locations (2010-2015)



	PA Bureau of Forestry		U.S. Forest Service
	PA Game Commission		U.S. Fish & Wildlife Service
	PA Bureau of State Parks		U.S. Army Corps of Engineers
	Fort Indiantown Gap		National Park Service
	Natural Lands Trust *		The Nature Conservancy *

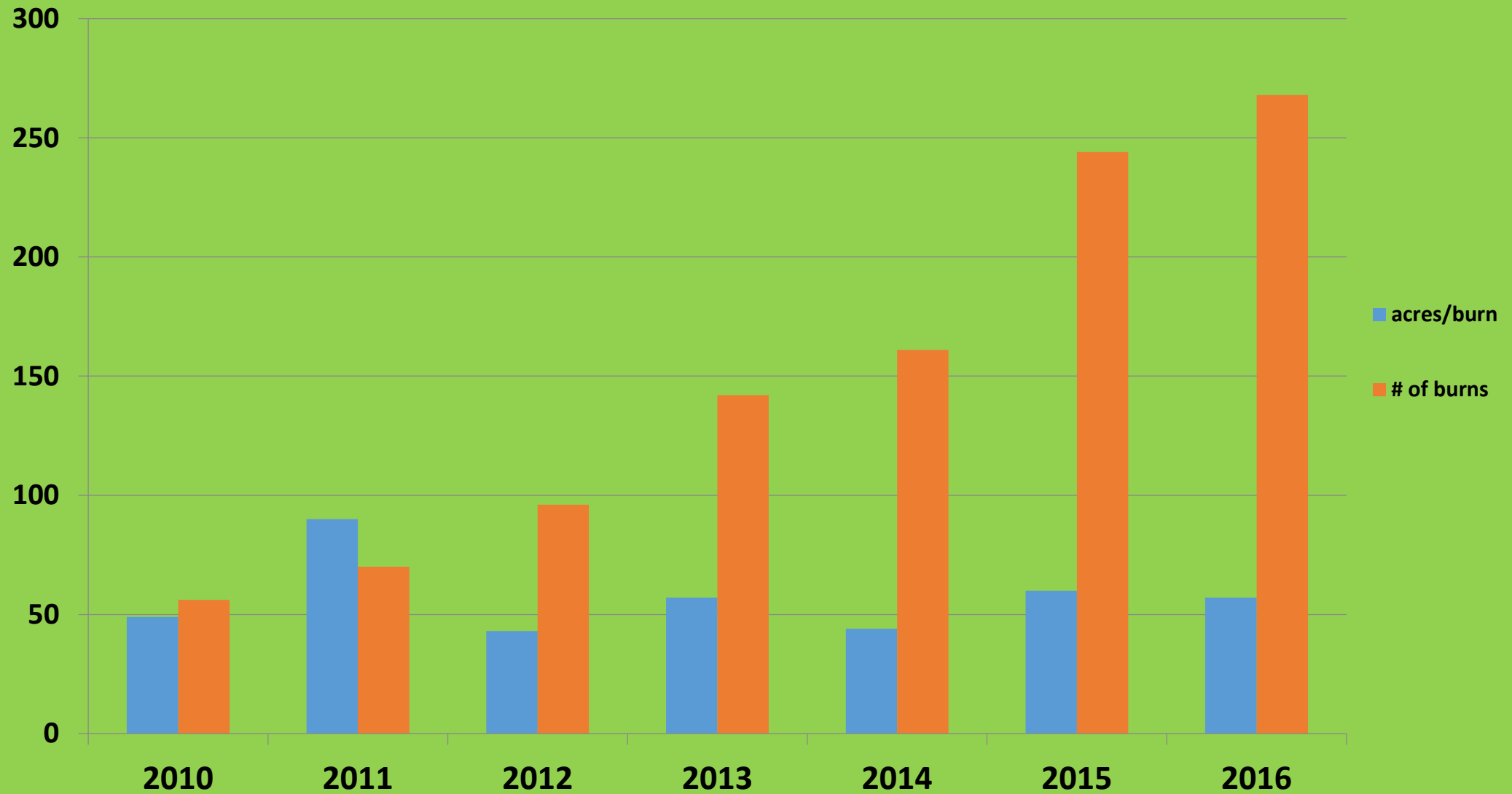
* Only lands owned in fee (no easements) are shown.

