

# Lake States Fire Science Consortium

<http://lakestatesfiresci.net>

A JFSP KNOWLEDGE EXCHANGE CONSORTIUM



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Volume 2 Issue 3

## OUR MISSION

*Accelerate the awareness, understanding, and adoption of wildland fire science information by federal, tribal, state, local, and private stakeholders in Michigan, Minnesota, and Wisconsin*

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## NETWORKING WILDLAND MANAGERS IN THE LAKE STATES

**Efforts Old and New are  
Discussing Issues and  
Coordinating Efforts to  
Manage Wildlands**



The consortium was privileged to be invited to this year's winter meeting of the Kirtland's Warbler Recovery Team, held poetically at Kirtland Community College, March 8 and 9. The picture here may not fully capture the energy of this partnership, but many folks traveled long distances with a wintery weather forecast to be there.

Reports included research finding and progress reports, research, monitoring, and management needs, and outreach activities. Among those discussions, one of the take home messages was adapting to changes brought about by success in their efforts. With population estimates meeting recovery targets, changes are in store and plans for the future are needed.

Interestingly, this success story does not end. They've been at it since the 80's. And the need for active management of these Jack Pine plains, at least 4000 acres per year, will need to continue.

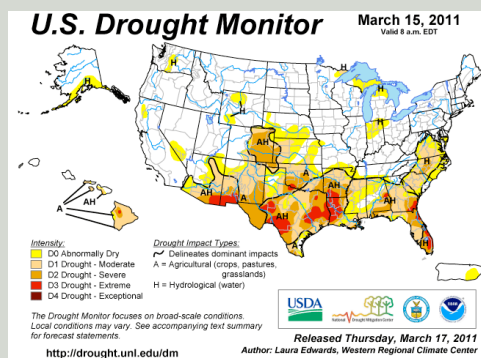
Like other partnerships; such as the Minnesota Incident Command System (MNICS), and the Michigan Climate Coalition (MCC) to name a few; this group demonstrates that networks of the willing can and do work.

As the consortium grows and new partnerships form, keep this recipe for success in mind. First, make sure you share a **challenging issue**. Insure that you can rally around a **shared vision**. Finally, focus on the **skill, method, and technique needs** you share.

# Beyond the Forecast: Using Climatology

Do you have a prescribed burn that you haven't been able to start because the winds are never in prescription? Would you like to know how dry it was when a fire burned last year? Do you need to know what conditions are possible several weeks into the future? Consider the local climatology.

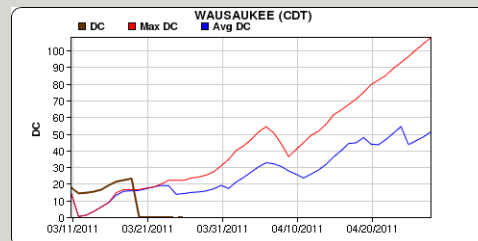
Climatology is the study of weather history; using that history to suggest the state of current conditions, the range of possibilities into the future, and the expected trends beyond the forecast period.



This map of drought conditions is an excellent example of how weather history can be used as a reference for current conditions. Other common

examples include a comparison that takes the difference between current snowfall and the historic average or dividing a current total rainfall by a historic average to get a percentage difference.

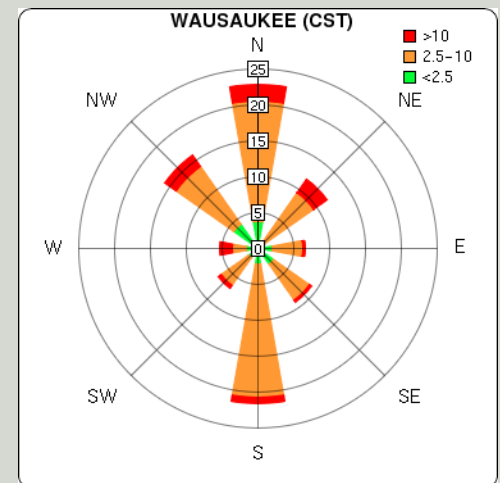
It may be just as important to consider how conditions may change over time, even beyond a typical several day forecast.



The graph above depicts the historic Maximum (red) and Average (blue) trend lines for Drought Code over a 2 month period. The current trend (brown) is overlaid. This can show not only how current conditions compare to the climatology, but suggest what are likely trends well into the future. Combining this kind of analysis with 30 and 90 day outlooks, for example, can

provide important guidance for strategic decisions.

The third example here, a “wind rose”, says nothing about current conditions. Rather, it is used to represent the range of possibilities based on the historic record.



