

Wildfire Preparedness



How Do Wildfires Start



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The National Geographic Society defines a wildfire as an uncontrolled fire that burns in woodland vegetation, often in rural areas. Nationally, America lost about 2.1 million acres of land in 2019, due to these violent outbreaks.

While fires cause severe threats to humans and property, they are also essential to the survival of some plant

species and the overall ecosystem.

Certain plants like manzanita, chamise and scrub oak rely on fires to germinate their seeds. The process promotes propagation and helps them pass through their regular life cycle. Wildfires are also essential to eliminate harmful insects and diseases that cause damage to trees. Low-intensity flames are efficient at cleaning debris and underbrush on the forest floor, adding nutrients to the soil and opening the space to let sunlight access the ground.

There are a few factors involved in how a wildfire starts, but once it's inflamed, weather conditions commonly determine how quickly and vastly it spreads. The National Park Service

two sources can cause these events.

HUMAN INVOLVEMENT

Studies from the United States Forest Service Research Data Archive shows that humans cause nearly 85% of wildland fires in the U.S. Some of the typical causes for these infernos include:

- Unattended campfires.
- Burning of debris.
- Equipment use and malfunctions.
- Negligently discarded cigarettes.
- Intentional acts of arson.

When building a campfire, make sure the surrounding perimeter is free from twigs or branches as they can cause a controlled fire to accelerate. It's also crucial to completely extinguish the flames

before leaving the site by soaking it with water or slow its progress with sand.

NATURE'S INVOLVEMENT

In addition to human-caused fires, nature is sometimes solely to blame. When lightning strikes, two components are present. The first is called a leader, which is considered the probing feeler sent from the clouds. Next, a stroke occurs that produces the visible bolt or flash. The natural occurrence is also subject to two separate categories: cold and hot lightning. While hot bolts typically result in currents with less voltage, they are usually blamed for fire outbreaks as they occur for a more extended period.

Wildfire Risks in America

Wildfires have decimated large parts of the Western United States in recent years, as climate conditions have made preventing and controlling them incredibly difficult.

According to the National Interagency Fire Center, America experienced 50,477 wildfires in 2019. As of mid-July, in 2020, we have seen 27,423. This is an increase from 22,327 during the same period last year. Fires cause significant harm to property, wildlife and both human and animal lives.

While California is known for the risks of forest fires, according to the World Resources Institute, five other states broke records during 2018.

- Colorado: most fire alerts.
- Hawaii: most land burned.
- Oregon: most expensive fire season.

- Utah: most structures burned.

- Nevada: largest single fire.

As responsible American citizens, it's important to understand that our actions can have a direct impact on the frequency and severity of wildfires.

Recognize the risks and extent of harm caused by wildfires from these statistics reported by the Federation of American Scientists and the



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Insurance Information Institute.

- Over the past 10 years, there were an average of 64,100 wildfires annually, resulting in about 6.8 million acres burned.

- More wildfires occur in Eastern states, but Western outbreaks are larger and burn more acreage.

- The 2015 fire season was the largest on record, burning

10.1 million acres.

- While humans cause most wildfires, those resulting from lightning strikes tend to be larger and burn more land.

- Of the 1.4 million wildfires occurring since 2000, 197 exceeded 100,000 acres, and 13 events raged over 500,000 acres.

- California is estimated to be the top state with the high-

est extreme wildlife risk, with over 2 million properties at stake.

- The Camp Fire of 2018 that occurred in Butte County, California, caused an estimated loss between \$8.5 billion and \$10.5 billion.

- In 2019, 65% of the nationwide acreage burned by wildfires was on federal land. The other 35% occurred on state,

local or privately owned properties.

- The 2018 fire season resulted in the burning of 25,790 structures, with 70% of those being personal residences.

- The Hill and Woolsey Fires that started on Nov. 8, 2018, burned about 97,000 acres, destroyed an estimated 1,600 structures and killed three people.

Smokey Bear Campaign

Introducing the life-threatening severity of wildfires to children can be a challenging discussion. However, they must understand the risks and be prepared for the emotional distress an evacuation may cause.

Fortunately, parents can take tips from a friendly and familiar character to help promote campfire safety.

The familiar words, “Only YOU Can Prevent Forest Fires” became the official Smokey Bear slogan in 1947. The fictional bear was created by the United States Forest Service and the Ad Council in 1944 to promote forest fire prevention. Since his introduction, the campaign has focused on educating the public about their impact on dangerous wildfires.

