

Nachusa Grasslands Prescribed Fire Crew Summary Report

For fires completed from Fall 2013 through Spring 2014

By Bill Kleiman, The Nature Conservancy

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Please share this with your colleagues.

Take a few minutes to envision our fire season, look at the data, the maps, photos, and consider our lessons learned.

Building a fire culture. Until our modern era, prescribed fire in our prairie, wetland and woodlands has occurred frequently throughout the millennia. These habitats need fire every two to three years, or about 30 to 60% of the acreage burned annually. To be able to pull this off year after year you need good fire breaks, good equipment, and willing and able people.

This was a great year to show off the fire work in the Middle Rock River Valley:

Byron Forest Preserve. Burned 700 acres of 1,600 or 43% burned this year. Fire leader is Russ Brunner, with Katie Sullivan and Austin Webb (all three are Nachusa alumni).

DNR Green River Conservation Area. Burned 235 acres of 2,300 acres or 10% this year. Fire leader is Frank Ostling, DNR Wildlife Division.

DNR Franklin Creek Natural Area. Burned 286 of 742 available acres or 39%. Fire done by Nachusa fire crew with DNR Curt Brauhn as fire leader.

DNR Castle Rock State Park. Burned 724 acres of 1,800 acres or 40%. Fire leader is Brad Semel, DNR Heritage, with solid support from John Nelson of INPC, and Dave Griffith, DNR District Forester.

DNR Lowden Miller State Forest. Burned 187 acres of 2,291 or 8%. Fire leaders again are Brad Semel, John Nelson and Dave Griffith.

Rock River Prescribed Fire Crew. Fire leader is Damian Considine. This volunteer crew burned four sites on their own and assisted DNR on two fires. They have training and fire equipment.



Brad Semel of DNR and John Nelson of IL Nature Preserve Commission were the driving force behind big fires in our valley.



Gwen Deters and Susan Kleiman at the Tellabs fire.

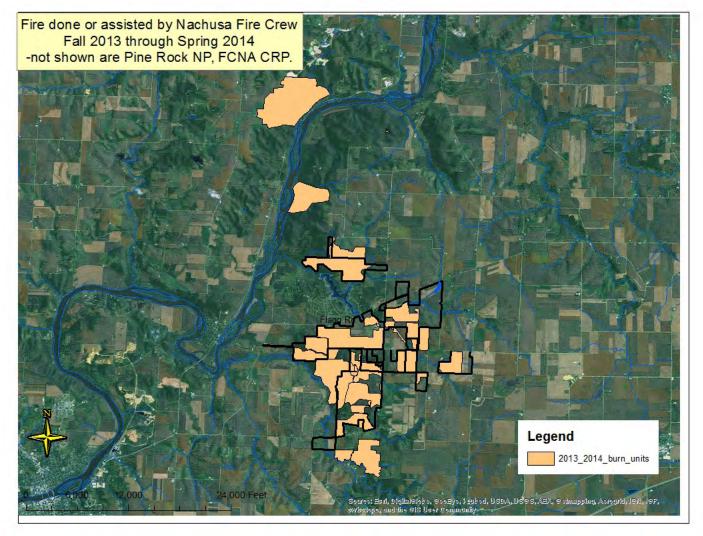
grow in such shade. Fourteen years of fire yields this open savanna.

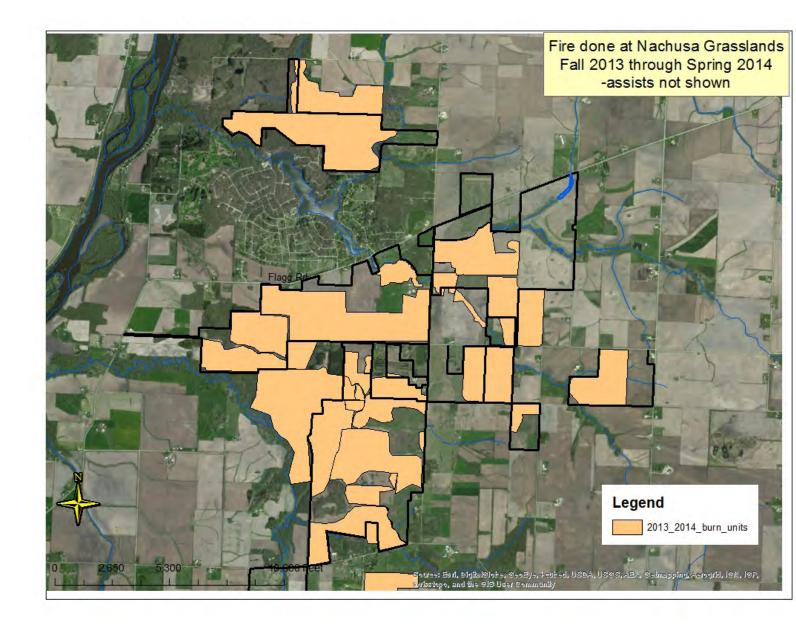
What no fire yields: An old open grown white oak buried in shade- tolerant brush and trees. The next generation of oak can't

The Nachusa team burned 2,083 acres, and if you add assists we made on conservation partner lands we get up 3,824 acres. It was a long winter and cold spring. We burned two days in November, four days in March, and seven days in April. That is thirteen burn days. The fire season may last for weeks but the available days are few. Seize them all.



