

POINT of ORIGIN

Spring 2016

Surviving wildfire by adapting to it

Looking Back: 40th Anniversary of the 1976 Fire Season

Jolene Ackerman,
Statewide WUI Coordinator

Excerpt from the Wisconsin 1976 Forest Fire Report:

The 1976 forest fire season started in the middle of March and was in full swing by mid-April. The dry period in the spring continued all year until snowfall. There was no normal let up until the first part of November when snow stopped the running fires, but the peat fires continued until way into February 1977.

On Mother's Day 1976, the small community of New Miner (Juneau County) was brought into the news when more than 3,000 acres of prime young pine were up in smoke. Flames in the pine reached 300 feet. Firefighters witnessed a smoke column that would split into two separate, slowly revolving vortices which

would drop horizontally over the sides of the fire, touch the ground and then rejoin into a single smoke column again. A tractor operator was trapped when a "horizontal vortex" began dropping over his unit. He was able to escape, but the tractor was destroyed. Communities 20 miles away reported ash from the burning pines dropping on their cars. This was the first major forest fire of 1976. Others followed. In all, there were 14 forest fires over 300 acres with six of these over 1,000 acres. Peat fires (fire burning underground) started to plague firefighters early in July and there was no letup in the peat fire suppression until after Christmas.



Fire control training at MacKenzie girl's camp, June 1976.

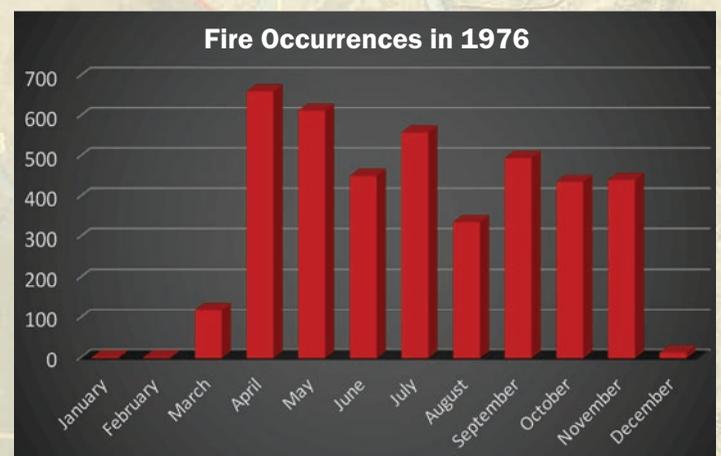


Posting of Emergency Forest Fire Regulations.

"Big ones" of 1976

Fire Name	County	Size (acres)	Date	Cause
New Miner 1	Juneau	3,177	May 9	Miscellaneous
Necedah	Juneau	1,507	Aug. 28	Incendiary
Dewey Marsh	Portage	1,318	Sept. 11	Campfire
Range Line	Portage	2,776	Oct. 2	Incendiary
Shamrock	Jackson	1,210	Nov. 2	Trash burning

In Wisconsin, wildfire suppression responsibilities are shared by the Department of Natural Resources (primarily the forested areas of the state) and the townships (the more open or agricultural areas). By the end of 1976, a total of 4,141 fires burned 29,581 acres in the parts of the state under DNR protection and another 3,680 fires burned 23,605 acres in the "cooperative areas" protected by the townships and their fire departments.



From the Editors

Our purpose is to provide you with information about the services, products and direction of the Wisconsin DNR and the various partners in protection, referring specifically to wildfire prevention, suppression and outreach. Building partnerships is the key to success!

If you are interested in having an electronic copy of any of the articles for use in your own newsletter, website or other outreach tool, or you would like an informational packet contact:

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Upcoming Changes to the Wildland Fire Program

Catherine Koele, Wildfire Prevention Specialist, Wisconsin DNR

People and fire have a long history in Wisconsin and 2016 marks another milestone as the Wisconsin Department of Natural Resources fire management program implements changes in wildfire detection and how burning permits are administered.

Fire lookout towers no longer in service

A recent decision was made to remove all remaining 72 DNR fire towers from service as a result of a recent assessment of their condition and effectiveness for fire detection.

A study conducted in Pennsylvania assessed their 53 state-owned fire towers. That engineering study found that all towers were loaded beyond structural capacity. These towers were the same vintage and made by the same manufacturer as Wisconsin's towers in similar environmental conditions and under the same load parameters. The study also revealed some design flaws that would be cost prohibitive to rehabilitate the towers.

