

U.S. Geological Survey and Michigan State University Questionnaire to Land Managers for the Efficacy of Oak Sav

Dear property manager/partner, thank you for agreeing to provide management data for the sites that you manage. The energy you have already offered to assist our efforts to better understand oak savanna restoration in the upper Midwest. From the field data we collected, we would like to assemble information on the management history of each site we sampled to make exact inferences on the effects of management, and compare the importance of management to pre-management conditions. This will allow us to examine the relationships among oak savanna vegetation condition (composition, richness, diversity, etc.) and management actions such as burning, thinning, seeding or other management actions. We have employed dropdown menus for the data entry spreadsheet to make your task as easy as possible. Thanks.

Office of Management and Budget (OMB) number: **TBD**

Geographic scope of study: northeast Illinois, northwest Indiana, lower Michigan, northwest Ohio and southeast W

Three tabs: there are three tabs. The first is the "Data Entry Form" where you will enter your data. The second contains the data and the third tab lists the menus that populate the dropdown windows in the data entry form. You should not need to change the

Data entry: Go to the tab labeled "Data Entry Form" that has a combination of drop-down menus and manual data entry. Each "management event" separately for each site we sampled, that is one event per line. *First*, select a site from the dropdown menu. A triangle that appears at the lower right of the cell - we have provided you with a map indicating where each site is located. If you are not sure. *Second*, indicate the management event you are reporting. We are interested in two categories: 1) The occurrence of specific management events that may encourage restoration - Fire - Prescribed and Wildfire, Thinning, Seed Addition and 2) The data of cessation of intensive management events: Tillage and Grazing. Therefore, if a site was sampled in 1980 and had seed added 1 time, and has both a known tillage and grazing history, that site would have 8 lines of data. *Third*, if you know the date, you know. Fourth, if you only know the year, then please provide the Season that management occurred, if you know the date. In your own words any additional info you wish to share about the types of management specifically and any other random thoughts you think might be relevant or useful. If the date or year is approximate, please clarify that in the "management event" column. The tab labeled "Example Data" that gives an indication of what kinds of info should go in each column. Finally, we would like to know your (or your organization's) available institutional knowledge of management goes at your site(s). For example, if you have detailed records back to 1980, and no records before that - we would love to know. We may follow up with a phone call to clarify those kinds of things. The questions are summarized below.

Thank you: Eric Behrens, Dr. Tyler Bassett, Dr. Lars Brudvig, Dr. Noel Pavlovic and Dr. Ralph Grundel

If you have questions contact Eric Behrens at eric.g.behrens@gmail.com, (712)330-7189

The questions are:

Question 1: Site - the name of the site is selected, needed to relate site management information to vegetation data

Question 2: Type of management - options include, these items tell us about the management. that has occurred at each site. We want to understand how management has influenced the ground layer vegetation. Each management event will be a separate line of data.

Fire - Prescribed (list date it occurred)

Fire - Wildfire (list date it occurred)

Thinning - Canopy (list date it occurred)

Thinning - Shrub (list date it occurred)

Seed addition (list date it occurred)

Tillage (list date it stopped)

Grazing (list date it stopped)

Question 3: Year, the year that the selected management type occurred. If known. Without this information we cannot examine variables such as fire return interval.

Question 4: Month, the month the selected management occurred if known.

Question 5: Day, the day of the month when the selected management occurred, if known.

Question 6: Season – season of the treatment, if known. If the month and day are not known but the manager can tell us, we can examine the seasonality of treatment on groundlayer vegetation condition.

Question 7: Describing anything specific about the management: opportunity for manager to provide additional information about the event such as partial burn or high intensity burn

Question 8: Additional notes, any other notes that the manager wants to add.

