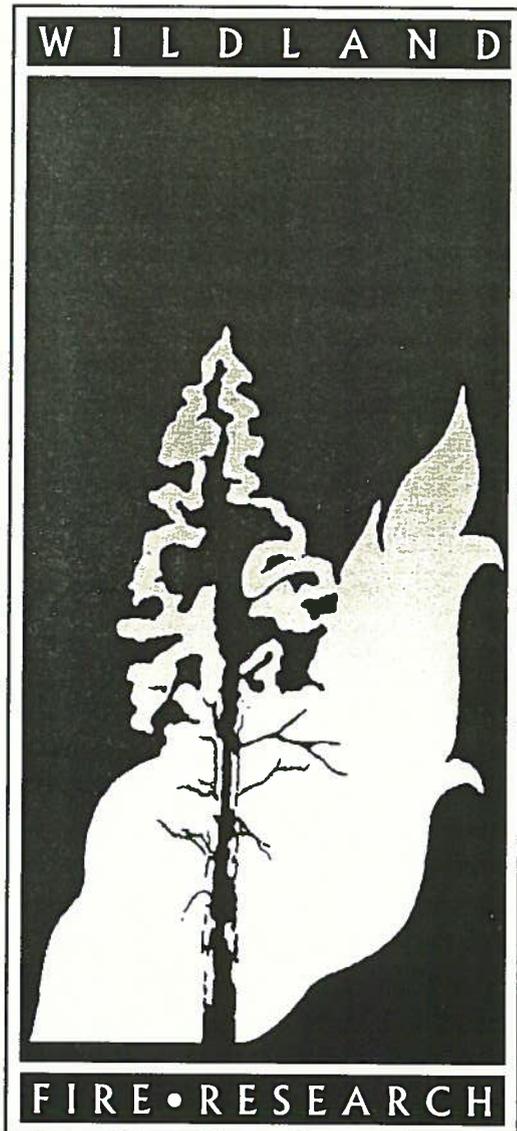


# Fire Conditions in National Forests

A Survey of Citizens in Minnesota,  
Wisconsin, and Michigan



## Summary Frequency Distributions October 2002

Bruce Shindler, Associate Professor  
Kirk Koehler, Research Assistant  
Eric Toman, Research Assistant  
Department of Forest Resources  
Oregon State University

Research conducted for the  
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North Central Research Station

This preliminary report summarizes responses to a mail survey of citizens in communities surrounding National Forests in Minnesota, Wisconsin, and Michigan. Overall, 1125 citizens were contacted and 583 completed the questionnaire for a 52% response rate. This report is a summary of frequency distributions only. Some response categories have been collapsed for presentation purposes (e.g. *strongly agree* and *agree* responses were combined into a single category). A more detailed analysis will be forthcoming in the final project report.

**Please note: Research for this project is still in progress. Do not cite information contained within this report without permission of the authors.**



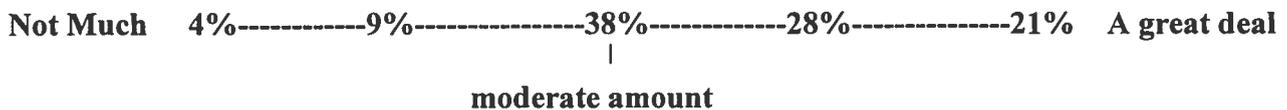
# FIRE CONDITIONS ON PUBLIC FORESTS

## A SURVEY OF CITIZENS IN MICHIGAN, MINNESOTA, AND WISCONSIN

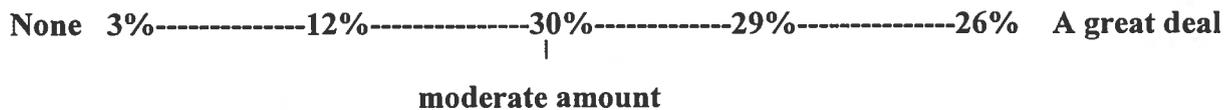
This questionnaire has been developed by researchers at Oregon State University in cooperation with the U.S. Forest Service. It is designed to help forest managers and researchers understand what citizens in Michigan, Minnesota, and Wisconsin think is important for managing public forest lands.