An analysis by the Wisconsin DNR was conducted to determine replacement costs, which were in excess of 25 million dollars. Not only is that a very difficult investment to justify, fire reports show that well over 90% of our forest fires are reported by citizens.

As a result, forest fire tower lookout managers were notified and began the necessary actions to take the towers out of service including posting restricted access signs, removing ladders and ensuring they are properly secured.

All landowners with DNR easement rights for the siting of the towers were notified of the change in operations. The landowners will have to decide what is in their best interest

throughout the decommissioning process. They may choose to acquire the towers or have them removed.

All towers will be reviewed for historical status and inspected for asbestos. This will take place over the next several months as weather and tower access allows.

Going forward, DNR fire control will rely solely on aircraft and citizen reporting for the detection of wildfires. This will result in an increase in flight time and potential route changes for Forestry's 11 full-time employee pilots this spring. The DNR will also continue to work with the media to help stress the importance of reporting smokes early by dialing 911.

Emergency fire wardens reduced

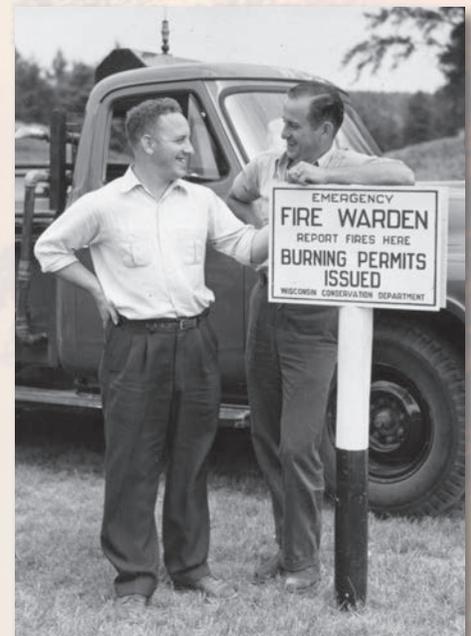
In September 2015 the decision was made to further reduce the number of business-type Emergency Fire Wardens (EFW) to 3 per county by January 1, 2020, while retaining EFW partner locations, including fire departments, municipal offices, tribal offices and the Forest Service.

EFWs have benefited Wisconsin's Forestry program since the 1920s. This partnership is an example of a successful fire prevention tool that has been historically cost effective while maintaining valuable relationships between the community and the Department.

The role of EFWs has changed significantly over time, evolving from a detection and suppression role to the current role of mainly issuing outdoor burning permits.

Results from an extensive study revealed no ill effects or consequences from eliminating residential-based EFWs in 2013 and that the general public has been making great strides to transitioning to getting their burning permit online or over the phone.

As a result, forestry staff have begun the process of further reducing their EFW workforce by assessing their local areas of greatest need, communicating the reasons behind the decision and continuing to encourage the public to transition to the electronic burning permit options (over the phone and online).



Emergency fire wardens posting a sign in Park Falls in 1955



Siting in a fire in 1953 from the Irma, WI fire tower



Mosinee Ranger Station and Fire Tower, 1958



Know Your Wisconsin Firewise Terms ...

Firewise is a **term** to describe homes that are constructed and maintained in such a way that they are able to survive a wildfire, even without help from firefighters

A Firewise Community refers to a **neighborhood** that has earned recognition through the Firewise Community/USA program. A Firewise Community could be a home or lake owner association, campus or camp.

A Firewise Education Site gives recognition to a **specific location** which demonstrates Firewise recommendations, in terms of construction, landscaping and maintenance. A Firewise Education Site could be a well-prepared town hall building, local library, elementary school or a building at a youth camp.

A Community Wildfire Protection Plan (CWPP) is a **document** that results from a collaborative process among many stakeholders. Key components are identifying local wildfire risks and developing strategies to address the risks based on what makes the most sense locally. The final result is a 5 year plan with a timeline for completing mitigation projects. CWPPs in Wisconsin are developed for towns and villages, including some multiple town plans.

Camp Chi is located in the Village of Lake Delton in Sauk County which is designated as being a Community at High Risk to wildfire. The camp has been in operation for over 90 years. It is located on 650 acres with 127 buildings tucked in the woods. Although the buildings are not private residences, they are historical buildings which are occupied much of the year. Camp Chi is very concerned about protecting the aesthetic beauty of their property from wildfire as well as being responsible neighbors to the many private residences surrounding the camp. Camp

Chi was recognized as a Firewise Community in 2015 after doing extensive work around the property to create fuelbreaks around camp buildings, reduce the amount of dead trees and brush on the forest floor and find safer storage areas for campfire wood.



