

POINT of ORIGIN

Fall 2016

Surviving wildfire by adapting to it

Good Fire Part I



November prescribed fire in the Namekagon Barrens Wildlife Area, Burnett County. NBWA is divided into 30 burn units and is managed through a 5 to 8 year rotation of prescribed burning. The burning maintains this critical pine barrens habitat type for a wide variety of plant and animal species that depend on this habitat community for survival, including the sharp-tailed grouse.

Contributing authors from Wisconsin DNR: Michelle Witecha, Forestry Specialist; Jed Meunier, Research Specialist; and Jolene Ackerman, Statewide WUI Coordinator

Then

Many of Wisconsin's natural communities were shaped by periodic fires and depend on fire disturbance to regenerate and remain vigorous. Before the age of modern fire suppression, fires would burn across large swaths of the landscape at varying degrees of intensity, creating or maintaining areas of open prairie, savannas, barrens and oak-dominated forests. In addition to fire occurring naturally through lightning strikes, indigenous communities would also utilize fire to control biting insects, attract game animals and clear areas for settlement.

Now

Modern land managers work to mimic the benefits of naturally occurring fires through the use of prescribed burns. This type of fire differs from wildfire in many ways; most importantly, care is taken to extensively plan the event so that it occurs during a specific combination of weather conditions, leading to more manageable fire behavior. Comparatively, wildfires often occur during a combination of weather extremes such as low humidity, high temperatures and high wind speeds, creating more intense and unpredictable fire behavior. Due to the absence of naturally occurring smaller fires and a historic policy of fire suppression throughout the country, ground vegetation (fuel) can build up and tree density can be higher

than what would naturally occur. Higher fuel loads, coupled with extreme fire weather, provide the perfect combination for a fire to occur with the intensity and rate of spread past the point of control. Because prescribed burns reduce dead fuel buildup, they also provide the benefit of reduced wildfire risk.

Timing it Right

While the vast amount of prescribed burning in Wisconsin typically occurs during the spring (March through May), fall burns do also occur, after hard frosts cure the above-ground vegetation. Recent research on prescribed fire seasonality points to some evidence that Native American-set fires occurred mostly in the fall and were primarily attributed to fall hunting practices. In fact, many have suggested that the term "Indian Summer" stems from a warm, dry spell after a killing frost in fall when fires burned extensively. When researchers looked at potential burn windows throughout recent years, results indicated that there may actually be more opportunities to burn in the fall than previously thought. The fall season often provides more days with suitable combinations of precipitation, temperature, wind speed and relative humidity compared to the spring.

Prescribed burn practitioners have been expanding their view even further, by conducting prescribed burns during the winter months! For example, frozen marshes allow land managers the opportunity to burn off thick swaths of invasive reed canary grass and Phragmites. The removal of this thick layer of vegetation gives native marsh grasses an opportunity to emerge in the spring.

Editor's note: Good Fire, Part 2 will appear in the spring 2017 edition of the Point of Origin newsletter.

Emergency Response and Recovery Support Team

Catherine Koele, Public Information Officer, Wisconsin All-Hazard IMT

Incident Management Teams (IMTs) play an essential role in the management of, and response to, local, or widespread emergencies, natural disasters and other events. Historically, their primary purpose was for wildfire response, but today IMTs respond to a wide range of emergencies, including fires, floods, earthquakes, hurricanes, tornadoes, and other natural or human-caused incidents.

The Wisconsin Complex All-Hazard Incident Management Team (AHIMT) was initiated back in 2014 through the sponsorship of the Wisconsin Department of Natural Resources and Wisconsin Emergency Management. The team's mission is to provide incident management expertise and capabilities to support or manage emergency response and recovery throughout the State of Wisconsin.

Functional Roles & Services

The AHIMT is a multi-agency, multi-jurisdiction team for extended all-risk incidents. The Team's approach is to support or manage major incidents requiring a significant number of local, regional, state and potentially federal and military resources. The purpose of the AHIMT is to assist any jurisdiction confronted with an incident beyond its capabilities in either complexity or duration.

Qualified personnel covering 16 different organizational functions serve on the team. Members come from a broad cross section of disciplines including: law enforcement, fire, EMS, public works, emergency management, public health, finance, forestry, general administration and much more.

The Team is a modular organization that can expand or contract its organizational structure and staffing based on the request of the local jurisdiction. Under Incident Command, deployment of a standard team includes Safety, Liaison, Public Information, Finance, Planning, Operations and Logistics. More staff positions are available if needed.