We are particularly interested in your opinion about fire conditions in your area and the practices that resource professionals could use to manage forests. Even if you are unfamiliar with certain items, it is important that you tell us that as well. For each question, please choose the answer that most closely reflects your beliefs. Your answers and comments are strictly confidential.

1. How much attention do you pay to issues or problems on public forests?



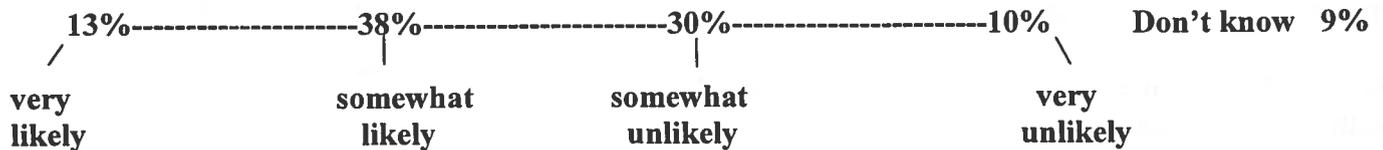
2. Prior to this survey, how much had you thought about wildfires in forests or grasslands?



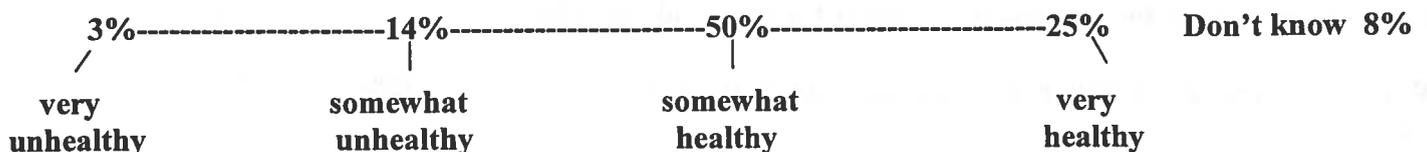
3. About how far is it from your home to a natural area where a wildfire might burn?

- 49% adjacent land
- 11% less than one mile
- 24% 1-5 miles
- 15% more than five miles

4. In your opinion, how would you rate the likelihood that a wildfire could break out in the forests or grasslands near your home in the next five years?



5. In general, how would you rate the overall condition of the public forests in your area?



6. Public trust in natural resource organizations is essential to the success of fire protection programs. Please indicate your level of trust in the following to make good decisions about wildfires and fire prevention. If you have no basis for judgment, please mark "no opinion."

	-----Level of Trust-----		
	Moderate/Full	None/Limited	No Opinion
City government	29%	45%	26%
County government	44%	38%	18%
State Dept. of Natural Resources	68%	23%	9%
Native American tribes	25%	46%	29%
Private timber and paper companies	49%	36%	15%
U.S. Forest Service	72%	19%	9%

7. There has been a good deal of discussion lately about forest management, but some terms used by resource professionals may not be familiar to many people. Please tell us how familiar you are with the following.

	I know the meaning of the term	I've heard the term, but don't know the meaning	I've never heard of the term
a. controlled burn	96%	3%	1%
b. ecosystem management	63%	25%	12%
c. native vegetation	84%	11%	5%
d. threatened & endangered species	94%	5%	1%
e. prescribed fire	62%	25%	13%
f. blowdown	70%	15%	15%
g. pine barrens	39%	28%	33%
h. fuel reduction	65%	21%	14%

8. We're interested in learning more about what citizens think about wildfires. Please respond to each statement to the best of your ability by indicating whether you believe it is **generally true**, **generally false**, or that you are **not sure**.

