



5

**THE ROLE
OF FIRE IN
FORESTS**

Photo Credit: Wisconsin DNR

THE ROLE OF FIRE IN FORESTS

IN THIS LESSON YOU WILL FIND:

LESSON WHICH INCLUDES

- Introduction to Wildland Fire and Background Information
- Outdoor Activities
 - Flame Game
 - Safe Campfire Practices
- Indoor/Outdoor Activities
 - Fire Safety with Smokey Bear (see Student Resource 11a, Student Resource 11b, and Student Resource 11c or the printable Google resources)
 - The Fire Triangle (see Student Resource 9 or the printable Google resource)
 - Wildland Fire Survey (see Student Resource 12 and Teacher Resource 1 or the printable Google resources)
 - Wildland Fire Facts and Myths Activity Sheet (see Student Resource 13 and Teacher Resource 2 or the printable Google resources)

LINK TO GOOGLE RESOURCES

OPTIONAL ACTIVITIES RELATED TO THIS THEME

- Wisconsin DNR Videos
- Wisconsin DNR Resources

LEAF LESSONS THAT SUPPORT THIS THEME



Photo Credit: Wisconsin DNR



THE ROLE OF FIRE IN FORESTS

WISCONSIN DNR KEY TARGET MESSAGES

- Wisconsin has a plan to sustain the healthy, working forests vital to Wisconsin's well-being. (1)
- Everyone can help sustain Wisconsin forests (by being careful with fire, not spreading invasive species, using wood products rather than alternatives, planting and caring for a native tree, enjoying the outdoors responsibly and more. (8)

WISCONSIN STANDARDS FOR ENVIRONMENTAL LITERACY AND SUSTAINABILITY

- Students examine the interactions and outcomes of cycles and flows in natural and cultural systems. (Strand 2: Explore; Standard 4)

PRIMARY OBJECTIVES

- Students will examine the role of fire in forests.
- Students will differentiate between “good” fire and “bad” fire.
- Students will understand how to prevent unplanned forest fires.
- Students will explore careers related to fire in the forests.

PREPARATION

- Read the lesson to familiarize yourself with what you need to explain and where you may need to elaborate.
- If you are presenting indoors and want to use the slideshow:
 - Reach out to the teacher to make sure there is a projector and computer with internet available.
 - Email the slideshow to the teacher and ask them to have it ready for your visit.
 - Select the slides that go with your desired activity.
- You know a lot about wildland fire. Feel free to make this lesson your own!



Photo Credit: Wisconsin DNR

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MATERIALS

Google resources to support this theme can be accessed at uwsp.edu/wcee/wcee/leaf/leaf-curriculum/lessons-for-forestry-professionals/.

Please share the appropriate grade level slideshow with the educator so they have access to materials used in the activity and other recommended teacher resources.

- Team Level Forester Kit
- Slideshow_Theme 5_The Role of Fire in Forests

Outdoor Settings: Flame Game/Safe Campfires

- Wildland fire clothing, helmet, eye protection, gloves, and/or boots
- Wildland firefighter tools including a back can, bladder bag, axes, hoe, McLeod, Pulaski
- Items to represent flames that can be extinguished

Indoor and Outdoor Settings

- Smokey Bear coloring pages (see Student Resource 📄11a, Student Resource 📄11b, and Student Resource 📄11c or the printable Google resources), drawing paper, crayons, colored pencils, markers
- The Fire Triangle (see Student Resource 📄9 or the printable Google resource)
- Wildland Fire Survey (see Student Resource 📄12 and Teacher Resource 📄1 or the printable Google resources)
- Wildland Fire Facts and Myths Activity Sheet (see Student Resource 📄13 and Teacher Resource 📄2 or the printable Google resources)



Photo Credit: Wisconsin DNR

Google resources to support this theme can be found at leafprogram.org/fg



MODIFICATIONS

K-2 Audience

- Do not go over background information with students.
- Use outdoor lesson or Fire Safety with Smokey Bear.
- Use Wisconsin DNR 75th Birthday video.

Elementary Audience

- Provide only brief background information.
- All activities are appropriate for this grade level.

Middle and High School Audiences

- Use more of background information.
- Most activities can be appropriate for these grade levels.
- Consider using the additional resource, "Learning from the Ojibwe."

Urban Setting

- Make sure you help kids connect with forests and campfires.