Some services available from the team:

- Incident safety
- Resource coordination
- Volunteer coordination
- Event planning
- Logistics and supply needs
- Mapping and technical support and tracking
- Communication needs
- Public information coordination
- Financial tracking

Requesting Support

Any Federal, Tribal, State, County or local jurisdiction can request support from the AHIMT by contacting the Wisconsin Emergency Management Duty Officer at 1-800-943-0003, 24 hours a day, 7 days a week. Initial requests can be verbal but must be followed up with a written request which includes a Delegation of Authority.

If requested for deployment, reimbursement for personnel, travel, lodging, per diem and operating costs will be pursuant to any mutual aid agreement or the Emergency Management Assistance Compact (EMAC). AHIMT activities, equipment and related expenses will be the responsibility of the AHIMT.



In June 2016, the Wisconsin Complex All-Hazard Incident Management Team (AHIMT) recently participated in a robust simulated event at Volk Field and Ft. McCoy referred to as "Miles Paratus" (Ready Soldier), with the primary goal of integrating civilian (AHIMT) and military resources.



From the Editors

Our purpose is to provide you with information about the services, products and programs 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:

WDNR-Point of Origin
P.O. Box 7921
Madison, WI 53707
(608) 267-7677
DNRFRPointofOrigin@wisconsin.gov



Welcome to Four Cooperative Fire Rangers

—Jolene Ackerman, Statewide WUI Coordinator

Four Cooperative/Law Enforcement Rangers were recently hired within the Division of Forestry to serve as the primary contact for fire management and forestry law enforcement and to provide services to fire departments, county fire associations, local governments and law enforcement agencies within the state's fire cooperative area. The rangers each have a multi-county assigned area where they will provide services to ensure forest protection needs are fully met. Services include technical training, outreach and education to partners, law enforcement activities, initial attack, fire prevention, fire suppression and incident support. They also provide extended attack fire suppression services and serve as the Incident Commander in a Unified Command structure, Operations Section Chief, or as a Division Group Supervisor/Task Force/Strike Team Leader during major fire suppression operations.

Tony Marinello

Tony served as the Forest Ranger in Cornell for the past 12 years where he worked initial attack fire and law enforcement as well as state, county, and private lands forestry in Chippewa County. Before that he was a DNR private lands forester in Iowa and Buffalo counties. Currently Tony is an instructor at the DNR fire academy and serves in the operations section of the Wisconsin All Hazard IMT. Tony says, "I'm really looking forward to working on fire and law enforcement issues in the cooperative area of western Wisconsin."

Tony Marinello, Baldwin, WI, 715-684-2914 ext. 130

Ralph Sheffer

Ralph's career started as a seasonal forester. He joined DNR full time in 1997 and spent his first 18 months in Spooner before becoming the Forest Ranger in Poynette in March 1999. As one of the busiest fire stations in the state, his Poynette Ranger job kept him active working with fire departments, county sheriffs, lake owner associations and the general public. Ralph also joined the Poynette-Dekorra Fire Department and was a member for 10 years until 2009. In 2007, Ralph became the Division's Fire Operations Specialist in Dodgeville, a job that he held until becoming the Coop Fire Ranger.

Ralph Sheffer, Dodgeville, WI, 608-935-1925

Rick Buser

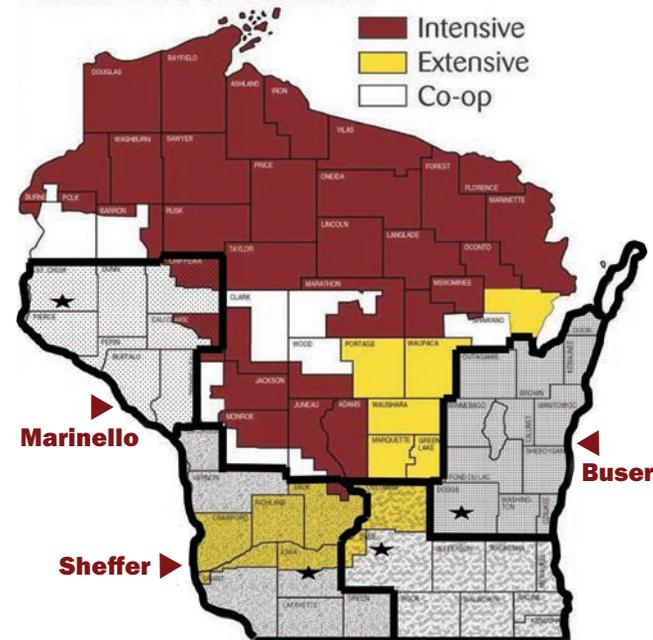
Rick grew up on a small farm in Winnebago County which nurtured his love of the outdoors. His most recent job was Department Chair of the Wildland Fire-fighter program at Fox Valley Technical College. During his career he has held several DNR positions in Spring Green, Oshkosh, Manitowoc and Friendship. Rick has a bachelor's degree in Wildlife Management from UW Stevens Point and a master's degree in Education from Marian University. He has over 17 years of paid-on-call fire and EMS experience.

