

# Point of Origin

Awareness begins in your community

Spring 2013

## Spring cleanup may be more important than you think

Warm, windy days of spring are greeting the residents of Wisconsin and those warmer temperatures are ushering in the spring wildfire season. Wisconsin's primary wildland fire season occurs between mid-March and June. The debris that remains scattered across lawns, under decks, and around the base of buildings is all potential fuel for a wildland fire. Over the years we have seen that even small fires can cause extensive damage to homes and property in Wisconsin. Inspecting your property now and then doing the appropriate clean up can go a long way toward protecting your home and its surroundings.

So, what can a homeowner do to prepare for spring fire season? Following are several Firewise tips that will help with homeowners' fire preparedness:

clean the leaf litter off your roof and out of rain gutters.

from off porches, steps and decks. Be sure to clear away the debris that has accumulated underneath these attachments.

around the base of buildings. All leaf litter and dead vegetation should be removed. If you're planning on replacing mulch in these areas, consider using something non-flammable, like stone, instead of the traditional shredded bark.

in the area 30 feet around buildings. Rake away

all fallen debris from your yard and around the base of trees and shrubs.

and other dead vegetation instead of burning it.

you've collected to create a brush pile for small animals to use as shelter.

should be moved to a spot at least 30 feet from your home.

of watering plants to green up your yard.

your home's address or fire number sign to make sure it is still visible.



**"In the spring, at the end of the day, you should smell like dirt."**

**~Margaret Atwood**

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 have any comments, questions, or ideas for the newsletter, contact:

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[dnr.wi.gov](http://dnr.wi.gov) (search 'fire')

# Bark beetles, drought and wildfire behavior in pine stands

*Mike Hillstrom, DNR forest health specialist, Wis. Rapids*



Bark beetle exit holes

Wildfire behavior is affected by fuels, weather and topography. Pine bark beetles alter fuels by attacking and killing drought stressed trees. On a landscape scale, more drought prone areas and species will be impacted first. Other areas or species are affected depending on the length and severity of the drought. The result is a complex landscape of fuels that changes over time.

Pine bark beetles also influence fire behavior at the individual tree scale. Recent Forest Service research by scientist Matt Jolly suggests that dead, red or brown needles have 10 times less moisture, ignite three times faster and require less heat to ignite than healthy, green needles. Dead needles ignite much faster because of decreased water levels and an increased proportion of flammable fiber and fat. This means that dying and dead needles remaining on pine branches increase the risk of crown fire in a stand. After beetle killed pines drop their needles, the risk of more intense surface fires increases. Overall, the risk of wildfire appears to be greater following a bark beetle outbreak.

## Management Recommendations

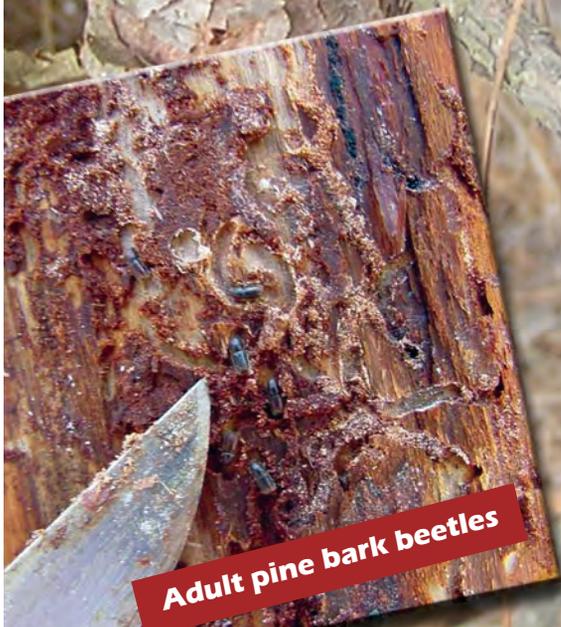
Drought caused bark beetle outbreaks in pine stands rarely last more than a few years in Wisconsin. Wetter weather returns and stressed pines recover and are able to defend themselves from beetle attack again. One of the best ways to help pines withstand drought is by maintaining appropriate stand density. Thinning when it

is appropriate promotes the health of the remaining trees and they are better able to withstand drought or other stresses, including bark beetle attack.

