

Slide 1



Thank you for coming to our presentation on Pennsylvania wildfires. When is Pennsylvania's wildfire season? Most people would suggest summer. This program will help you make the connection between the conditions that make our woods vulnerable to wildfire and times of the year they are likely to occur. Hopefully, you can then be more aware of the risk and do your part to prevent wildfires from starting. After all, people start most wildfires in Pennsylvania.

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Wildfire is defined as an unwanted fire that burns uncultivated fields, grass, brush or forests.

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Wildfires can negatively impact wildlife and their habitat.

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Wildfires can destroy ground cover. This leads to soil erosion and causes sedimentation in streams, rivers, and water supplies.

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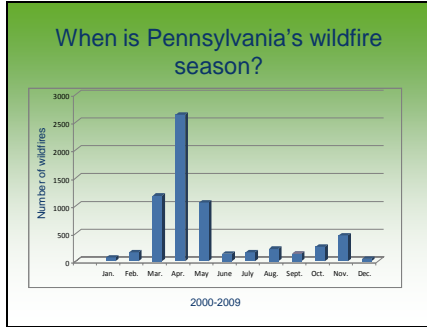
Wildfires damage forests and plants which can take months or years to recover to their natural state.

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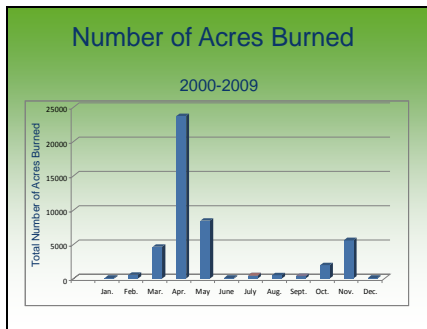
Wildfires can damage or destroy personal property including homes, vehicles, garages, barns, sheds, and other valuable items.

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Typically wildfire risk is greater in the spring and fall when leaves are off the trees. In the spring, after the snow melts and before the new leaves come out, the sun warms and dries the fallen leaves, twigs, and branches. Similarly, in the fall the air is drier and the leaves fall and dry on the forest floor.

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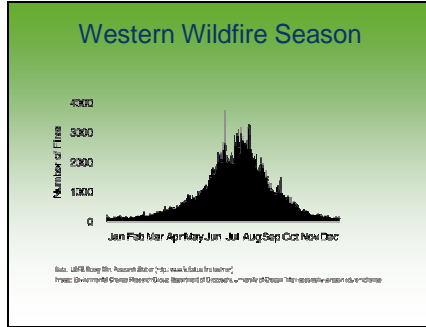
Over the ten year period from 2000-2009 there was an average of 4300 acres burned annually in Pennsylvania.

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Media attention from western wildfires leads individuals to believe all wildfires occur during the summer. Western states have hot, dry summers with frequent dry lightning storms. Lightning is a major cause of western fires. Less than 2% of Pennsylvania wildfires are caused by lightning.

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Western wildfire season is different from Pennsylvania wildfire season. Western wildfire season is continuous with most fires occurring from May to October. Pennsylvania's wildfire season is not continuous. Most occur primarily from March through May and then can resume from October through November.

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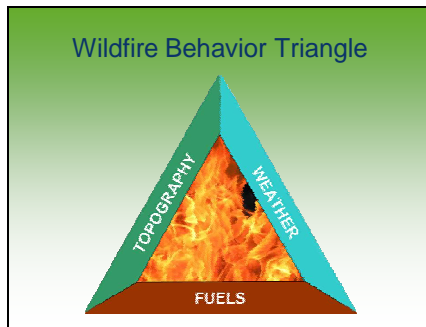
Why are PA fires predominately in spring and fall?

- Direct sunlight
- Dry winds
- Leaves
- Logs and fallen limbs



Trees without leaves in the spring and fall allow sunlight and wind to reach the forest floor; warming the ground and drying leaves, brush and logs.


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Wildfire behavior and intensity are controlled by fuels, topography and weather.

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Fuels

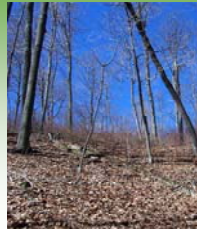


- Grass
- Leaves
- Pine needles
- Twigs
- Branches and logs

Fuels consist of plant and tree materials. Grass, leaves, and pine needles can dry within an hour. Small twigs and branches dry in several hours.