The Face of Firewise Communities

Amy Luebke, Wildland Urban Interface Specialist

Firewise Mini Tour Fall 2015

In early November, representatives from seven Central Wisconsin Firewise Communities loaded onto a bus to tour the four most recently recognized Firewise Communities in Sauk and Adams counties. At each stop, the local representative gave an overview of identified risks, provided a recap of 2015 projects and gave a preview of future project plans.

It was a great opportunity for networking among the communities and a chance to show off all the good work that has been done to date.

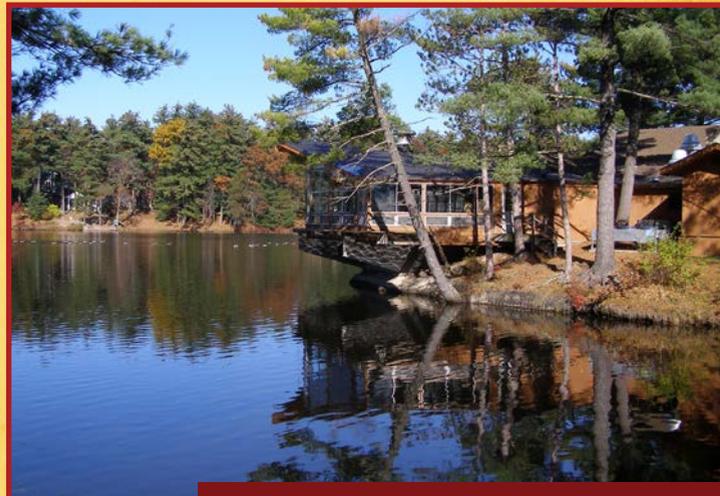


Participants in the Firewise Tour stand by Smokey Bear in his efforts to prevent wildfires



Buckhorn Community recognized in 2015

Buckhorn Community is a wooded subdivision located in the Town of Delton, Sauk County. The Town of Delton is designated as being at very high risk to wildfire. Buckhorn is 440 acres in size with 133 homes and wonderful commonly owned amenities including 7 miles of greenways around the lake which provide hiking trails for residents. Buckhorn became a recognized Firewise Community in 2015 after area property owners completed a large storm cleanup project on their commonly owned property.



Camp Chi is the first camp in Wisconsin to become a recognized Firewise Community

Watch for These Forest Health Issues in 2016

Wisconsin DNR Forest Health Team

Oak Wilt

While many people in Wisconsin's southern counties have seen a tree die of oak wilt, only a few have experienced that in the northern portion. Oak wilt is a fatal fungal disease of oak trees and although new oak wilt sites were identified in northern Wisconsin in 2015, many areas of the Northwoods are still currently free of this disease. Keeping it that way will require everyone's vigilance. Regardless of your location, the best strategy is to prevent disease from infecting your oak trees. Prevention is extremely important as oak wilt is difficult and costly to manage. A few simple steps will help prevent the spread of it to new areas.

Avoid damage to oaks. Pruning, wounding and harvesting oaks during spring and summer makes them more susceptible to oak wilt. In southern counties the high risk time period is April 1 thru July 15 and April 15 thru July 15 in the northern counties. If your oaks are damaged at any time from April through July and you have oak wilt in your county, you should use tree paint immediately to cover the wound. One easy way to prevent the spread of the disease is to prune during winter when the insects that spread oak wilt are not active.

Do not move infected wood. Movement of infected firewood is a common way oak wilt reaches new areas. Keep infected wood local at least until the bark is loose (minimum 1 year). For additional information on oak wilt including a distribution map visit dnr.wi.gov and search 'oak wilt.' Newly revised oak harvesting guidelines for 2016 are also available.