Mike Carr, Bernie Buchholz, and David Crites at Holland East Savanna Fire.





Fire done fall 2013 through spring 2014

Unit Name	Acres	Date	Temp high	Humidity Iow	Wind high	Crew size	Comment
HLP and Holland	268	11/3/2013	44	53	7 WNW	11	Circled unit but had to reburn in spring
CCK Gobbler	63	11/3/2013	44	53	7 WNW	11	Circled unit but had to reburn in spring
Carpenter	25	11/15/2013	55	52	8 S	7	
Main north	111	3/21/2014	59	44	14 S	17	4 FPCC, 4 UW, 1 trainee
Stonebarn Farm	114	3/22/2014	37	67	15 NNW	13	
Clear Creek S Hotchkiss E	135	3/22/2014	37	67	15 NNW	13	
Main center	178	3/26/2014	37	51	15 S	9	
Sand Farm CCK middle	256	3/26/2014	37	51	15 S	12	

D D planting	35	3/29/2014	44	34	11 NE	18	2 trainees
Dot's Knob	5	3/29/2014	44	34	11 NE	18	2 trainees
E Heinkel							
planting	35	3/29/2014	44	34	11 NE	16	1 trainees
Holland NW	50	3/29/2014	44	34	11 NE	10	
Orland	168	3/30/2014	59	37	15 S	11	
Naylor Rd planting EH	70		50		45.0		
woods	76	3/30/2014	59	37	15 S	9	
Holland E reburn	106	4/5/2014	52	44	9 w	7	
Big Woods	100	4/5/2014	52	44	9 W	8	
Tellabs	234	4/6/2014	52	52	12 S	11	
Orland center &	204	4/0/2014	51	52	12.5	11	
west	131	4/6/2014	51	52	12 S	15	2 trainees
DNR FCNA E		1,0,2011	0.				2 4641000
of Twist	229	4/9/2014	63	24	15 W	9	
DNR FCNA W							
of Twist	53	4/9/2014	63	24	15 W	9	
							One ignition crew as
Holland E							perimeter lines mostly
Savanna	32	4/10/2014	63	38	15 NW	4	black
							One ignition crew as perimeter lines mostly
Fellows tract	126	4/10/2014	63	38	15 NW	4	black
	.20	1/10/2011					One ignition crew as
CCK Gobbler							perimeter lines mostly
reburn	55	4/10/2014	63	38	15 NW	4	black
Walgreen							
Dahlberg,							
Potowatami	263	4/11/2014	66	19	13 SW	11	
DNR Castle	704	4/44/0044	<u> </u>	10	10 014/		Ma cont 4 w coor
Rock SP	724	4/11/2014	66	19	13 SW	na	We sent 4 w gear
DNR FCNA Friends CRP	4	4/19/2014	68	33	13 SE	8	
Schafer	4	4/19/2014	00		13 SE	0	
Wetlands	40	4/19/2014	68	33	13 SE	8	
DNR LMSF	182	4/23/2014	56	30	11 ESE	10	IBP/Nachusa sent 6
DNR LMSF							
wetlland	5	4/23/2014	56	30	11 ESE	5	Nachusa sent 3
Total acres	3,824						
# fire we	5,027				I		<u> </u>
assisted on							
partner							
lands	8						
Total							
Nachusa							
land	2,083						
T .(.)) %							
Total burn units	29						



Kirk Hallowell on Doug's Knob.



What we learned and relearned:

- **Carpe diem ignis.** "Seize the fire day". You want to have your crews out burning on every day that the weather is safe and the vegetation is ready to burn. This means getting your equipment loaded and functioning before fire season begins. For us this is late October and then we are ready to go again March 1. Communicate up your chain of command the mportance of having few meetings, events, programs, and other work due during fire season. Make fire your most important stewardship.
- **Empower volunteers.** Our fire crews are primarily volunteers. They are treated as colleagues with the raining and tools to get the job done. A special call out to Dave Crites, John Heneghan, and Mike Carr who again prepared and maintained our fire equipment. Also to the folks who came out for lots of fires.
- Mentor others. Established fire crews need to reach out to other agencies, non-profits, and private landowners and actively mentor folks towards getting fire on their ground. We have had a number of successes in this regard.
- Help build a fire culture. Recognize others that are doing fire. Attend the annual fire symposium hosted by the IL Prscribed Fire Council. Host tours of your burned unit in May when they are looking nice, the birds are back, and people want to be outside. Get to know the other fire teams in your area, your local fire department, county police dispatch, local politicians. Work with local media to promote good fire.
- Rock River Prescribed Fire Crew. This fire crew did well this spring with Damian Considine as its cooridinator, and Greg Hunter being active. They burned several units that added up to about 1,000-acres. The Rock River Fire Crew is comprised of volunteers from the region working to help landowners and agencies get fires done. They have their own safety gear and fire equipment. <u>Rock River Prescribed Fire Crew</u>