Even in properly managed stands some pines may succumb to drought and attack by pine bark beetles. Heavily attacked trees typically die within one year. If more than 50 percent of a pine trees canopy is dead it is highly unlikely the tree will recover. Consider a salvage harvest to remove affected trees. If you decide to harvest bark beetle impacted pines here are some thoughts to keep in mind:

- 1) Be careful not to damage nearby trees during harvesting.
- 2) Many bark beetles overwinter in the soil or leaf litter so cutting infested trees between November and March will probably not help reduce the bark beetle population.
- 3) If harvesting from mid-April through October, logs stacked on site need to be removed within three weeks to avoid additional bark beetle problems.
- 4) Many factors need to be considered before replacing trees killed by drought and bark beetles including soil moisture, tree age, location of dead trees, stocking level and other insect or disease issues in the stand.

**Not sure what to do? Go to the DNR website [dnr.wi.gov](http://dnr.wi.gov) and enter "forestry" in the keyword search box.**



Adult pine bark beetles

# Not all fire is bad - the benefits of prescribed burning

Catherine Koele, wildfire prevention specialist

Where there's smoke, there's fire, but out in grasslands and woodlands, this is not always a bad thing. As the flames race across the landscape, the fire consumes dead vegetation, invasive species and other harmful plants, leaving a mineral rich coating of ash on soil that is newly exposed to the sun's energy. This will spur the growth of hardy native plants, creating wildlife habitat while making it more difficult for invasive species to gain ground.

Natural resource managers call these fires controlled burns or prescribed burns. Trained crews conduct these burns under strict guidelines with ample fire suppression equipment and only when weather conditions are favorable. They are a common tool used to preserve the richness and diversity of Wisconsin's landscapes.

Accomplishing land management objectives is the primary consideration for conducting prescribed burns. Some examples:

- Stimulate prairie grass growth and improve habitat for upland game and waterfowl
- Create pockets of open water for waterfowl amid cattails proliferating in low areas
- Improve habitat for upland nesting birds, such as pheasants

- Spur native vegetative growth for songbirds
- Help preserve grasslands and native fire-adapted plant species
- Encourage natural regeneration of desirable native tree species such as oaks

Prescribed burning can also reduce the fuel available for a wildfire. This objective is especially important in woodlands close to developed areas. Reducing fuel loads is one of the most effective elements of any fire preparedness program.

There are numerous properties slated for burning this spring by DNR staff

throughout Wisconsin, primarily in the southern half of Wisconsin. The burns will be carried out in April, May and perhaps June, depending on weather conditions. Parcels are typically burned on a two-to-five-year rotation and vary in size from 2 to 340 acres.

For information regarding prescribed burning visit [dnr.wi.gov](http://dnr.wi.gov) enter keyword "prescribed burn." Property owners wishing to conduct prescribed burns should be sure to obtain proper burning permits and check for fire restrictions as conditions change daily. More information on burning permits can be found at [dnr.wi.gov](http://dnr.wi.gov) enter keyword "fire."

An estimated 30-40,000 acres are burned each year in Wisconsin to improve wildlife habitat, control invasive plant species, restore and maintain native plant communities and reduce wildfire potential.

# Fire prevention outreach campaign begins

Catherine Koele, wildfire prevention specialist

Think your fire is out? The Great Lakes Forest Fire Compact would like to make sure you check again! Every couple of years, the Compact identifies a common fire problem and creates a two-year campaign to help promote fire prevention messages. This year, the campaign will focus on encouraging the public to double-check for hot coals left behind from debris piles, campfires, or ashes dumped from woodstoves or fireplaces.

Debris burning continues to be the number one cause of wildfires in Wisconsin. Many responsible debris burners obtain proper permits and conduct their burn, but neglect to make certain their fire is out before leaving. Oftentimes that fire still contains smoldering embers. The wind causes the hot embers to escape and cause a wildfire. This practice is also a common occurrence with abandoned campfires or ashes dumped in the outdoors from fireplaces or woodstoves.

In 2012, the DNR discovered that of the 345 reported debris fires, 13 percent were caused by individuals who obtained a proper permit, but the responsible party failed to extinguish their fire before leaving. Initially, these were legal debris fires, but overnight the embers rekindled, escaped and caused a wildfire the following day. Embers left behind from debris piles can remain hot for days, even weeks. It's important to be certain a fire is out

by using plenty of water, stirring and repeating until the fire is out cold.

Since the campaign is adopted among five Great Lakes agencies (Wisconsin, Minnesota, Michigan, Ontario &



Embers from burned debris piles, campfires, and dumped ashes from woodstoves or fireplaces can remain hot for days, even weeks. To prevent a wildfire, drown ashes with plenty of water, stir, and repeat until cold.

Manitoba), the Division is able to share in the production costs on many of the products resulting in an overall cost-savings as well as cohesive and professional material representative of the fire causes in the region.

The "Think your fire is out?" campaign products include radio and TV advertisements, flyers, display banners, restaurant placemats, newspaper ads, and other promotional materials and will be distributed throughout the spring during Wisconsin's peak spring fire season.