Rick Buser, Horicon, WI, 920-387-7896

Ron Schneider

Ron grew up in central Wisconsin and worked as an arborist following college. Ron came to the DNR in

Forest Fire Protection



WI DNR Cooperative Fire and Law Enforcement Specialist Zones. Based on DNR Protection Areas.

▲ Schneider

2000 and worked as a forestry technician and forest ranger in Wausau, Brule, Spring Green and Tomah. He also enjoys working on large incidents throughout the nation and has worked on forest fires in Michigan, Minnesota, Texas, California, Washington and Montana. He has a background in forestry and continues to stay active as a certified forester and owns an 80 acre tree farm in Monroe County. He also has been a volunteer structural firefighter for 12 years.

Ron Schneider, Fitchburg, WI, 608-275-3261

New Smokey Bear campaign targets lesser known wildfire causes

—Catherine Koele, Wildfire Prevention Specialist

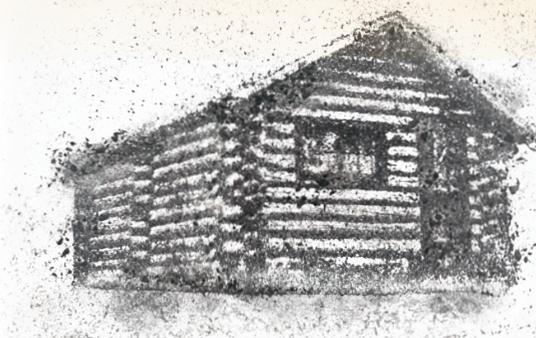
In honor of Smokey Bear's 72nd birthday, the Ad Council, the U.S. Forest Service, and the National Association of State Foresters launched a new series of public service advertisements (PSAs) that aim to help prevent wildfires nationwide by increasing awareness about less commonly known ways that wildfires can start. The new "Rise from the Ashes" campaign uses ashes from an actual wildfire as an artistic way to illustrate the devastation caused by wildfires and highlight less obvious wildfire causes.

As more people live in and alongside forests and other natural areas, Smokey Bear's message of personal responsibility remains a critical tool to help reduce risk. The new PSAs help teach wildland-urban interface residents and outdoor enthusiasts about wildfire causes that many of us may have never thought were risky.

Many Americans believe that lightning starts most

wildfires when in fact, on average, nearly 9 out of 10 wildfires nationwide today are caused by people. In Wisconsin, the number one cause of wildfires is related to debris burning.

The new PSAs show how lesser-known wildfire starts such as unattended barbecue coals, metal chains dragging from a moving vehicle, and parking over



Campaign artwork created using ash from a wildfire

tall, dry grass can spark a wildfire. The scenarios in the television PSAs play out in reverse with the ashes rising up and Smokey Bear stepping in to help show the correct preventative action to avoid igniting a wildfire.

Smokey Bear has been a recognized symbol of protection of America's forests since August 9th, 1944, making him part of the longest running PSA campaign in U.S. history. Although progress has been made, human-caused wildfires continue to remain one of the most critical environmental and public safety issues affecting U.S. communities.

Visit www.SmokeyBear.com to learn more about wildfire prevention. Smokey Bear is also continuing to encourage people to be proactive in preventing wildfires through his social media channels on Facebook, Twitter and YouTube.





NEWS FROM THE WOODS

Wisconsin's State-Federal Partnership Working Together to Implement National Forest Plans

Wisconsin DNR has entered into a Good Neighbor Authority (GNA) agreement with the only national forest located in Wisconsin, the Chequamegon-Nicolet National Forest (CNNF), which is 1.5 million acres in size. Good Neighbor Authority allows the Forest Service to enter into agreements or contracts with states for the performance of forest, rangeland and watershed restoration services on National Forest System lands.