	Generally True	Generally False	Not Sure
Humans cause most of the wildfires in my state.	68%	16%	16%
Most forest fires in my area occur in the Fall.	13%	59%	28%
Years of fire suppression have increased the risk of severe wildfire in the region's forests.	42%	18%	40%
Fires play an important role in controlling insect and disease outbreaks in forests.	48%	17%	35%
Fires are important for maintaining habitat for deer and game birds.	52%	26%	22%
White pine trees grow better in open, sunny areas than in shaded ones.	45%	12%	43%
Many plants require occasional fires so that new seeds or seedlings can sprout.	73%	12%	15%

**The next few questions ask for your opinions about specific practices resource managers can use to change environmental conditions in public forests. Please read the following paragraphs, then answer the questions below.**

For nearly a century, natural resource managers tried to put out all wildfires. However, scientists have learned in recent years that wildfires are an important part of how nature works. Conditions in many forests now differ from those the pioneers encountered. In some places leaves, dead branches, and other debris have built up over time, creating “fuel” that promotes hotter, larger, and more frequent fires. In many forests, trees are more numerous than before but also smaller, so they are more likely to burn in a fire.

These situations can create greater risk to lives, property, and healthy natural environments. Public resource managers now seek ways to allow fires to burn more naturally and less dangerously in forests. To do this, they want to change the amount and types of plants to create conditions more like the lands encountered by the pioneers. Some practices that can do this are:

●**Prescribed fire** – Also called controlled burning, this practice can involve 1) letting a naturally caused fire burn under close and careful watch; or 2) intentionally setting fires in ways that can be controlled to produce desired conditions.

●**Mechanical vegetation removal** – Managers can use chainsaws, mowers, or other specialized machines to reduce the number of shrubs and small trees where they are so numerous that they increase the risk and size of wildfires.

●**Thinning** – In some high-risk areas with numerous trees, the trees are too big for mowing machines but can be thinned out using chain saws or other harvesting equipment.

9. In my opinion, intentionally setting **PRESCRIBED FIRES** on public forests is:

**38%** a legitimate tool that resource managers should be able to use whenever they see fit.

**44%** something that should be done only infrequently, in carefully selected areas.

**3%** a practice that should not be considered because it creates too many negative impacts.

**3%** an unnecessary practice.

**12%** I know too little to make a judgment about this topic.

10. In my opinion, **MECHANICAL VEGETATION REMOVAL** on public forests is:

**50%** a legitimate tool that resource managers should be able to use whenever they see fit.

**26%** something that should be done only infrequently, in carefully selected areas.

**3%** a practice that should not be considered because it creates too many negative impacts.

**4%** an unnecessary practice.

**17%** I know too little to make a judgment about this topic.

11. In my opinion, **THINNING** trees to reduce fuel on public forests is:

**59%** a legitimate tool that resource managers should be able to use whenever they see fit.

**28%** something that should be done only infrequently, in carefully selected areas.

**1%** a practice that should not be considered because it creates too many negative impacts.

**3%** an unnecessary practice.

**9%** I know too little to make a judgment about this topic.

12. Not everyone agrees about the effectiveness of fuel management practices. We'd like to know what *you* believe about the practices described below. Please circle the number that best reflects your belief about the accuracy of each statement. You are not being judged on right or wrong answers – we are interested in your opinion. If you feel you do not know enough to give an opinion, circle the letters DK for that statement.

	Agree/ Strongly Agree	Disagree/ Strongly Disagree	Don't Know
Prescribed fire has little overall effect on the intensity or frequency of wildfires.	26%	54%	20%
Prescribed fire effectively reduces amounts of fuel in most forests.	75%	10%	15%
Prescribed fire improves habitat for wildlife.	68%	12%	20%
Prescribed fires kill a majority of large trees in a burned area.	18%	58%	24%
Biting insects are less of a problem in areas that are burned frequently.	32%	18%	50%
Prescribed fire causes unacceptable impacts on recreation uses.	17%	60%	23%
Mechanical vegetation removal has little overall effect on the intensity or frequency of wildfires.	18%	55%	27%
Mechanical vegetation removal causes unacceptable impacts on recreation uses.	10%	63%	27%

13. The use of prescribed fire may create concerns for some people. Please tell us how concerned you are about the following possible effects.