THE CAMPAIGN ORIGINS

When the Smokey Bear campaign was expressed to the public, the original slogan was, “Smokey Says – Care Will Prevent Nine out of 10 Forest Fires.” Since its inception in 1944, the project has become the longest-running public service advertising campaign in United States history. While today’s message is clearly about promoting wildfire safety, its origins date back to World War II.



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After Japanese planes attacked Pearl Harbor in 1941, Americans were rattled that attacks occurred directly on the mainland. The risks of more impending threats raised concern that exploding shells may ignite the Pacific Coast, resulting in raging wildfires.

Because many firefighters and first-responders were deployed during the war, communities were tasked with

resolving infernos alone. To increase awareness and urge citizens to be careful, the Forest Service organized the Cooperative Forest Fire Prevention.

The campaign credits the creation of the animated Smokey Bear on the success of Disney films like Bambi. The corporation loaned its blockbuster character’s images to the CFFP for advertising purposes for one year. The ani-

mated fire prevention symbol was auspicious and led to the need for a majestic and powerful animal: enter Smokey Bear.

FUN FACTS

While teaching your children essential lessons about wildfire safety, highlight the Forest Service’s fun facts to keep their attention.

- Smokey Bear’s middle name is not “The.” Songwriters penned this addi-

tion to help with the rhythm of campaign songs.

- A real-life Smokey Bear was found refuge in a tree during a wildfire in the Capitan Mountains of New Mexico, in 1950. He was rescued and given a home at the National Zoo in Washington, D.C.

- The slogan, “Only YOU Can Prevent Forest Fires,” was updated in 2001 to state, “Only You Can Prevent Wildfires.”

Prepare before a Wildfire

Preparation is key to surviving a wildfire when you live in harm's way.

Fortunately, an inferno's expected track can be forecasted, giving residents plenty of time to react.

If you live in an area where these wildfires are frequent, pay attention to the experts and prepare for an evacuation.

The United States Department of Agriculture suggests that fire season for many regions is becoming a year-round event. In the past, the communities would employ volunteer responders during the summer as the occurrences were more prevalent.

Today, because snow melts earlier and rain is coming later in the fall, federal agencies and fire departments have shifted their strategy to plan for a six to eight-month season.

As those who are tasked with protecting you adjust their plan on wildfire response, you must rethink your approach to keep yourself and family safe. Follow these tips from the Federal Emergency Management Agency when creating your preparedness plan.

KNOW HOW TO STAY INFORMED

Receiving timely information is crucial when evacuating due



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to the risk of a wildfire. Pay attention to the news forecasts. Meteorologists and other experts may discuss the threat of the inferno turning in your direction. Check with your local authorities for access to text or email alerts about emergencies in your area.

You should also consider investing in a battery-powered

weather radio approved by the National Oceanic and Atmospheric Administration. Ensuring you can stay informed during a power outage gives you a beneficial advantage to stay informed.

PREPARE AN EVACUATION ROUTE

Your local community

should have an evacuation in place that identifies escape routes, and alternative paths in case roads are blocked. If wildfire risks are pertinent, make sure to keep your car fueled in case you must leave rapidly.

Make sure to have a destination in mind. Consider asking friends or family who live far

from the threat or scheduling ahead at a distant hotel.

Stock Supplies

A go-bag is a must-have advantage that will accelerate your escape. Store essential items like food, water, clothing, a first-aid kit and important documents that you may need to recover after property damage.

Protect Your Property

Wildfires can cause mass damage to communities and personal property.

Significant infernos may lead to evacuations for numerous people who are at risk. While a successful escape saves lives, do you know how to protect your home when an outbreak occurs? If you live in a region that's susceptible to an active fire season, follow this advice from the Natural Resources Defense Council to defend your property while you're away.

TIPS FOR LANDSCAPING

The landscaping in your yard should be considered the structure's first line of defense. If a fire can feed on trees or greenery that is near your home, it can overtake the property.

An excellent place to start in reinforcing your protection strategy is to eliminate plants within five feet of the house. Be attentive to branches that overhang in the perimeter and trim them back.

The NRDC recommends being conscious of the types of plants you grow near the home.

Here are some different types to consider during an outdoor renovation.

- Succulents are a great option as they store water in their leaves and stems and don't ignite when exposed to fire.



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- Choose plants with high moisture, high soap and high salt content. Examples include soapweed yucca, salt-bush and crabapple.