If you are interested in promoting this campaign in your community, send an email to [DNRRPointofOrigin@wisconsin.gov](mailto:DNRRPointofOrigin@wisconsin.gov). We have outreach items available and would be willing to support your fire prevention efforts!

number of equipment caused fire. Emergency burning restrictions placed for 46 days in 17 counties.

Considering the increased level of potential throughout the year a state, DNR Protection areas reported 1498 fires, burning 2824 acres. In comparison to a 10-year average, this is a 10 percent increase in the number of fires. Forty structures were lost and many more were threatened and destroyed during suppression efforts.

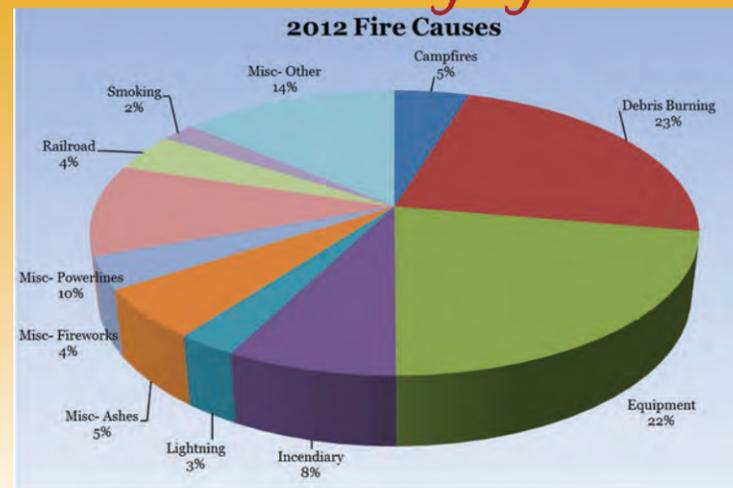
Much of the success in minimizing the amount of loss is likely due to the implementation of fire restrictions and increased media attention.

Windstorm damage, lack of significant snowfall and extended drought conditions made for a memorable fire season in 2012.

A major windstorm ripped through five counties in northwest Wisconsin in July 2011, leaving behind a 250,000 acre footprint of significant damage to many homes and forests. Entering the 2012 traditional spring fire season, communities in the area were at risk to wildfire due to an abundant fuel-load and many landowners wanting to burn their debris.

By July 2012, much of southern Wisconsin entered into a prolonged summer drought resulting in an increase in the

## 2012 Fire Season Highlights



# It's spring. It's time for oak wilt. What can I do?

*Kyoko Scanlon, DNR forest pathologist, Fitchburg*

If you value your oak trees, do not prune them from April through July. Pruning in spring and early summer makes oak trees vulnerable to oak wilt, a fatal fungal disease of oaks in the red oak group, such as northern red, northern pin and black oaks. The risk of oak wilt moving from one tree to another is highest April through July.

In fact, homeowners should avoid wounding oaks in any way from April through July. Any action that provides an opening into the tree, such as carving initials into the tree, accidentally cutting exposed roots with a lawn mower, or attaching a birdfeeder or clothes line, could provide an opportunity for the oak wilt fungus to invade and establish itself in the tree. **Just 15 minutes could be enough time for the beetles that transmit the disease to land on a fresh wound and infect your tree.**

While using paint or a wound dressing is not normally recommended on pruning cuts or wounded surfaces on most trees, oaks are an exception from April through July. **If you need to prune oaks during April through July, an immediate light painting of wounds is recommended during this time to help protect against the spread of oak wilt by beetles.**

While the risk of spreading oak wilt is low after July, homeowners should avoid pruning or wounding oaks until November, to be on the safe side. Check with your municipality to find out if they have their own oak wilt

ordinances that you should follow as well.

## **How oak wilt spreads**

Oak wilt can spread from a diseased tree to a healthy tree

through a connected root system as well as by insects. **Very small sap beetles transport fungal spores by landing on fungal mats found beneath the cracked bark of trees that died the previous year.** The spores are then transmitted from the beetle body onto the fresh wound of a healthy oak tree while the beetle is feeding at the pruned or damaged site. The beetles that transmit oak wilt disease are not capable of boring into a tree.