Indoor/Outdoor Setting

- Lessons have notations about indoor and outdoor activities.



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INTRODUCTION: WILDLAND FIRE AND BACKGROUND INFORMATION

Share the following information as you see fit for your audience.

There are two types of wildland fires:

- **WILDFIRES:** Unplanned fires started through human or natural (lightning) causes. Most Wisconsin wildfires are caused by human activities. Wildfires can take lives, destroy homes and property, and leave charred landscapes. Wildfire can have positive effects on fire-dependent ecosystems.
- **PRESCRIBE FIRES:** Planned fires ignited and controlled by land managers. Used to restore plant and animal habitat, reduce fuels to prevent dangerous wildfires, and control pests and diseases.

Combustion (Grades 7-12 Only)

- Combustion is the act of burning.
- Combustion releases energy in the form of heat.
- Combustion is the opposite of photosynthesis.
 - **PHOTOSYNTHESIS:** Plants create energy from sunlight by combining water and carbon dioxide to make sugar and oxygen.
 - **COMBUSTION (Requires O₂):** Sugars are broken down and energy is released as heat; carbon dioxide and water are components of smoke.

The Fire Triangle

For fire to ignite and spread, three elements must be present. The elements can be thought of as the sides of a triangle (see Student Resource [9](#) or the printable Google resource).

- **HEAT:** Heat is needed to start and continue the combustion process. For fire to spread, heat must move from one piece of burning fuel to another.
- **FUEL:** There must be fuel to burn. Fuel characteristics (type, chemistry, size, shape) determine how intense a wildland fire burns and how far it spreads. The quantity of fuel and how it is arranged also influences fire. Fuels include trees, tree litter, grass, shrubs, and logging slash. Light fuels like grass burn very fast and hot. Heavy fuels like logging slash burn for longer periods of time.
- **OXYGEN:** Oxygen is needed for combustion.

If any one of these three elements is missing, the fire will extinguish!

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Fire Season

In Wisconsin, most wildfires occur during the months of March, April, and May although fires can occur any time certain conditions are present:

- Low relative humidity
- Strong/constant winds
- High temperatures
- Fuels readily available to burn

Fire Ecology (Cover the Basics Only With K-5)

Fire causes short- and long-term changes in ecosystem function, forest structure, and ecosystem composition.

- **ECOSYSTEM FUNCTION:** Ecosystem functions support life through the flow of energy and cycling of matter. Wildland fire can decompose organic material (e.g., leaves, sticks, logs) and make nutrients available for plants to grow. Wildland fire can clear forest trees, shrubs, and other organic material so sunlight can reach the ground and stimulate new plant growth. New plant growth after fire provides food to many types of animals.
- **FOREST STRUCTURE:** Forest structure is the vertical and horizontal spacing of trees in a forest. Both can be changed by wildland fire.
 - Vertical Layers: Overstory and understory
 - Horizontal Spacing: Density of tree cover across the landscape
- **ECOSYSTEM COMPOSITION:** The type and distribution of plants and animals in an area is changed by wildland fire. Some plants cannot survive wildland fire (e.g., maple). Other plants are resistant/resilient (e.g., oak and Jack pine). Fire increases: 1) species diversity; 2) flower, seed, fruit, or nut production; 3) animal numbers and species (eventually). Fire also makes soil more fertile.

Fire-dependent Ecosystems

Wisconsin fire-dependent ecosystems include prairies, sedge meadows, oak savannas, and pine barrens.



Photo Credit: Wisconsin DNR



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WISCONSIN BURNING PERMITS

- Burning permits are required by the Wisconsin DNR to encourage the public to burn safely.
- Burning permits are free and easy to obtain.
- Burning permits prove to be effective.

STEPS TO SAFE BURNING

1. Get a permit.
2. Check before burning – after 11 a.m. on the day you wish to burn.
3. Check the daily burning restrictions for your county.
4. Follow the rules. For more information, visit the Wisconsin DNR website (dnr.wisconsin.gov/topic/forestfire/permits).

FIRE AND HUMANS

Wildfires need a source of ignition – human activities cause the majority of fire ignitions in Wisconsin (over 90% each year).

- Outdoor burning
- Sparks from railroads
- Machinery
- Individual and group activities in rural, forested, or grassland areas

Early American Indian Tribes

Fire was used to create animal habitat and clear areas for agriculture.