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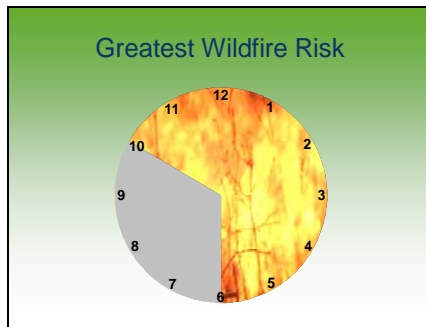
Weather



- Relative humidity
- Temperature
- Wind
- Precipitation

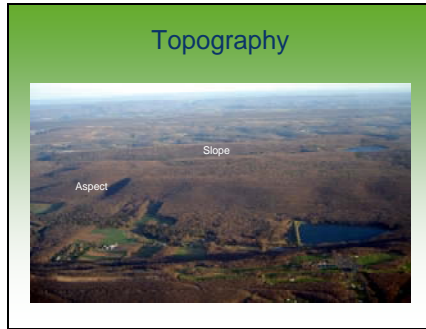
Low relative humidity, warmer temperatures, and wind rapidly dry grass, leaves, twigs, and branches. A lack of rain or snow allows vegetation to dry further and increases wildfire risk.

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Peak burning activity takes place between 10 AM and 6 PM. The driest time of the day begins after the morning dew has evaporated. The sun is high in the sky and beats directly on the ground rapidly drying light fuels. As the sun sets, temperatures drop and relative humidity increases thus reducing fire intensity.

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Topography includes slope and aspect. Each plays a role in wildfire behavior.

- Fire moves faster up steep terrain and slower on flat terrain.
- Aspect is the direction (north, south, east or west) the terrain is facing. North and east facing slopes dry slower in the morning sunlight. South and west facing slopes dry faster in the warm afternoon and evening sunlight resulting in drier conditions.

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Because of Pennsylvania's size, there is a South to North transition as the vegetation becomes green in the spring.

The Process reverses itself as fall colors come upon us and trees lose their leaves prior to winter.

This effects where wildfire activity occurs during these times.

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The next couple slides show a progression of vegetation green up from south to north.

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Progression of fall foliage and leaf drop from north to south

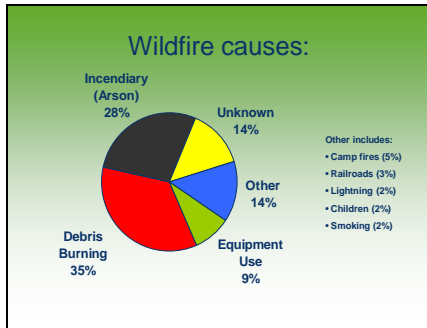
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Human activity causes 98% of all wildfires in Pennsylvania with debris burning and arson as the leading causes.

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The individual responsible for starting a wildfire in Pennsylvania can be held accountable for suppression costs including manpower

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... equipment

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...helicopters

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... and aircraft. (pause for video)
The fire bill could easily exceed several thousands of dollars. The responsible party may also be liable for a civil or criminal suit for loss of personal property and injuries. To reduce the risk of causing a wildfire, there are simple steps individuals can take.

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Practice careful burning. When you burn debris, five simple steps will reduce the risk.

- Clear an area 10 feet around the barrel to prevent sparks from igniting material outside the barrel.
- Have a hose and rake available to quickly put out sparks.
- Use a metal container with $\frac{1}{2}$ inch ventilation holes at base to allow for quick and clean burning of debris.
- Put a $\frac{1}{4}$ inch steel screen on top of barrel as a spark arrester.
- Always make sure the fire is completely out before you walk away from the burn barrel or burning debris.

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Alternatives to Debris Burning

- Recycling
- Mulching/chipping
- Wildlife habitat
- Composting



<http://www.earth.com/2014/04/07/alternatives-to-debris-burning/>

Instead of burning debris, alternatives include recycling materials, mulching or chipping lawn debris, or creating brush piles in wooded areas. Composting debris creates rich organic matter which can be added to gardens and flower beds.

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Alternatives to Campfires



Check forest fire danger with your local Bureau of Forestry office. When local or county-wide burn bans are in effect, campfires should not be used. When camping, use a stove for cooking to reduce the risk of wildfire. A self-contained metal or ceramic fire pit can be used in place of an open campfire. And as always, be sure camp fires are put out cold.

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Prevention Message



There will be a 3-5 second delay before the video starts.

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For more information, contact:



- DCNR Bureau of Forestry
- Local Forest Fire Warden
- Local Fire Company

www.dcnr.state.pa.us



For more information, Contact your local Bureau of Forestry office, Forest Fire Warden, or fire company.