Site	<u>DROPDOWN MENUS</u> Type of Management Year Month Day	Season
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MANUAL DATA ENTRY

Describing anything specific about the management

Additional notes

Site	DROPDOWN MENUS				(Blank)	Season
	Type of Management	Year	Month	Day		
SWMLC - Chipman East Woods Burn Only	Fire (Date it occurred)	2007	4	3		
SWMLC - Myers	Thinning - Canopy (Date it occurred)	2006				
SWMLC - Myers	Thinning - Shrub (Date it occurred)	2009	9			
Other	Seed addition (Date it occurred)	2007				Fall
Other	*Tillage (Date it stopped)	1947				
Other	*Grazing (Date it stopped)	1986				
Other	Fire (list date it occurred)	1965				

MANUAL DATA ENTRY

Management Notes

Timber cut - shelterwood, targeted ___ size class

Loppers and herbicide

I will email species list separately

Either occurred in 1964 or 1965

Other Notes

Site never productive

This was a wildfire set by sparks from the Such-and-such train line

Site	Type of Event
ASGA - 126th Ave. Barrens	Fire - Prescribed (list date it occurred)
ASGA - 126th Ave. Control	Fire - Wildfire (list date it occurred)
ASGA - 126th Ave. Timber Cut	Thinning - Canopy (list date it occurred)
ASGA - 46th Ave	Thinning - Shrub (list date it occurred)
ASGA - 48th Ave.	Seed addition (list date it occurred)
Dunes State Park - Control	Tillage (list date it stopped)
Dunes State Park - Burn	Grazing (list date it stopped)
Dunes State Park - Burn-Thin	
FCTC - Area 7 SE "mound"	
FCTC - Hart's Lake West Woods	
Indiana Nature Preserves McCloskey Burr Oak Savanna	
Shirley Heinze Land Trust Bur Oak Woods Burn-Thin	
Save The Dunes Peddicord Property South Control	
Indiana Dunes - Calumet Burn Only	
Indiana Dunes - Calumet Control	
Indiana Dunes - Calumet Thin Only	
Indiana Dunes - Hobart Prairie Grove Burn Only	
Indiana Dunes - Howe's Prairie Burn Only	
Indiana Dunes - Howe's Prairie Burn-Thin	
Indiana Dunes - Howe's Prairie Control	
Indiana Dunes - Inland Marsh Control	
Indiana Dunes - Inland Marsh Burn-Thin	
Indiana Dunes - Inland Marsh Burn	
Indiana Dunes - Miller Woods Control	
Indiana Dunes - Miller Woods Burn-Thin	
Indiana Dunes - Miller Marguette Burn	
Iron Creek - Andy's Hill	
Iron Creek - Coyote Hill	
Iron Creek - Krause Control	
Iron Creek - Sybil 001 Burn-Thin	
Kalamazoo - KVCC Control	
Kitty Todd - Islands Control	
Kitty Todd - Karner Burn-Thin	
Kitty Todd - Schafer Burn Only	
Kitty Todd - Schafer Burn-Thin	
Kitty Todd - Schwamberger Burn-Thin	
LCWM - B.D. White Burn-Thin	
LCWM - B.D. White Control	
Lowell - Huck Hills	
MacCready - Plot 1 Burn Only	

MacCready - Plot 2 Burn-Thin
MacCready - Plot UN11 Control
Manistee NF - Hayes Thin Only
Manistee NF - Hayes Burn-Thin
Manistee NF - Hayes Control
Manistee NF - Otto Control
Manistee NF - Otto Roosevelt East
Manistee NF - Otto Roosevelt West
Manistee NF - Pines Point Burn Only
Manistee NF - Pines Point Burn-Thin
Manistee NF - Pines Point Control
Manistee NF - Pines Point Thin Only
OO Metropark - Eber Thin Only
OO Metropark - Old State Line Control
SWMLC - Chipman East Woods Burn Only
SWMLC - Keka
SWMLC - Myers
SWMLC - Portman Mud Lake Hill
SWMLC - Wolf Tree N Kettle Hill
Other

Year	Month	Day	
	2017	1	1
	2016	2	2
	2015	3	3
	2014	4	4
	2013	5	5
	2012	6	6
	2011	7	7
	2010	8	8
	2009	9	9
	2008	10	10
	2007	11	11
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