

Wildfire Prevention Educational Package

This package was created to provide teachers a tool to teach basic wildfire prevention to students. The target is fourth grade. Teachers have the opportunity to use the package themselves or call the local wildland fire management agency to assist in the implementation of this program.

The developers of the program attempted to adhere to the following Louisiana Department of Education curriculum standards for fourth grade:

- Earth and Space Science
 1. Identify various types of weather-related natural hazards and effects (ESS-EA4)
 2. Identify safety measures applicable to natural hazards (ESS-E-A4)
- Reading and Responding
 1. Determine the meaning of unfamiliar words using knowledge of word origins and inflections (ELA-1-E1)
 2. Answer literal and inferential questions about ideas and information in grade-appropriate text in oral and written responses (ELA-1-E5)
- Places and Regions
 1. Describe and compare the distinguishing characteristics of various land forms, bodies of water, climates, and forms of vegetation in the United States (G-1B-E1)
- Environment and Society
 1. Identify natural disasters, their causes, areas prone to them, and how those disasters affect people and the environment (G-1D-E3)
 2. Describe the importance of specific natural resources to human survival and human endeavors (G-1D-E4)

Package contents:

- CD containing:
 1. Story of Smokey Bear (PDF format)
 2. Fact Sheet (PDF format)
 3. Study Questions for Students(PDF format)
 4. Study Question Answer Sheet (PDF format)
 5. Suggested Discussion Topics for Teachers (PDF format)
 6. Package Contents Document (PDF format)
 7. Adobe Reader
- A hardcopy of each of the sheets included electronically on the CD
- Contact information for the agency providing the program

Smokey Bear: From Bear Cub to National Icon



Many people do not realize that the story of Smokey Bear is true. It is about a real bear cub who was injured in a wildfire started by a careless human in a forest in New Mexico. No one knows for sure exactly how the fire was started, whether that careless person dropped a lit match or left their campfire burning, but everyone knows what happened next on that hot, dry day in New Mexico.

During a drought season, a lookout in a fire tower spotted smoke in the nearby forest of the Capitan Mountains of New Mexico. He called the location of the smoke into the nearest ranger station.

Firefighting crews rushed to the scene where they discovered a large wildfire being pushed by a strong wind. The fire was burning in the trees and grass of the forest. More firefighters were needed to help gain control of the raging fire. As soon as the fire crews thought they were going to get control of the blaze, the wind would send burning material across their control lines.

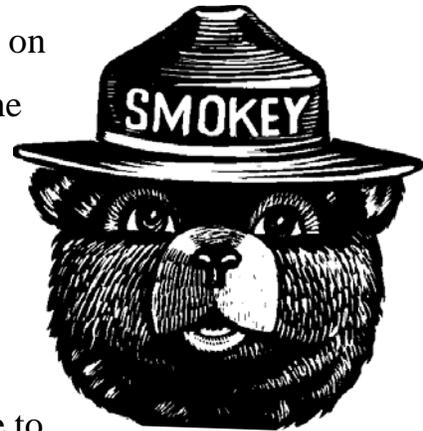
When the smoke had cleared from a portion of the fire, firefighters spotted a little bear cub that had been caught in the path of the wildfire. He had taken refuge in a tree that was now nothing but a charred, smoking snag. He had been badly burned on the paws and hind legs. The firefighters removed the little bear cub from the burned tree. The cub needed medical attention and was flown

in a small airplane to Santa Fe, New Mexico where his burns were treated and bandaged. For the next several days, veterinarians and game wardens nursed the little bear cub back to health. His fur began to grow back where he had been burned and his bandages were removed. Then the cub was given a name. He became known as Smokey Bear.

The news about Smokey Bear spread swiftly throughout the United States. Television, newspaper, and radio reporters broadcasted stories about Smokey Bear. Many people wrote or called to inquire about the little bear.

Since Smokey had been orphaned, he was put on an airplane and flown across the country to live in the National Zoo in Washington, D.C.

Fire officials throughout the nation decided Smokey Bear would be the perfect symbol for fire prevention to remind visitors to the forests to be careful with fire. Smokey would serve to tell people to use water to put out their campfires, to avoid burning yard debris on windy days, and that fire is a tool that must be used with great care. He would help kids remember not to play with matches or anything that could start a fire.



Over the last several decades, Smokey has transformed from a small bear cub in New Mexico into an icon recognized throughout the world. Despite all of his hard work, Smokey's goal to prevent unwanted human caused fires is a big task. Each year in the United States, nine out of ten fires are started by humans. Since that means ninety percent of all wildfires are preventable and do not have to start, Smokey will continue to remind us that, "Only you can prevent wildfires."

Smokey Bear Facts:



- ‡ Smokey is an American Black Bear.
 - ‡ Smokey's birthday is recognized each year on August 9th.
 - ‡ Smokey is the one of the most recognized icons in the United States, second only to Santa Claus.
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Wildfire Facts:

- ‡ Over the last ten years, the United States has averaged 100,466 wildfires each year.
- ‡ Over the last ten years, the United States has averaged 4,923,848 acres burned in wildfires each year.
- ‡ Approximately 90% of all wildfires in the United States are caused by people.
- ‡ The most deadly wildfire in United States history was on October 8, 1871 in the logging community of Peshtigo, Wisconsin. Over 1,200 lives were lost and 2 billion trees burned in the fire.