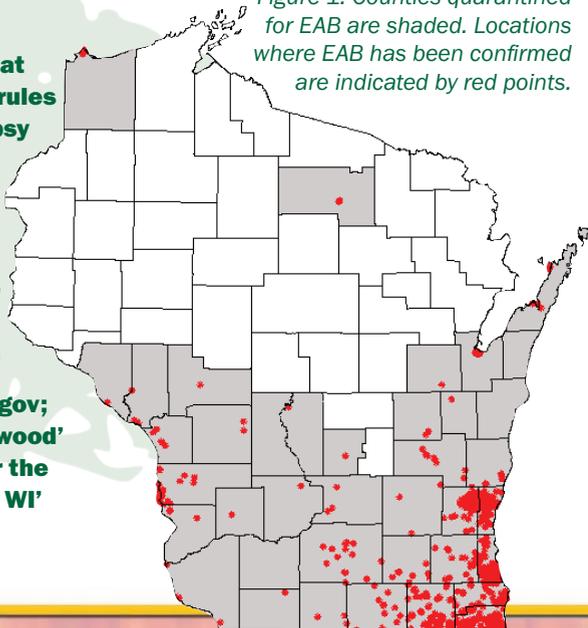
Emerald Ash Borer

Emerald ash borer (EAB) continues to be a major threat to the ash trees of Wisconsin with significant ash mortality occurring in the southeast portion. Further north and east and along the Mississippi River ash tree decline and canopy thinning is

Figure 1. Counties quarantined for EAB are shaded. Locations where EAB has been confirmed are indicated by red points.

Be aware that quarantine rules for both gypsy moth and emerald ash borer always apply to the movement of firewood.

Visit dnr.wi.gov; search 'firewood' and look for the 'firewood in WI' map.



becoming apparent as EAB populations build and continue to spread. Ash trees that have died from EAB quickly become brittle and can drop limbs unexpectedly. Exercise appropriate precautions when removing dead ash trees. To reduce the spread of forest pests to unaffected stands, store and burn firewood near the harvest site.

In 2015, EAB was found for the first time in six new Wisconsin counties: Green, Jackson, Lafayette, Marquette, Outagamie and Richland. EAB was also detected in numerous new communities. EAB has not yet been found in all Wisconsin counties but it does continue to spread and be detected in new areas. A list of all locations where EAB has been confirmed (Figure 1) is available at emeraldashborer.wi.gov. Detection of EAB involves both setting traps and confirmation of samples or photos submitted by municipal staff or the public. Current detection efforts are a multi-agency effort with participation by staff from the DNR, Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP), University of Wisconsin Extension, USDA Forest Service and USDA Animal and Plant Health Inspection Service (APHIS).

Spruce Budworm

Spruce budworm is a native caterpillar/moth that has outbreaks in Wisconsin every 30-50 years with outbreaks lasting 10-15 years. The last outbreak ran from 1970 to 1980. A few years ago DNR forest health staff noticed the start of a new outbreak.

After several years of moderate to heavy defoliation, mortality is starting to occur in northeastern Wisconsin (Marquette, Florence, Vilas counties). Defoliation was also observed in Ashland, central Oconto, Oneida and northwestern Portage counties. Mature balsam fir and spruce are the primary targets, although younger balsam or spruce can be defoliated as well. Repeated defoliation can cause tree mortality. Yard trees can be protected with insecticides.

Biological insecticides such as *Bacillus thuringiensis var kurstaki* (Btk) are the best option. Salvage harvests are often the only reasonable action in forest stands. If you would like more information about management of spruce budworm contact DNR forest health specialist Mike Hillstrom (michael.hillstrom@wi.gov).



Figure 2. Spruce budworm caterpillars web and clip off needles to feed.

2015 Fire Season Review

Fire season began March 8, with a string of small fires that started along I-90/94 in Columbia County. The fires kept coming – **724 in the months of March, April and May** alone. DNR burning permits were canceled for the first time of the year March 16 and many municipalities outside of DNR protection followed suit. Permits were periodically suspended throughout much of the spring.

Red flag warnings, called for when critical fire weather conditions occur (warm temperature, gusty winds, low relative humidity and exceptionally dry fuels), were issued 3 times in April. This type of extreme fire danger called for the **cancellation of burning permits** and request that the public use caution with things like campfires, fireworks and outdoor cooking and smoking.

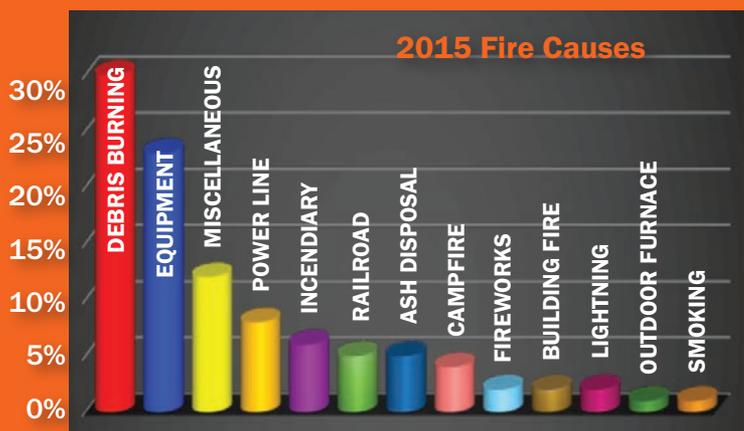
A wildfire ignited by a passing train caused the evacuation of the western part of the Village of Necedah April 13. The fire burned 337 acres and threatened 50 buildings; all were saved with firefighter assistance.