	Moderate concern/ Great concern	Not a concern/ Slight concern
a. Risk of fire going out of control	70%	30%
b. Increased soil erosion	48%	52%
c. Loss of wildlife and fish habitat	46%	54%
d. Damage to private property	45%	55%
e. Increased levels of smoke	43%	57%
f. Reduced scenic quality	42%	58%
g. Economic loss of useable timber	41%	59%
h. Deteriorated public water supply	38%	62%
i. Effects on recreation opportunities	35%	65%
j. Lower traffic safety	21%	79%

14. To further help natural resource managers make decisions, please tell us how you feel about the following by circling the number that best matches your agreement with each statement.

	Agree/ Strongly Agree	Uncertain	Disagree/ Strongly Disagree
All fires, regardless of origin, should be put out as soon as possible.	33%	18%	49%
I am not concerned about the threat of wildfire in my area.	26%	14%	60%
Selectively thinning dead and dying trees is better than leaving them in the forest.	72%	13%	15%
In my area, smoke levels from fire are not a problem.	65%	14%	21%
Jack pine has become a fire hazard in local forests.	24%	51%	25%
Much of public forestland is over-crowded with too many trees.	36%	30%	34%
I would support closure of some forest roads if it would reduce the fire danger in my area.	39%	22%	39%
Fire risks are so great in my area that managers need to use any means necessary to reduce them.	14%	29%	57%

15. We'd like to know what you think about the scenic impacts of fuel management practices. Please circle the number that best describes how acceptable you believe the likely impacts are.

	Scenic Impacts		
	Acceptable	Neutral	Unacceptable
Prescribed fire	51%	35%	14%
Mechanical vegetation removal	59%	31%	10%
Thinning	70%	23%	7%

16. Please tell us your opinions about the potential of smoke from prescribed fire?

	Yes	No	Not sure
a. I worry about the effects of smoke on public health.	38%	50%	12%
b. I worry about the effects of smoke on travel safety.	32%	56%	12%
c. I think smoke levels can be managed acceptably.	57%	16%	27%

17. People get information about forests from a variety of places. How helpful have the following sources of information been to you? By helpful, we mean sources that are credible and provide good information.

	No Opinion	Easy to Understand*	Trustworthy*	How helpful is the information to you?*		
				<i>Not</i>	<i>Slightly</i>	<i>Very</i>
newspapers/magazines	13%	92%	68%	7%	60%	33%
TV/radio programs	10%	94%	67%	9%	55%	36%
internet	53%	71%	45%	35%	44%	21%
forest industry groups	31%	71%	57%	21%	47%	32%
environmental groups	28%	49%	22%	45%	42%	13%
university researchers	36%	63%	77%	12%	53%	35%
family and friends	28%	83%	73%	18%	54%	28%
<b>Public forest agencies...</b>						
• public meetings	41%	75%	68%	16%	53%	31%
• interpretive information at visitor centers	36%	90%	87%	9%	53%	38%
• newsletters	43%	86%	73%	13%	57%	30%
• guided field trips to forests	50%	94%	91%	8%	40%	52%
• elementary school programs	50%	91%	81%	15%	48%	37%
• informational brochures	42%	89%	80%	9%	54%	37%
• conversations with agency personnel	46%	83%	78%	11%	39%	50%

\*Percent of respondents who had an opinion about the information source.

18. U.S. Forest Service managers are faced with numerous concerns on National Forest lands. Please tell us how important the following management issues are to you.