- NORTH: Created tree stands of different ages, structures, and composition.
- SOUTH: Expanded grasslands, prairies, and savannas.

1800s

European settlers began to log, farm, and build towns.

- NORTH: Many small fires were allowed to burn to clear more farmland. Often small fires turned large due to fuels left behind from logging.
- SOUTH: Fire was reduced due to agriculture, and resulted in the loss of bison, elk, and cougar that depended on grasslands, prairies, and savannas to survive.
- The largest fire in Wisconsin's history was the Peshtigo Fire of 1871. It burned in Wisconsin and Michigan killing over 1,500 people and burning 1.5 million acres.

1904

Fire control efforts begin in Wisconsin.

1920s-1940s

Fire prevention is adopted. Smokey Bear is introduced in 1944.

Present Day

Use of forest management and prescribed fires.



Photo Credit: Wisconsin DNR

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FLAME GAME

GOAL: To understand how fires are extinguished and the tools used to extinguish them.

Materials

- Safety gear that wildland firefighters wear (e.g., fire-resistant clothing, helmet, eye protection, gloves, boots).
- Items to represent flames that students can extinguish or knock down (e.g., traffic cones or wooden fire cut-outs).
- Tools to put out the fire (e.g., back can, bladder bags, axe, hoe)

Procedure

- Set up the fire ahead of time (items for students to knock down).
- Show students the safety gear. Allow them to try it on, if possible.
- Allow students to take turns extinguishing the fire with available tools.

Extension

- Discuss and show tools that can be used to prevent the spread of fire (e.g., axes, hoes, Pulaski, McLeod, etc.)
- Allow students to try to use some of these tools.

SAFE CAMPFIRE PRACTICE

GOAL: To learn how to safely build, light, and extinguish a campfire.

Materials

- Safe space to build a fire, fuel, ignition source, bucket, and water.

PROCEDURE

- Go through the steps to build a fire (only light if allowed on-site).
- Go through the proper steps to extinguish a fire; complete these steps using water even if the fire was not lit.

Extension

- Discuss other times care is needed with recreational fires including while using grills, camp stoves, and lanterns.



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FIRE SAFETY WITH SMOKEY BEAR (K-2)

GOAL: To understand Smokey Bear's messages.

Materials

- Smokey Bear coloring pages (see Student Resource 11a, Student Resource 11b, and Student Resource 11c or the printable Google resources)
- Drawing paper
- Crayons, colored pencils, or markers

Procedure

1. If indoors, share the Wisconsin DNR video, "F.I.R.E. – Happy 75th Birthday Smokey Bear" (WIDNRTV YouTube).
2. Discuss Smokey Bear's messages.
 - Only you can prevent wildfires!
 - Help Smokey prevent wildfires!
 - 9-out-of-10 wildfires are caused by people!
 - Careless campers cause fires!
 - Drown your campfires!
 - Smokey's friends don't play with matches!
3. Have students color Smokey Bear coloring pages (see Student Resource 11a, Student Resource 11b, and Student Resource 11c or the printable Google resources) OR create a picture of their own to share one of Smokey Bear's messages.

DISCUSSION

Ask students the following questions and discuss their answers.

- Why is it important to prevent wildfires?
- Why is it everyone's job to prevent wildfires?



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THE FIRE TRIANGLE (GRADES 2-3 AND UP)

GOALS: 1) Students will identify and describe the three sides of the fire triangle; and 2) Students will explain how the fire triangle can be used to have a safe campfire.

Materials

- Image of The Fire Triangle (see Student Resource 9 or the printable Google resource)