The largest fire of the year was a 366-acre Winnebago County marsh fire. Named the “Rat River Fire,” it was the largest of a string of fires that started along railroad tracks. Local fire departments were paged to the fires and requested assistance from the DNR. Aircraft, fire department members, DNR forestry and wildlife staff, marsh rigs and ATVs/UTVs were used to suppress the fire.

Governor Walker issued an Executive Order April 20, declaring a state of emergency in response to ongoing drought and elevated wildfire conditions. This allowed the DNR to have wildfire suppression support from the Wisconsin National Guard.

June 29 marked the **100TH anniversary of the first forest fire detection flight**, not just in Wisconsin, but in the entire country! Jack Vilas kept his seaplane at the Trout Lake Forestry Headquarters and got the idea to assist fire control staff by using his plane to spot fires from the air in order to catch them early.

By the end of 2015, a total of **1,004 wildfires burned 2,787 acres** in DNR protection areas (about half the state). Thirty eight buildings were destroyed and another 500 were threatened. The top two causes were debris burning and equipment.



CWPP SPOTLIGHT



The Town of Mount Morris adopts CWPP in 2015

The Town of Mount Morris, located in Waushara County, is designated as being a community at very high risk to wildfire. Beginning in fall 2014, a group of concerned community members began meeting to develop a plan to address local wildfire risks, including inadequate access to high density areas around lakes. A Community Wildfire Protection Plan (CWPP) was adopted in September 2015 and work has already begun on their first mitigation project, a publication that highlights the results of the community survey which was used to inform the planning process. It will be mailed to each town property owner at the beginning of spring fire season.



The Town of Boulder Junction on a field tour to assess areas of concern.

Due to the flammable vegetation of the area, housing density and wildfire occurrence, the Town of Boulder Junction in Vilas County is a community at high risk for wildfire. The town determined the need for a CWPP and began the planning process in July 2015 with members from the town, fire department, DNR, county emergency management and long-standing property owners. This CWPP group has placed a lot of emphasis on a tiered communication approach to educate and involve the community to ensure successful implementation of their 5-year plan. The town is planning to finalize and adopt their CWPP in spring 2016. Plans are also underway for several wildfire education and risk reduction projects for the upcoming year.

Congratulations to Mount Morris and Boulder Junction!

Rich Martinson & Conover/Land O' Lakes

Honored for Exemplary Commitment to Community Fire Protection

The National Association of State Foresters, International Association of Fire Chiefs, National Fire Protection Association, and Forest Service established a Wildfire Mitigation Awards program in 2014. These awards are the highest commendation for innovation and leadership displayed by individuals and organizations committed to wildfire preparedness and mitigation.

Rich Martinson (former Conover town foreman and firefighter) and the Conover/Land O'Lakes Community Wildfire Protection Plan (CWPP) committee were awarded the 2016 Community Wildfire Preparedness Pioneer Award. This is a posthumous recognition for Rich Martinson who was very influential in motivating the CWPP group to ramp up their wildfire risk reduction efforts.

In 2010, Conover leaders were very concerned about the amount of dead and fallen trees in the town from storm damage and disease. Martinson's focus became creating a brush collection site for the town to use for the large dead trees and stumps.

Rich also wanted to make the site more available to residents, so the gates and staffing were removed and the site continues fully accessible to the residents of the community. Because of the increased use of the site, in 2014 Rich secured grant funds to expand the site, provide a stable turnaround area and add professional signage.

In June 2014, 18 members of the Conover and Land O'Lakes fire departments volunteered to attend a daylong training session on how to conduct "home ignition zone assessments" as a method to educate area homeowners on how to reduce wildfire hazards on their properties. In 2015, the fire departments conducted their first round of assessments with area homeowners and identified several issues that will be addressed through various CWPP projects.



Entrance to the Conover brush collection site