0 10 20 40 Miles

January 29th, 2016



Pennsylvania Prescribed Fire Activity (2010-2016)



Why?

- Today's fire problems are so complex that no single person or party can solve them.
- Collaborative is not intuitive.
- "Anthropogenic fire has played a role for millennia in shaping certain ecosystems." – David Van Lear

Fire Learning Network

The U.S. Fire Learning Network (USFLN) is engaging dozens of multi-agency, community-based projects in a process that accelerates the restoration of landscapes that depend on fire to sustain native plants and animals.

Goal

By fostering innovation and transferring lessons learned to other landscape projects, scientists and decision makers, we will accelerate the implementation of ecologically based and culturally acceptable fuels reduction and fire regime restoration strategies at ecologically meaningful scales and in high-priority habitats and landscapes.

FIRE LEARNING NETWORK (FLN)



Central Appalachians FLN



Prescribed Fire Council

Mission Statement :

- **The mission of the Pennsylvania Prescribed Fire Council is to promote the exchange of information, techniques, and experiences of the Pennsylvania prescribed fire community, and to promote public understanding of the importance and benefits of prescribed fire.**

Pennsylvania Prescribed Fire Council

Steering Committee Members:

Association of Consulting Foresters

Forest Stewardship Council

Longwood Gardens

National Wild Turkey Federation

Natural Lands Trust

Natural Resources Conservation Service

PA DCNR Bureau of Forestry

PA DCNR State Parks

PA Department of Environmental
Protection

PA Department of Military and Veterans' Affairs

PA Forestry Association

PA Game Commission

Penn State Department of Ecosystem
Science and Management

Pheasants Forever

Quality Deer Management Association

Society of American Foresters

The Nature Conservancy

United States Fish and Wildlife Service

United States Forest Service

United States National Park Service

Western Pennsylvania Conservancy

Benefits of Prescribed Fire

- Fuel Reduction
- Restore or Maintain Rare Vegetation Communities
- Re-invigorating warm season grass communities
- Rare Species
- Maintain Forest Health
 - Resilience/Diversity
 - Oak Regeneration
- Invasive Species
- Cost Effective
- Restore Disturbance
- Grazing Improvements
- Seeding and Planting Prep

Why?:

- Pennsylvania: fire dependent ecosystems
- Ecological management: habitat restoration and maintenance
- PA State Wildlife Action Plan - PGC
 - Mandates the use of fire for habitat maintenance



Why?

Major Threats to Fire Dependent Barrens:

- **Altered Fire Regime**
- **Connectivity**
- **Development – houses, utilities, wind-farms, roads**
- **Minimum core and buffer habitat**



Why?: Ecological Management in Barrens

- Sustain a variety of seral stages and forest strata
- Maintain mid-seral barrens habitat by lowering the height of shrubs and reducing tree saplings
- Invigorate barrens plant species by cycling nutrients into the soil and promoting new growth and fruiting
- Species dependent on early successional habitat
- Preserve canopy openings
- Promote regeneration of pitch pine and oaks



U.S. Forest Service
Southern Research
Station, Supervisory
Research Ecologist, Jim
Guldin, Hot Springs,
Arkansas

Source: Oak Woodlands and
Forests Fire Consortium,
Newsletter

January 2017, Vol. 6, Issue 1



- Interviewer: In your opinion what is the greatest advantage to using prescribed fire when managing oak woodland and forests?
- JG: The ecological effects that resource managers can achieve using prescribed fire cannot be attained with any other silvicultural tactic. Fire is a magical tool in the toolbox of the silviculturist.

Field Tour (March 8th)

Fire in Oak Forests

-a decade ago, fire was introduced to the Hitz Rhodehamel Woods Nature Preserve, managed by the Nature Conservancy. At the time, the shade tolerant mid-story was thinned, the canopy opened, and invasive species controlled. Come see how this work has restored a dry-mesic oak woodland, improved habitat for wildlife, stimulated the forest understory, and impacted timber values.



Upcoming NAFSE Events:

Field Trip:

Keep the Pine in the Pine Barrens

May 3-4, 2017

Brookhaven National Laboratory, Upton, New York

Workshop:

Fire and Fuels Monitoring

June 6-8, 2017

Albany Pine Bush Preserve, Albany, New York