Procedure

1. Explain to students that to understand fire, they need to understand the fire triangle. Show them the image and tell students that for fire to ignite and burn, it needs three things: heat, oxygen, and fuel. Explain where these things come from.
2. Tell students that if you take away one of the sides of the fire triangle, the fire will go out AND that if any one of the sides is missing, a fire will not start. By understanding the fire triangle, people can prevent the start of wildfires.
3. Help students understand the fire triangle by using the following examples:
 - Suppose we want to have a campfire, what will we need to light it? (MATCHES, THEY ARE A SOURCE OF HEAT.)
 - How do we keep the campfire burning? (ADD WOOD, THAT IS FUEL.)
 - How can we make sure that the campfire doesn't get out of control? (MAKE SURE THERE IS NO SOURCE OF HEAT OR FUEL NEAR/AROUND THE CAMPFIRE.)
 - How can we make sure there is no heat/fuel around our campfire? (WE CAN CLEAR AWAY ALL OF THE STICKS AND LEAVES AROUND THE FIRE. WE CAN BUILD A FIRE RING OUT OF NONFLAMMABLE MATERIALS LIKE ROCKS. WE CAN MAKE SURE WE HAVE WATER NEARBY TO SMOTHER ANY FIRE THAT STARTS OUTSIDE OF THE RING WHICH IS TAKING AWAY OXYGEN.)
 - What if it is very windy? How will that affect the fire? (IT WILL ADD MORE OXYGEN AND MAKE THE FIRE BURN HOTTER AND FASTER. IT CAN ALSO CARRY SPARKS – SOURCES OF HEAT – OUTSIDE THE FIRE RING. WE NEED TO MAKE SURE IT ISN'T TOO WINDY.)

DISCUSSION

Ask students the following questions and discuss their answers.

- Explain how all sides of the fire triangle work to produce fire.
- Explain how understanding the fire triangle can help prevent fire.



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WILDLAND FIRE SURVEY

GOAL: To understand how fires start, the role of fire in nature, and how we can prevent and be safe with fire.

Materials

- Wildland Fire Survey (see Student Resource 📄12 and Teacher Resource 📄1 or the printable Google resources)

Procedure

1. Explain to students that the prevention of wildfire depends on the public understanding how fires start, the role of fire in nature, who is responsible for destruction caused by wildland fire, and how we can be safe with fire. Tell students that during this activity, they will see what they know about these aspects of fire.
2. Give each student a copy of the Wildland Fire Survey (see Student Resource 📄12 or the printable Google resource). Allow them about five minutes to complete the survey independently.
3. Once all students are finished, go through the survey question by question and have students share their answers. Discuss the correct answer for each question (see Teacher Resource 📄1 or the printable Google resource).

DISCUSSION

Ask students the following questions and discuss their answers.

- What questions had the most incorrect answers?
- How could misconceptions about these questions lead to misguided decision-making or action about fire?
- What two things do you think are MOST important for everyone who lives in Wisconsin to know about wildland fire?



Photo Credit: Wisconsin DNR

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FIRE MYTH OR FACT

GOAL: To understand that to effectively manage wildland fire, people must make decisions based on facts not myths.

Materials

- Wildland Fire Facts and Myths Activity Sheet (see Student Resource 13 and Teacher Resource 2 or the printable Google resources)

Procedure

1. Ask students to define the word myth. (AN IDEA THAT IS NOT SUPPORTED BY EVIDENCE.)
2. Explain to students that for people to effectively manage wildland fire, they must make decisions based on facts and not myths.
3. Divide students into teams of two and have each pair identify each statement on Wildland Fire Facts and Myths Activity Sheet (see Student Resource 13 or the printable Google resource) as a myth or fact. Allow students about five minutes.
4. On the board or large poster paper, make two columns and label one "Fact" and the other "Myth." Write the numbers 1 through 6 next to the columns.
5. Go through the questions and have students raise their hand to show whether they think each statement is a fact or myth. Allow students to explain their reasoning.
6. Once you have totals for all statements, share the correct answers and discuss answers that students had incorrect.
7. Discuss what would happen if people based decisions on some of the myths.
8. Tell students preventing destructive wildfires and maintaining the ecological benefits of wildland fire requires that people make informed decisions based on facts.

Extension

Suggest teachers and students read "Up in Smoke: Spring Means Peak Time for Wildfires in Wisconsin" by Joshua Morris, *Wisconsin Natural Resources* magazine (Spring 2022).



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ADDRESS QUESTIONS

- Are there any questions from the presentation?
- Collect notecards/sticky notes and answer questions.

REVIEW KEY MESSAGES

- Over 90% of all wildland fires in Wisconsin are started by humans.
- Education about wildland fire and fire prevention is important.
- Fire needs three elements to start or spread: heat, fuel, and oxygen.
- Prescribed burning is an important tool for fire and forest management.

OPTIONAL WISCONSIN DNR VIDEOS RELATED TO THIS THEME

- Wisconsin Smokey Singers “F.I.R.E. – Happy 75th Birthday Smokey Bear” (WIDNRTV YouTube)
- Gear Up for Fire Season
- Be Ember Aware. Cottages and Cabins
- Think Your Fire is Out?
- State Natural Areas – Prescribed Fire 2017
- Fire Season is Here!