- Avoid decorative grasses, twiggy plants, bushes and small trees as they are highly flammable.

- Ask your nursery for plants that are considered drought tolerant.

TIPS FOR THE STRUCTURE

You should also consider fire-proofing your home during makeovers or when building. If you're due for a new roof, avoid using wooden materials. Instead, talk to a contractor about fire-resistant material like slate, terra cotta or metal roofing.

It's also imperative to ana-

lyze your home's covering periodically and remove twigs or pine needles that prevalent on the rooftop or gutters.

Windows should also get special attention. Invest in fire-resistant glass, like double-paned and tempered increases the range of heat they can withstand before cracking.

Make sure to keep flamma-

ble items at least 30 feet away from the structure. This includes equipment like vehicles with fuel, deck furniture and propane grills.

While you can't predict the level of damage your property will experience during a wildfire, preparing your home for the worst-case scenario can offer peace of mind while you evacuate.

Returning Home after a Fire

In some severe cases, residents may be forced to evacuate from the threat of a wildfire. Because the infernos are relentless and unbiased about what they impact, it's crucial to listen to the experts when they determine you should leave.

Ensuring you are a safe distance from the fire while it blazes helps first responders focus their efforts on extinguishing it rather than saving citizens that are trapped in their homes. According to Sleepy Hollow Fire Protection District, 60% of lives lost to wildland fires are those that choose to stay and ultimately evacuate too late.

If you fear that an inferno is too close for comfort, it's never too early to leave. However, once local authorities instill a mandatory evacuation, it's imperative to escape before the recommended date.

While leaving the scene is the only guaranteed way to save you and your family's lives, it can be anxiety-inducing to think of what is happening at home.

Prepare yourself for a safe return with this advice from the organization Ready for Wildfire.



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LISTEN TO THE EXPERTS

If your home is spared from a forest fire, there are several precautions to follow. Listen to your local experts before doing the following:

- Avoid returning or entering your home until fire officials say it is safe to do so.
- Do not drink or use water from the faucet. Fires can

sometimes damage water-supply systems and cause pollution.

- Never turn on the power until you have inspected the home for a natural gas odor.

If you have any doubts about your home's condition, post-fire, don't hesitate to call a fire inspector to analyze the property.

EXAMINE YOUR HOME

When it's safe to re-enter, you can quickly discover common problems related to fire or smoke exposure. Check for smoke or sparks throughout both the interior and exterior of the home. Some key places to check are in the gutters, rooftops and attics. You may find ash pits or hidden embers

under closer inspection.

Check the pantry and cabinets for any food exposed to heat, smoke, floodwaters or soot. They should be discarded immediately. It's also important to check the home for power. If it is not working, ensure the main breaker is intact before calling the utility company for assistance.

Prepare your Small Businesses

Depending on the strength and severity of a wildfire, both residences and businesses can feel its impact. If you're the owner of a small business or a concerned employee of a company who lacks a proficient emergency plan, now is the time to engage a strategy.

The United States Small Business Administration recommends these tips to get started in your preparedness policy.

- Ensure there is an adequate number of appropriate fire extinguishers in strategic locations and train employees on how to use them properly.
- Consider installing a sprinkler or water-supply system to control small fires until emergency personnel arrives.

- If your primary water pump requires electricity, invest in a backup unit powered by gasoline or diesel fuel.

- Have tools like rakes, axes, saws, buckets and shovels available to extinguish a manageable outbreak.

It's also crucial to create a thorough evacuation plan for each area of your building. Your employees should know



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where to meet after an escape and instill protocols to account for everyone. It's beneficial to draft two plans, in case one of the routes is closed or is impacted by the fire.

DURING A WILDFIRE

Ensure your staff exits the building and enters the

pre-designated shelter area such as a safe room, basement or storm cellar. If employees must remain in the building during a threat, stay in the most interior room on the lowest level.

Make sure to shut all doors and windows and hold refuge under a sturdy table to avoid injury from falling debris.

When it's safe to do so, mark the exterior of your location with distress signals to alert emergency workers. Consider using bright-colored materials or clothing to attract attention.

AFTER A FIRE

Once the threat has passed, immediately check the roof

for signs of damage or active embers. They should be extinguished. Check your building for power, if it's not working, the blaze likely caused a breaker to trip. If you feel there is still a sense of danger present or signs of damage, contact 911 and your local experts before resuming business.