- **Build in redundancy.** Have more people than the minimum of crew. Have a water tender to fill up pumps quickly. We have a plethora of water sprayers, we call pumpers, that we have gathered over the years. If you have a truck or utility vehicle sitting empty you might put in the bed a water sprayer <u>water sprayer Minn</u> <u>Wanner</u>, or a simple pillow tank <u>pillow tank by Scotty</u>
- Use a low volume, but high pressure pump. We use piston or diaphram pumps that produce high pressure (300 to 400 psi) and use only 10 gallons per minute. This produces an efficient sprayer for Midwest fuels. Centrifugal pumps used by wildfire crews put out too much water at too low a pressure to be useful for prescribed fire. We use the Minnesota Wanner piston pump <u>piston pump</u> or the Hypro D30 diaphram pump (which is a piston with a rubber diaphram) hypro pump.



This dead and burning "snag" we felled with a chainsaw and two spotters to help the sawyer not be widowed.

Fire and grasslands go together. Here a storm front passes over prairie plantings bursting with pale purple coneflower. No fire, no prairie.





Anthony Merisko and Stuart Goldman from TNC's Indian Boundary Prairie with John Heneghan at the DNR fire at Lowden Miller State Forest.

Nachusa Grasslands Crew who participated in Fall 2013 to Spring 2014 Let me know if I missed you.

Eirct nomo	Last Nama	<u># of</u> fires	Commonto
First name	Last Name	1	<u>Comments</u>
Ben	Adams	-	trainee
Mike	Adolph	1	scout
John	Ayres	4	
Mary	Anicich	1	TNC at IBP
Eric	Bird	1	TNC at IBP
Bill	Bowes	3	Castle Rock fire
Curt	Brauhn	2	FCNA
Gerard	Breen	1	trainee
Bernie	Buchholz	15	
John	Cain	3	trainee
Mike	Carr	14	Crew boss
Damian	Considine	1	and several Rock River Fire Crew fires
Josh	Clark	4	
Cody	Considine	17	
Dave	Crites	24	Crew boss
Casey	Crooks	1	UW Stephens Point
Gwen	Deters	12	
Ron	Deters	6	
Chantalle	Edmunds	2	
Stuart	Goldman	2	TNC at IBP
Kirk	Hallowell	10	
Becky	Hartman	11	
Hank	Hartman	13	
Kevin	Helenthal	1	trainee
Wes	Herwig	2	
John	Heneghan	25	Crew boss
Mark	Jordan	3	
Kevin	Kaltenbach	2	
Susan	Kleiman	13	
Bill	Kleiman	30	career 299 times burn boss
Lisa	Lanz	2	trainee
Dave	Lawson	2	
Mark	Liechty	5	
Bruce	Marlin	1	trainee
Dale	Maxon	2	TNC Iowa
John	McCabe	1	FPCC
Patrick	McNaughton	1	UW Stephens Point
Elliot	Medina	1	FPCC
Anthony	Merisko	1	TNC at IBP
Al	Meier	6	
Zach	Richards	1	UW Stephens Point
Jess	Richert	3	trainee
Gilbert	Rosario	2	FPCC
Steve	Ruby	2	
Mike	Saxton	2	
Matt	Skolfand	2	FPCC
Steve	Sentoff	3	
Sleve	Senion	3	

Susan	Stillinger	3	Trainee
Brian	Towey	2	Richardson Wildlife Found.
Jim	Vieregg	6	
Mary	Vieregg	11	Crew boss
Andrew	Westin	1	UW Stephens Point
John	Yapelli	1	FPCC
TOTAL			
CREW		53	

Want to see a handful more pictures with captions of the fire season?:

https://picasaweb.google.com/101552696223379880181/NachusaFireSeasonFall2013ThroughSpring2014?authuser=0 &authkey=Gv1sRgCKzqqOfW0tnWNQ&feat=directlink



Dot's Knob fire. We are burning half of a high quality remnant prairie for insect conservation (in case the fire were to burn up insect eggs or dormant rare insects in the vegetation).

Here on the headfire a wetline was first sprayed on the dry grass (that vehicle is already driven past me), then the prairie is ignited from the edge of that wetline. The wind carries the fire away from the line and after the heat goes away the backfire is sprayed out. In the far background is another prairie knob that was half burned for insect conservation.

The End. Thank you for reading our report. Feel free to share with others.