OTHER WISCONSIN DNR OR U.S. FOREST SERVICE RESOURCES

- How Does the DNR Fight Wildfires? (article by Catherine Koele, Wisconsin DNR Forestry News, May 9, 2022)
- Wildland Firefighter Employment (dnr.wi.gov)
- Wildland Fire Careers (www.fs.usda.gov)
- Up in Smoke: Spring Means Peak Times for Wildfires in Wisconsin (article by Joshua Morris, *Wisconsin Natural Resources* magazine, Spring 2022)
- Forest Fire (dnr.wi.gov)
- Fire Management Dashboards (dnr.wi.gov)
- Safe Burning Brochure, Wisconsin DNR (Google resource)

RECOMMENDED TEACHER RESOURCES

All recommended teacher resources are included in the Theme 5 Slideshow Presentation (Google resource). Resources can also be downloaded from the LEAF website (uwsp.edu/wcee/wcee/leaf/leaf-curriculum). Please share the slideshow or link to the website with the educators you work with.

- LEAF K-12 Wildland Fire Guide
- Wisconsin Forest Tales – Chapter 1: Saenomehsaeh Finds a Way (dnr.wisconsin.gov/education/WisconsinForestTales)
- Hot Topics: Wildfires & You (The California Forest Foundation) (Grades 4-8)

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LETTER TEMPLATE – CONFIRMATION LETTER

Theme 1: What Does a Forester Do? Theme 5: The Role of Fire in Forests

Dear (Insert Your Name),

This letter confirms that I am scheduled to present “What Does a Forester Do?” and “The Role of Fire in Forests” to your (insert grade level) class on (insert program date and time).

During my program students will:

- Examine the job of a forester.
- Understand how to become a forester and the skills needed to be a forester.
- Explore forestry-related careers.
- Examine the role of fire in forests.
- Differentiate between “good” fire and “bad” fire.
- Understand how to prevent unplanned forest fires.
- Explore careers related to fire in the forests.

Please review the information I have provided above and contact me if anything is incorrect.

If you would like to do any advanced preparation, feel free to have each student write a question for me on a notecard or sticky note. If time permits, I will answer these questions following the presentation.

I will check in at the office when I arrive. Please let someone in the office know that I am coming. I plan to arrive 10 to 15 minutes before the program is scheduled to begin to set up for the activities. I look forward to working with you soon!

Sincerely,

(Insert Your Name)



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LETTER TEMPLATE – FOLLOW-UP LETTER

Theme 1: What Does a Forester Do? Theme 5: The Role of Fire in Forests

Dear (Insert Your Name),

Thank you for inviting me into your classroom to help students understand the role of a forester and the role of fire in our forests. I hope you and your students enjoyed the program.

If you would like to extend student learning and engagement related to forestry and the role of fire in forests following my visit, please consider these LEAF activities which can be found in the LEAF Wisconsin K-12 Forestry Lesson Guides on the LEAF website.

Link: www.uwsp.edu/wcee/wcee/leaf/leaf-curriculum/

Theme 1: What Does a Forester Do?

- LEAF 2-3 Field Enhancement 1: I Can Be a Forester
- LEAF 5-6 Lesson 6: What is Management?
- LEAF 7-8 Lesson 3: How Forests are Managed

Theme 5: The Role of Fire in Forests

- LEAF K-12 Wildland Fire Guide (www.uwsp.edu/wcee/wcee/leaf/leaf-curriculum/wildland-fire-guide/)
- Hot Topics: Wildfires & You (link in lesson slideshow)
- Learning from the Ojibwe (link in lesson slideshow)