As a result of Wisconsin's state-federal partnership, Wisconsin DNR and partners are helping to implement CNNF's Forest Land Management Plan by assisting with 5,700 acres of timber harvests in six Wisconsin counties this year (Oconto, Forest, Vilas, Bayfield, Sawyer, Price, and Ashland).

In addition to making more wood available to Wisconsin's important forest products industry – an industry that supports 60,000 jobs and provides \$4 billion in annual wages – the agreement will help create and maintain healthy forests. A portion of the receipts from the timber sales will reimburse the state for its costs to do the work, with remaining funds available for use in conducting additional forest restoration activities in the future. Future projects will include not only timber sales, but other conservation projects such as wildlife habitat improvement and invasive species management.

To learn more about the Chequamegon-Nicolet National Forest and its Forest Plan and activities, visit: www.fs.usda.gov/main/cnnf/home and navigate to "Land & Resource Management." More information about forest management in Wisconsin can be found on DNR's website, dnr.wi.gov, keyword "forestry."

Contributing authors from Wisconsin DNR: Amy Luebke, Wildland Urban Interface Specialist and Rebecca Diebel, Administrative Policy Coordinator



Last winter the DNR and the US Forest Service entered into a cost share agreement to reduce wildfire risk in the Crooked Lake area. In early May a DNR skid-steer with a mastication head worked for 2 weeks to remove small brush and trees on 15 acres of high fire risk pine woodland in the Crooked Lake area. The agreement, in which the Forest Service covered 80% of the cost and the DNR covered 20%, allowed the DNR to perform work on Forest Service land. This type of cost share agreement benefits both agencies and the local residents by allowing the Forest Service to get work accomplished with money set aside from timber sales receipts. When finished, the entire project will treat 80 acres of pine and oak stands around the Crooked Lake area.



DNR skid steer with masticating head working in the flower lake area

—Scott Linn, AFMO Lakewood/Laona Ranger District, USFS



Area pre-treatment



Area post-treatment

Training helps Fire Departments to Increase Community Wildfire Preparedness

Contributing authors from Wisconsin DNR: Mark Conkey, Forestry Technician and Ben Garrett, WUI Specialist

Training Fire Department Partners

In August 2016 the Department of Natural Resources presented a 2-day Home Ignition Zone (HIZ) Assessment Training for the Boulder Junction Fire Department in Vilas County. Effective in April, the Town of Boulder Junction adopted a Community Wildfire Protection Plan (CWPP) and identified this training as a priority wildfire risk reduction activity that enables their fire department members to perform free, no obligation home evaluations for homeowners in their community.



Fire Chief Matt Reuss (left) initiated the fire department training



Trainer Mark Conkey (right) leads the field training exercise

The training consists of a classroom session that identifies wildfire risk areas to look for during an assessment and how to complete the form and a field session where the participants visited several area homes for hands-on training with homeowners.

This training has also been provided to other Wisconsin Fire Departments as part

of their town's CWPP. Other local departments are invited to participate in this valuable training.

HIZ assessments are designed to determine how vulnerable a property is to wildfire and provide recommendations that can be taken so that the home and its surroundings have a better chance to survive a wildfire. These assessments are not only beneficial to landowners; they also benefit the fire departments by providing an opportunity to meet with their community members face to face

and giving them a chance to become more familiar with wildfire risks in their neighborhoods.

As an added benefit, if a fire department is able to bring their engine to an assessment, driveway obstacles and access to homes can also be discussed. After their 30-minute assessment, which is completely voluntary, homeowners decide which recommendations they want to implement to help make their home and property more wildfire-resistant and provide improved access for emergency vehicles when time is critical.

Fire Departments Take it to the Field

Over the past year and a half, local fire departments in Northwest Wisconsin have been canvassing areas of elevated wildfire risk to provide Home Ignition Zone (HIZ) assessments. Whenever possible, the fire departments schedule HIZ assessment days when they will have the highest likelihood of being able to visit with the homeowner. That means they get a chance to explain Firewise principles and discuss any concerns about homes and their properties.