Louisiana Forest Facts:



- ‡ The state tree of Louisiana is the bald cypress.
- ‡ Forests cover 14 million acres of Louisiana, which equals about 50% of the state's total land area.
- ‡ Forestry is the leading agricultural crop in Louisiana.

Discussion Questions for Teachers

What are some similarities in the forests in New Mexico and Louisiana?

People use the forests in both states for natural resources production such as timber; recreation opportunities such as hiking, camping, hunting; and employment opportunities. The natural resources in each state also bring in tourists from other areas of the world to enjoy.

Both states have forest structure such as trees, shrubs, and grass. They both have rivers and streams. In forests of New Mexico and Louisiana, you can find a variety of wildlife species.

What are some differences?

Temperature

- New Mexico – Temperature varies by elevation, from -15 degrees Fahrenheit to 95 degrees Fahrenheit.
- Louisiana – Temperature varies from teens to over 100 degrees Fahrenheit.

Elevation

- New Mexico – Elevation ranges from 2,817 feet to 13,160 feet
- Louisiana – Elevation ranges from 8 feet below sea level to 535 feet (Driscoll Mountain)
- Different species of trees, grass, and shrubs grow at different elevation; different wildlife habitat is created by the variety of plant species at differing elevation ranges. Louisiana has wildlife such as alligators in the swamps to deer in the forests. New Mexico has no swamps and alligators, but they do have deer in the forests like Louisiana. They also have creatures such as lizards in their deserts.

Fire Season

- New Mexico – Fire season starts March or April and continues through mid-July.
- Louisiana – Fire season starts mid-August and continues through March.

Vegetation

- New Mexico – Because New Mexico is much drier than Louisiana and has no coastal influence, drought tolerant species such as desert cacti grow in lower elevations. Tree species such as Ponderosa Pine grow as the elevation gets higher. Species such as Englemann spruce grow in the high elevation subalpine forests.
- Louisiana – Vegetation ranges from grasses and bald cypress in the marshes and wetlands to the pine and hardwood forests throughout the state bayous, swamps, and Gulf of Mexico coastline.

Why do we care about preventing wildfires?

Wildfires can have costly effects of people's lives, natural resources, and wildlife habitat.

Wildfires can:

- Destroy or damage valuable forests and natural resources such as timber, water quality, or soils.
- Alter wildlife habitat sending animals to seek food and shelter elsewhere.
- Cause firefighters to risk their lives to put the fires out.
- Burn homes and property in its path.
- Compromise public safety by creating chaos and create potential health impacts due to smoke.

Possible Vocabulary Words:

Icon – symbol (Smokey Bear for fire prevention); one who is the object of great attention and devotion.

Wildlife – wild animals and vegetation, especially animals living in a natural, undomesticated setting. (Deer, squirrel, rabbits, etc.)

Drought – a long period with little or no rain causing very dry conditions.

Symbol – something representing something else by association, resemblance, or convention, especially a material object representing something abstract.

Transformed – changed the nature, function, or condition of (bear cub to National icon).



Review Questions

1. Why would a wildfire be considered a natural hazard?
2. List one thing people could do to prevent a wildfire from starting from the following causes:

Abandoned campfire _____

Debris burning _____
3. Why do you think Smokey Bear has become the symbol for fire prevention?
4. What state in the United States did the fire where Smokey Bear was hurt take place
5. What is a drought?
6. Name one similarity between forests in New Mexico and forests in Louisiana.
7. Name one difference between forests in New Mexico and forests in Louisiana.
8. What percentage of wildfires in the United States annually are human caused?
9. Why do we say human caused fires are preventable?



Review Questions—POSSIBLE ANSWERS

1. Why would a wildfire be considered a natural hazard?

Wildfire is a natural hazard because it burns natural resources and forests. Also wildfires can occur naturally from lightning.

2. List one thing people could do to prevent a wildfire from starting from the following causes:

Abandoned campfire

never leave a campfire unattended; use water to completely extinguish the fire before leaving the site.

Debris burning

never leave a burning debris pile unattended; make sure the fire is completely out before leaving the site.

3. Why do you think Smokey Bear has become the symbol for fire prevention?
Smokey is the perfect icon because his story is true; he was injured in a human-caused wildfire.

4. What state in the United States did the fire where Smokey Bear was hurt take place?

New Mexico

5. What is a drought?

a long period with little or no rain, which can dry a forest to make it more susceptible to wildfires

6. Name one similarity between forests in New Mexico and forests in Louisiana.

Both have natural resources, are enjoyed for recreation purposes, and provide employment opportunities.

7. Name one difference between forests in New Mexico and forests in Louisiana.

Variety of species, elevation, temperature, timeline for fire season

8. What percentage of wildfires in the United States annually are human caused?

90%

9. Why do we say human caused fires are preventable?

Since they are caused by people, they do not have to start; people have control over the ignition of these fires. Fires started by lightning are outside of our control and not preventable.