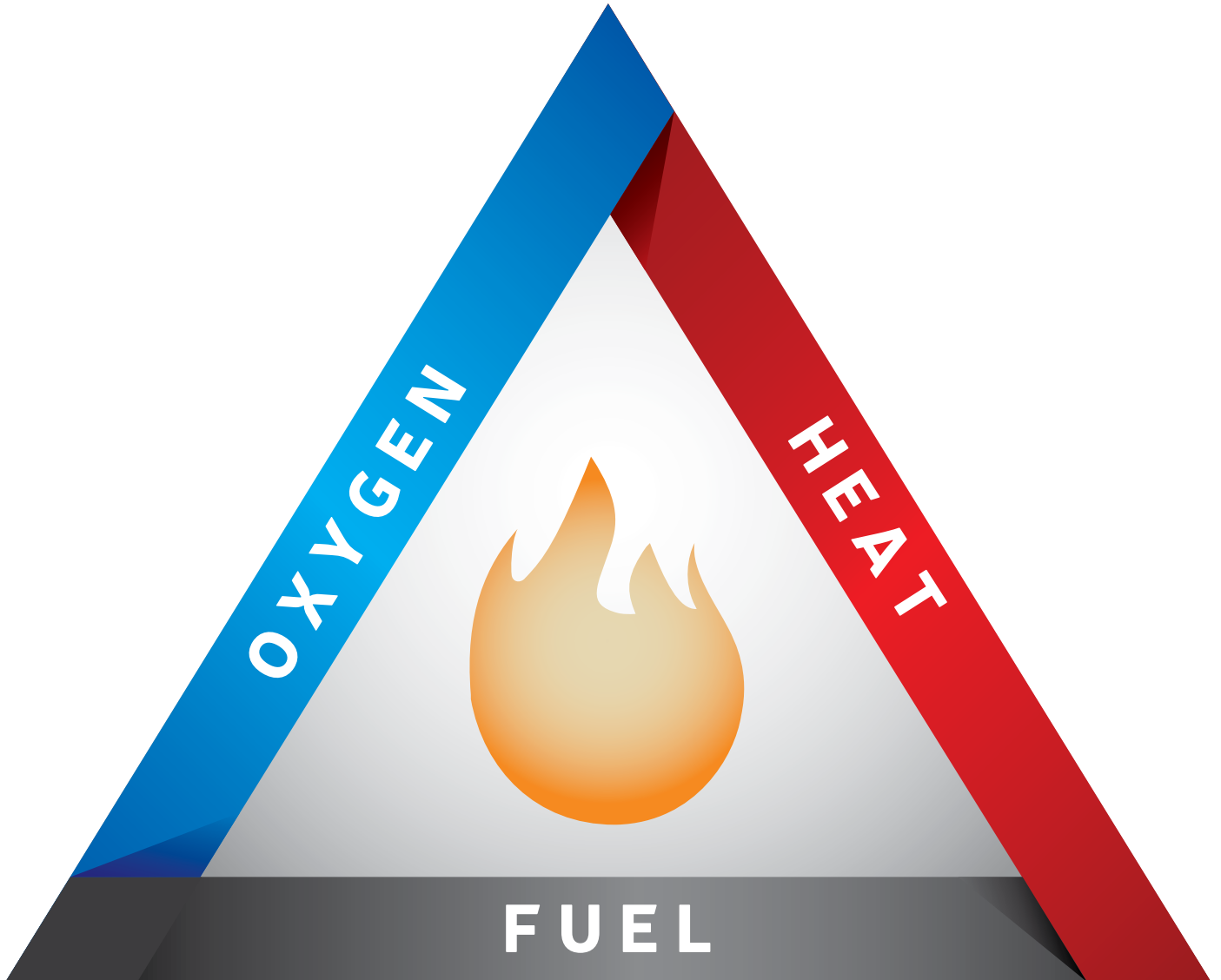
I also recommend several Wisconsin DNR videos, articles, and website resources that are linked in the lesson slideshow.

Please let me know if I can be of further assistance.

Sincerely,

(Insert Your Name)

THE FIRE TRIANGLE



Safe

BURNING



Burn responsibly...or don't burn at all!

Debris burning is the number one cause of wildfires in Wisconsin. Using fire as a method to dispose of vegetative yard waste isn't the only option. While debris burning is legal in most places, let's face it...**it's unsafe, unhealthy and a nuisance.** If you choose to burn, follow these simple guidelines to ensure you are burning SAFELY:



BEFORE BURNING

- Find alternatives to burning debris *before* deciding to burn
- Obtain proper burn permits and follow any restrictions
- Comply with local ordinances that may be more restrictive than state law
- Make certain you are only burning legal materials (*turn over for a complete list*)
- Keep an eye on the weather and avoid burning under windy conditions
- Make certain the area adjacent to the fire is free of all flammables



DURING BURNING

- Have a water source and firefighting tools handy
- Keep the size of the fire small and manageable
- Maintain a mineral soil firebreak around the burn area
- Never leave your fire unattended
- If weather conditions change for the worst, put the fire out
- If your fire escapes, dial 911 immediately!