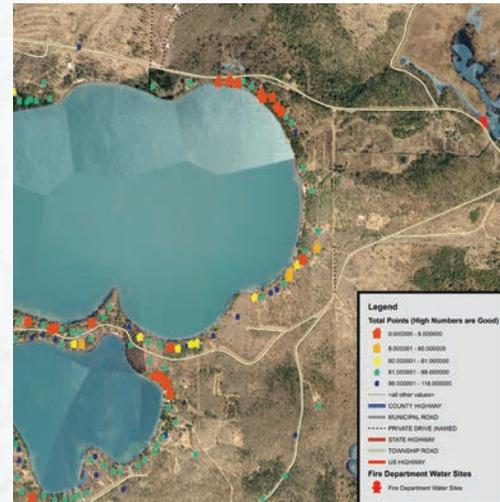
Ben Garrett, Wildland Urban Interface Specialist for northwestern Wisconsin converted the paper form typically used to an electronic format. Fire departments in his area complete the HIZ assessment form on hand-held tablets in the field. They are then able to immediately print out a report to leave with the homeowner that explains specific ways for them to reduce their risk of home ignition.

The form is also submitted electronically to Garrett who maps the data to identify areas that have specific mitigation needs, are at higher risk, or could be showcased as good examples of Firewise neighborhoods. Specific educational programs can be developed to use in these targeted areas to help landowners understand what they can do to protect their property.

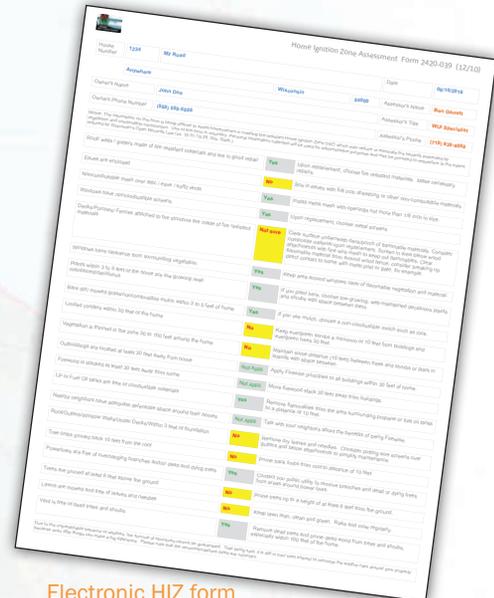
Through this program, one neighborhood (Chicog Acres) was encouraged to work toward Firewise Communities USA rec-

ognition. They have taken an active role in coordinating wildland fuels reduction projects, private property HIZ mitigation efforts and educational programs for their residents.

Since the beginning of this effort in the summer of 2015, nearly 800 HIZ assessments have been completed by five different volunteer fire departments. Over 100 residents have requested follow-up visits to help clarify mitigation needs, re-evaluate their property after projects have been completed, or simply to pass the word along to the dedicated volunteers that their efforts are appreciated.



Mapping electronic HIZ data



Electronic HIZ form

Benefits of Harvesting Trees

Keeping an ecosystem healthy includes management for wildlife habitat, aesthetics, soil and water quality, native biological diversity, recreational opportunities and forest products. One important component of sustainable forestry is the periodic harvesting of trees. There are many benefits of harvesting trees including:

- **A source of forest products:** Trees provide us with many of life's necessities, including lumber for furniture and building homes as well as pulp for paper. Practicing sustainable forestry ensures high quality timber both now and in the future.
- **Sustaining local and state economies:** Timber harvesting plays an important role in the economies of local communities and the state as a whole. Revenue earned from timber sales on state-owned lands is placed in an account which funds programs such as fire control, nursery operations, forest health protection, and many other forestry activities.
- **Protection from wildfire:** The spread of wildfire can be minimized by the removal of lower limbs of conifers and small trees near larger conifers reducing chances of a fire climbing into the crowns or tops of existing trees. In addition, the creation of logging roads or "fuelbreaks" can slow or stop a fire and allow fire suppression crews easy access for suppression and mop-up.
- **Enhancing wildlife habitat:** Timber harvests can create and enhance habitat for wildlife. Animals like ruffed grouse and sun-loving trees like aspen rely on open areas with lots of sun, which can result from timber sales. Other animals, such as snowshoe hare and woodcock, rely on the young, regenerating forest that is present after cutting.
- **Maintaining a healthy forest:** When trees become infected with diseases or pests, they sometimes need to be removed to keep the disease from spreading to other trees. Removing weak or poorly-formed trees gives the others additional light and space, allowing them to grow faster.
- **Aesthetics:** The forest scenery is very important to the public who uses the forest and to forest managers who work there. A well planned harvest can leave the forest looking like it wasn't harvested at all. One way this is done is by avoiding straight boundaries and mixing larger older trees with younger smaller trees.