If a wound is left unprotected, a new oak wilt pocket may develop in a location where oak wilt did not previously exist and will radiate to other oaks through the connected root systems. If no management steps are taken, the pocket could continue to expand year after year. Once oak wilt establishes itself in an area, control of

## **Oak wilt in Wisconsin**

*Oak wilt is found in all Wisconsin counties except Ashland, Bayfield, Calumet, Door, Douglas, Forest, Iron, Kewaunee, Manitowoc, Price, Rusk, Sheboygan, Taylor and Washburn. The most recent oak wilt infestation was confirmed in Lincoln, Sawyer and Vilas counties in 2012.*

*Anyone interested in learning more about oak wilt and other forest pests as well as tree pruning should visit the Wisconsin DNR website at [dnr.wi.gov](http://dnr.wi.gov) (Keyword: Forest Health).*

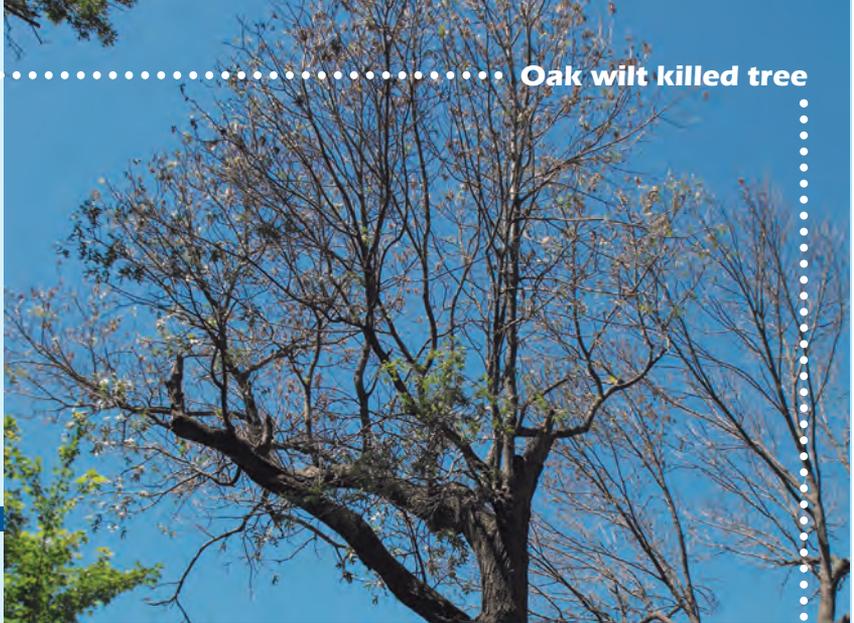
the disease is difficult and costly. Prevention is the best approach.

## **How oak wilt kills**

Every year, the disease kills many oaks in the state by interfering with the tree's water and nutrient-conducting systems, essentially starving the tree. Leaves begin to wilt, and the tree may eventually die. Trees in the red oak group are especially vulnerable. **Once wilting symptoms become visible, the tree loses most of its leaves and dies very quickly, often within weeks.** Trees in the white oak group – those with rounded or lobed leaves – are more resistant to oak wilt, and the disease progresses much more slowly, often one branch at a time. White oaks could live with oak wilt for many years, and some trees may recover from the disease.

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## Community Wildfire Protection Plan Update

*Amy Luebke, wildland urban interface specialist, Wis. Rapids*

The Town of Rome in Adams County created and adopted a Community Wildfire Protection Plan (CWPP) in 2007. An evaluation of progress was completed in 2012, including a survey of Rome property owners.

The survey showed that even though most people underestimated the number of wildfires we have in Wisconsin each year, they were concerned about the possible impacts of wildfire on their property and supported the on-going implementation of Rome's CWPP.

The information from the evaluation and survey went into the creation of a new five-year action plan. For the new plan, the committee took a close look at where people go for information regarding the town and planned outreach projects accordingly.



**Local wildfire planning, 5 years later** *Community members gather to discuss wildfire planning.*

### Homeowner recognized for outreach effort

*George Voyles with his Smokey Bear plaque*



George Voyles, the Big Flats homeowner who starred in the 2011 "Wildfire in Wisconsin: Would Your Home Survive?" video, was recognized in December at a Big Flats/Monroe Community Wildfire Protection Plan (CWPP) meeting for his efforts to promote the Firewise message.

George is a homeowner who followed Firewise recommendations when he moved to his rural home in Adams County. When his property received a direct hit by the 3400-acre Cottonville Fire in 2005, his home survived with only minimal damage thanks to those steps he took ahead of time to protect his home. George's story inspires other rural landowners to take action to protect their own homes.

To view the 9-minute video, go to [dnr.wi.gov](http://dnr.wi.gov) and search keyword "Firewise." A DVD version is also available. **To have a DVD mailed to you, send an email to [DNRRFRPointofOrigin@Wisconsin.gov](mailto:DNRRFRPointofOrigin@Wisconsin.gov)**