AFTER BURNING

- Make sure the burn is completely out before leaving
- Use lots of water, drown, stir and repeat until cold
- Go back and check again later for any remaining smoke or embers
- Fun fact: use cold ashes from your burn as a bed for your garden. It makes a great fertilizer!

For a DNR burn permit or to check today's burning restrictions

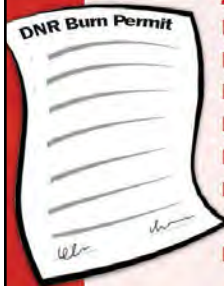
dnr.wi.gov (keyword "fire")

1-888-wis-burn (947-2876)

Responsible BURNING



WHAT CAN I BURN WITH MY DNR BURN PERMIT?



Allowed

- Brush
- Leaves
- Pine needles
- Grass
- Clean wood
- Unrecyclable paper*
- Unrecyclable cardboard*



*Recycling of clean paper and cardboard is required by law!

NOT Allowed

- Garbage
- Plastics
- Shingles
- Foam
- Structures
- Furniture
- Wire
- Metal
- Electronics
- Vinyl products
- Rubber products
- Oil-based products
- Painted, stained or treated wood

ALTERNATIVES TO BURNING

REUSE - Find someone else who can use it, have a yard sale or donate. Bring reusable shopping bags to the grocery store. Leave grass clippings on the lawn; they contain nutrients.

RECYCLE - Separate newspaper, magazines, cardboard, paper, glass, plastic and aluminum, steel or tin cans.

DISPOSE - Discard non-recyclable waste materials at a licensed landfill.

COMPOST - Mulch or collect leaves and plant clippings for composting or move brush piles in the woods for wildlife habitat.

CHIP - Collect brush and clean wood to make mulch or decorative chips, or use as heating fuel in fireplaces.

WAIT - Avoid burning in the spring. The safest time to burn is when the ground is completely snow-covered. Throw a tarp over legal materials and wait until it snows.

For a DNR burn permit or to check today's burning restrictions:

dnr.wi.gov (keyword "fire")

1-888-wis-burn (947-2876)

The Wisconsin Department of Natural Resources is an equal opportunity employer. Alternative format is available upon request. Please call (608) 267-7494 for more information.



PUB FR-551-2015



Smokey's friends don't play with matches!





WILDLAND FIRE SURVEY

Circle the correct answer/answers.

- Which of the following is the leading cause of wildfire in Wisconsin?
 - Debris burning
 - Fireworks
 - Lightning
 - Machine sparks
 - Smoking
 - Campfires
- Who is responsible for damages caused by an accidental, human-caused wildfire?
 - The government
 - The firefighters
 - The person who started it
 - The owners of the damaged property
- Everyone pays for the people and resources used to prevent and fight wildfires.
 - True
 - False
- Wildland fire is a natural process that maintains the health of forests and grasslands.
 - True
 - False
- The danger of catastrophic wildfire changes through the season. The most dangerous time of year is the fire season, which occurs in:
 - Winter (December, January, February)
 - Spring (March, April, May)
 - Summer (June, July, August)
 - Fall (September, October, November)
- Firefighters can stop every wildfire.
 - True
 - False
- What percentage of the 1,500 accidental fires in Wisconsin each year is caused by humans?
 - 20%
 - 50%
 - 70%
 - 90%
- Which of the following are legal to burn? (Circle all that apply.)
 - Plastic
 - Clean wood
 - Kitchen wastes
 - Wet paper
 - Treated or painted wood
 - Furniture
 - Yard waste (leaves, sticks, grass, etc.)

🍁 WILDLAND FIRE SURVEY KEY 🍁

Circle the correct answer/answers.