	Moderately important/ Very Important	Not important/ Slightly important
1) Maintaining healthy forests	96%	4%
2) Communicating with the public	94%	6%
3) Reducing wildfire risk	87%	13%
4) Managing recreation use	85%	15%
5) Restoring native forest conditions (oak, white pine, etc.)	85%	15%
6) Managing forests for timber harvests	84%	16%
7) Providing adequate habitat for sensitive wildlife species	80%	20%
8) Maintaining road closures	50%	50%

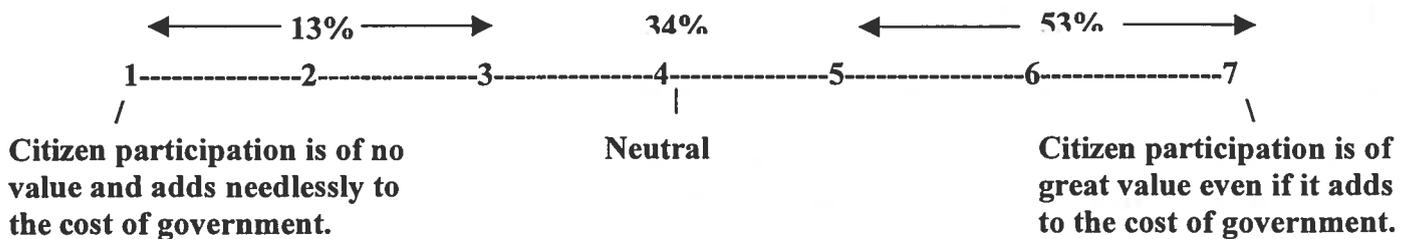
19. Please circle one item from the question above that you feel is the most important concern facing Forest Service managers in your area.

- 40% Maintaining healthy forests
- 18% Managing forests for timber harvests
- 12% Reducing wildfire risk
- 11% Communicating with the public
- 7% Managing recreation use
- 6% Restoring native forest conditions (oak, white pine, etc.)
- 5% Providing adequate habitat for sensitive wildlife species
- 1% Maintaining road closure

20. How much confidence do you have in the Forest Service to use the following practices as part of a responsible and effective fuel management program for your area?

	Moderate/Full	None/Limited	No Opinion
Prescribed fire	56%	33%	11%
Mechanical vegetation removal	61%	25%	14%
Thinning	67%	22%	11%

21. Recently there has been considerable debate over efforts to increase citizen participation in public land management. Where would you place yourself regarding these efforts?



22. In your opinion, how well has the Forest Service incorporated public concerns into its management strategies?

- 6% EXCELLENT, public concerns are always considered.
- 28% GOOD, public concerns are usually considered.
- 32% FAIR, public concerns are sometimes considered.
- 14% POOR, public concerns are rarely or never considered.
- 20% I have no basis for an opinion on this topic.

23. Please give us your opinion about how the Forest Service interacts with communities in your area. If you have no opinion about any item, it's important that you mark the "no basis for opinion" space.

	<b>Agree/ Strongly Agree</b>	<b>Neutral</b>	<b>Disagree/ Strongly Disagree</b>	<b>No Basis for opinion</b>
<b>The Forest Service is open to public input and uses it to shape management decisions.</b>	25%	19%	22%	34%
<b>Forest Service managers usually create plans without input from local communities.</b>	34%	13%	22%	31%
<b>Forest Service managers build trust and cooperation with citizens so that people feel the agency is acting in their best interest.</b>	23%	22%	26%	29%
<b>The Forest Service does a good job of providing information about its management activities.</b>	27%	22%	26%	25%
<b>The Forest Service should provide a stronger leadership role.</b>	46%	21%	8%	25%
<b>Local Forest Service staff are prohibited from doing their job because of national restrictions and regulations.</b>	31%	17%	12%	40%

24. How long have you lived in the community where you now live? **30 years (mean)**

25. How long have you lived in the same state? **48 years (mean)**

26. Which of the following best describes the community where you live?

2% urban area                      41% small town  
2% suburban area                55% rural area

27. Are you?                      76% male    24% female

28. What is your age?            58 years (mean)

29. What is the highest level of education you have completed?

11% some high school            12% bachelor's degree  
30% high school graduate        7% some graduate school  
30% some college                10% completed graduate degree

30. Do you, or does anyone in your household, suffer from a respiratory ailment?

27% Yes                      73% No