In this instance, the wind history suggests that winds from the North and South are much more likely than winds from the East or West.

Will climate change render climatology irrelevant? How will you consider the possibility of new records? These are issues you will hear more about.

## Member Spotlight



## Jessica Miesel, Post-Doctoral Researcher

Jessica ([miesel.1@osu.edu](mailto:miesel.1@osu.edu)) is an ecosystem ecologist and has recently joined the LSFSC as a post-doctoral researcher to identify knowledge gaps in fire science information in the Lake States region. Her research focuses on fire effects on soil processes.

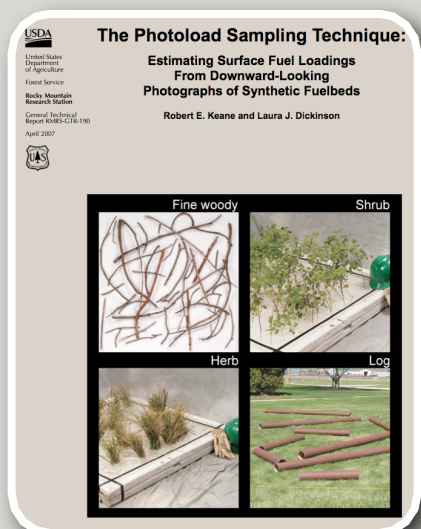


# FLASH

SCIENCE YOU CAN USE

## PUBLICATION SUMMARIES

### The Photoload Sampling Technique; RMRS-GTR-190



This report presents a new fuel sampling method to quickly and accurately estimate loadings for six common surface fuel components (1 hr, 10 hr, 100 hr, and 1000 hr downed dead woody, shrub, and herbaceous fuels). This technique involves visually comparing fuel conditions in the field with photoload sequences to estimate fuel loadings. Photoload sequences are a series of downward-looking and close-up oblique photographs depicting a sequence of graduated fuel loadings of synthetic fuelbeds for each of the six fuel components.

### Fire in Natural Areas Compendium CD

Fire Ecology - Fire Management  
Prescribed Burn Practitioners  
Working to Enhance Natural  
Communities



The articles included in this Fire Compendium were originally published in the Natural Areas Journal and represent some of the most important research and practical information available on the subject.

The Compendium CD is available for \$30 (\$20 for Natural Area Association members)

## OTHER REFERENCES

- [Atlas of Great Lakes Indian History](#)
- [American Indian Use of Fire in Ecosystems Bibliography](#)

## CONSORTIA CORNER

### LAKE STATES ANNOUNCEMENTS

- [Intro to Prescribed Burning, Aldo Leopold Foundation, March 24-25 or Mar 31-Apr 1, Baraboo, WI.](#)
- **Lake States Fuel Moisture Sampling Working Group web meeting April 1st.**
- **Wildland Fire Decision Support Sys (WFDSS) Fire Behavior Tools Workshop April 5-6.**
- [Michigan \(MiBCI\) Bird Conservation Initiative Joint Ornithological Congress, April 6-9, Petoskey, MI.](#)
- [Fire in Eastern Oak Forests, May 17-19, Springfield, MO](#)

# Webinar Schedule



The Lake States Fire Science Consortium Webinar Series will pause after the April webinar on burn severity monitoring. Expect us to begin again in the fall with regular offerings, and call on us at any time if you have a special need during the year.

Look for links to our recorded webinars elsewhere on this page.

## WEBINAR REFERENCES

- Fire & Birds & Plants in Northern Sedge Meadows, December 16th, 2010
  - [Background](#), [Webinar](#)
- Ecological Forestry: A Red Pine Case Study, January 28th, 2011
  - [Background](#), [Powerpoint](#)
- Fire & Mercury Contamination in Soil and Water, February 17th, 2011
  - [Background](#), [Webinar](#)
- Web-based Fire Wx for the Lake States, March 17, 2011
  - [Reference](#), [Webinar](#)
- Monitoring Burn Severity, April 7th, 2011
  - [Background](#), [Webinar](#)

## WORKSHOP REFERENCES

- [Fireline Assessment Method \(FLAME\)](#)
- [Canadian Forest Fire Danger Rating System \(CFFDRS\)](#)
- [Wildland Fire Decision Support System \(WFDSS\)](#)

## LEARNING ORGANIZATIONS

[The Stewardship Network](#)  
[Sustainable Forest Education Cooperative](#)  
[Aldo Leopold Foundation](#)  
[Michigan Prescribed Fire Council](#)  
[Wisconsin Prescribed Fire Council](#)  
[UWSP Fire Crew](#)

recommend your favorite!

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