- Which of the following is the leading cause of wildfire in Wisconsin?
a. Debris burning (35%) <<<
b. Fireworks (3%)
c. Lightning (5%)
d. Machine sparks (24%)
e. Smoking (4%)
f. Campfires (7%)
- Who is responsible for damages caused by an accidental, human-caused wildfire?
a. The government
b. The firefighters
c. The person who started it <<<
d. The owners of the damaged property
- Everyone pays for the people and resources used to prevent and fight wildfires.
a. True (We pay for it through our taxes.) <<<
b. False
- Wildland fire is a natural process that maintains the health of forests and grasslands.
a. True (Eliminating fire from ecosystems can have negative impacts on forest health, and without proper management, lead to dangerous fire conditions.) <<<
b. False
- The danger of catastrophic wildfire changes through the season. The most dangerous time of year is the fire season, which occurs in:
a. Winter (December, January, February)
b. Spring (March, April, May) <<<
c. Summer (June, July, August)
d. Fall (September, October, November)
- Firefighters can stop every wildfire.
a. True
b. False <<<
- What percentage of the 1,500 accidental fires in Wisconsin each year is caused by humans?
a. 20%
b. 50%
c. 70%
d. 90% <<<
- Which of the following are legal to burn? (Circle all that apply.)
a. Plastic
b. Clean wood <<<
c. Kitchen wastes
d. Wet paper
e. Treated or painted wood
f. Furniture
g. Yard waste (leaves, sticks, grass, etc.) <<<

WILDLAND FIRE FACTS AND MYTHS ACTIVITY SHEET

Decide whether each statement is **FACT** or **MYTH** and circle the correct answer.

1. Wildland fire is bad for Wisconsin's forests and grasslands. It destroys ecosystems by killing plants and animals.
 - a. Fact
 - b. Myth
2. American Indian tribes living in what is now called Wisconsin intentionally started more wildland fires before settlers arrived than we do today.
 - a. Fact
 - b. Myth
3. All wildland fires are dangerous and pose a threat to human life, property, and natural resources.
 - a. Fact
 - b. Myth
4. Wildland fires can be planned and controlled in ways that benefit forests and grasslands and reduce the risk of catastrophic wildfires in the future.
 - a. Fact
 - b. Myth
5. Wildland firefighters have the resources to stop every wildfire.
 - a. Fact
 - b. Myth
6. Most destructive wildfires could be prevented if people knew how to be safe with fire.
 - a. Fact
 - b. Myth



Photo Credit: Wisconsin DNR

WILDLAND FIRE FACTS AND MYTHS ACTIVITY SHEET KEY

Decide whether each statement is **FACT** or **MYTH** and circle the correct answer.

1. Wildland fire is bad for Wisconsin's forests and grasslands. It destroys ecosystems by killing plants and animals.
 - b. **Myth <<< Wildland fire has been a part of the Wisconsin landscape for hundreds of thousands of years. Many forest and grassland ecosystems depend on fire to remain healthy.**

2. American Indian tribes living in what is now called Wisconsin intentionally started more wildland fires before settlers arrived than we do today.
 - a. **Fact <<< American Indian tribes used fire to manage for wildlife and clear areas for farming. Many of our forests and grasslands were a result of the fires started before European settlement. Because of lower population densities, their close dependence on and understanding of local natural resources, and their often nomadic lifestyle, fire was much more widely used than it is today.**

3. All wildland fires are dangerous and pose a threat to human life, property, and natural resources.
 - a. **Fact <<< Every fire is dangerous and must be treated so. Without proper planning and control, a fire can easily get out of control. Prescribed fire should be undertaken only by a responsible and trained professional.**

4. Wildland fires can be planned and controlled in ways that benefit forests and grasslands and reduce the risk of catastrophic wildfires in the future.
 - a. **Fact <<< Prescribed fire can help maintain healthy prairie, grassland, and forest ecosystems. Prescribed fire can also reduce the fuel in a forest by burning built up branches and leaves on the forest floor and eliminating smaller trees. This can reduce the risk of severe fire in the future.**

5. Wildland firefighters have the resources to stop every wildfire.
 - b. **Myth <<< Wildfires that exhibit extreme fire behavior, such as crowning and torching, can cross roads, rivers, and the best made firebreaks. They can burn so hot that fire crews are not able to get enough water on them or move out of the way fast enough. Winds can alter the course of the fire, making any suppression strategy dangerous. Some fires are just too intense to stop.**

6. Most destructive wildfires could be prevented if people knew how to be safe with fire.
 - a. **Fact <<< Nine out of 10 wildfires in Wisconsin are accidentally caused by people. Of those, more than one-third are caused by people burning garbage and other debris outside. Improper disposal of ash, careless equipment use, smoking, matches, and fireworks are causes for most of the rest. All of these activities can be done safely to greatly reduce the number of destructive wildfires.**