

Take Part in the Smokey Patrol

Prevent wildfire and conserve our forests

Dear Educator,

Smokey Bear needs your help again. This time it's to train the next generation to prevent wildfires. Wildfire prevention is everyone's responsibility. That's why the Ad Council, National Association of State Foresters, and US Forest Service, along with curriculum specialists Young Minds Inspired (YMI) are pleased to present this free instructional program about forest science and wildfire prevention. Tied to national standards of the elementary science curriculum, the program features specific ways students can take a personal role in wildfire prevention and the maintenance and conservation of our nation's natural areas.

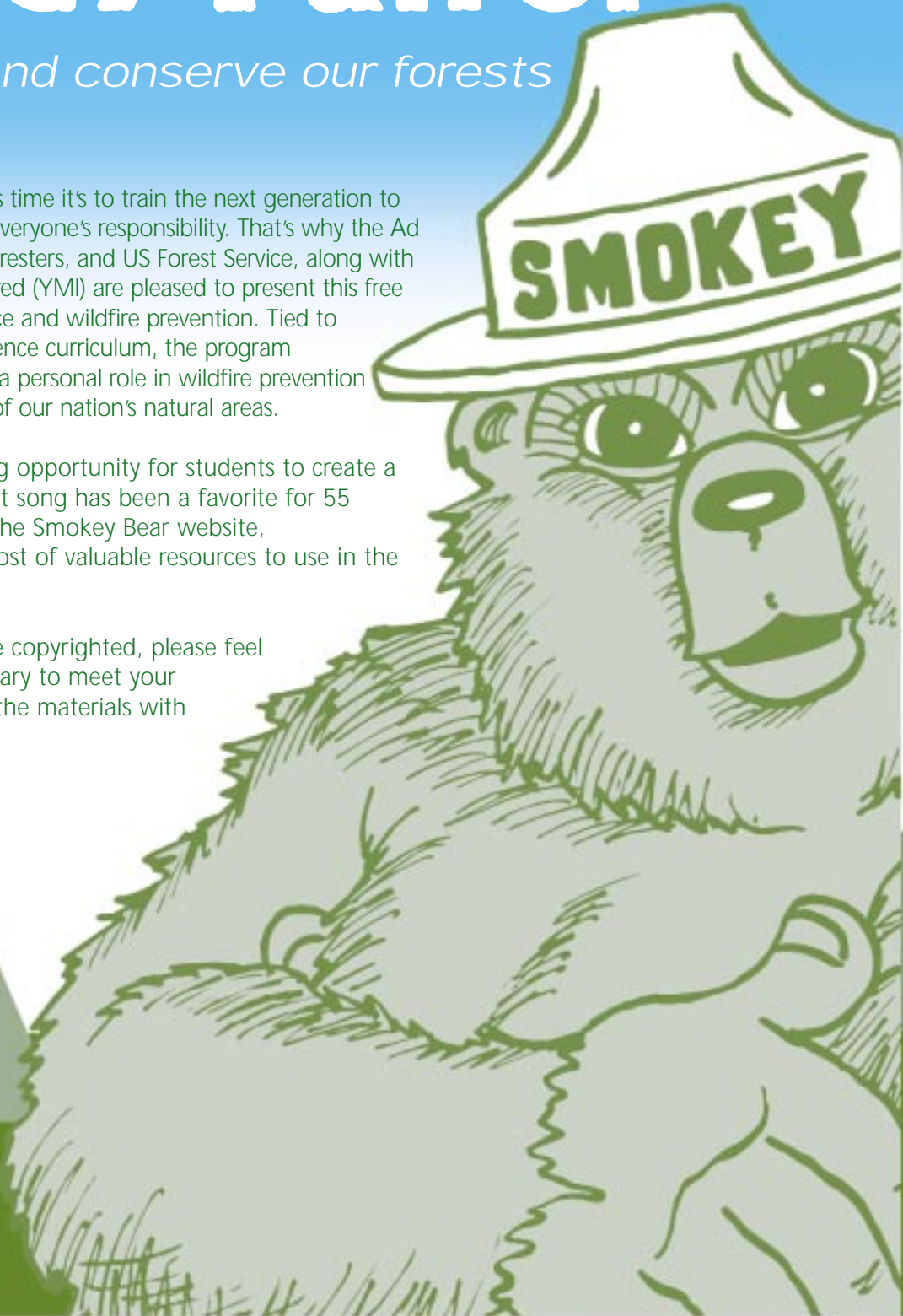
The material also introduces an exciting opportunity for students to create a new song for Smokey Bear. The current song has been a favorite for 55 years. Details are provided in this kit. The Smokey Bear website, www.smokeybear.com, features a host of valuable resources to use in the implementation of this teaching kit.

While the materials in this program are copyrighted, please feel free to make as many copies as necessary to meet your students' needs, and be sure to share the materials with other teachers.



Roberta Nusim

Roberta Nusim,
Publisher and former teacher



Program Objectives

- To teach students about forest ecology and forest science through a variety of research projects
- To educate students about the nature of wildfire in relation to wildland fire management practices
- To develop students' understanding of and appreciation for the resources and importance of forests in our everyday lives
- To educate students about types of careless behavior that could lead to destructive wildfire, and how these behaviors can be avoided
- To teach children to be good stewards of the land
- To encourage creative thought and expression
- To involve parents in wildfire prevention

Program Components

- This 4-page teacher's guide
- Four reproducible student activity masters
- One colorful and informative wall poster
- A reply card for your important comments

Target Audience

This program is designed for 5th graders but may be tailored to suit the needs and abilities of your students.

How to Use This Program

Provide one activity sheet and pencil for each student. Most activities require Internet access. Activity 4 should be reviewed in class before being sent home.

How to Use the Poster

Ask students to share what they know about wildfire, wildfire prevention, and Smokey Bear. Then share the poster. Have students discuss the pictures and read Smokey's Prevention Rules. Then ask them to bring in photos of their family enjoying the outdoors responsibly and safely and adhere them over the pictures printed on the poster. Hang the poster in a prominent classroom location to stimulate interest throughout this teaching unit.

National Standards for Upper Elementary Grades

Activity 1	Smokey's Forest Science	Populations and Ecosystems, Diversity and Adaptations of Organisms, Transfer of Energy
Activity 2	Forest Treasures	Abilities Necessary to Do Scientific Inquiry, Understanding Scientific Inquiry
Activity 3	Wildfire Detectives	Natural Hazards, Risks and Benefits
Activity 4	Be a Smokey Song Writer	Science and Technology in Society, Communication Strategies



Smokey's Forest Science

This activity introduces students to forest science and forest ecology—crucial to understanding the important role they can play in wildfire prevention.

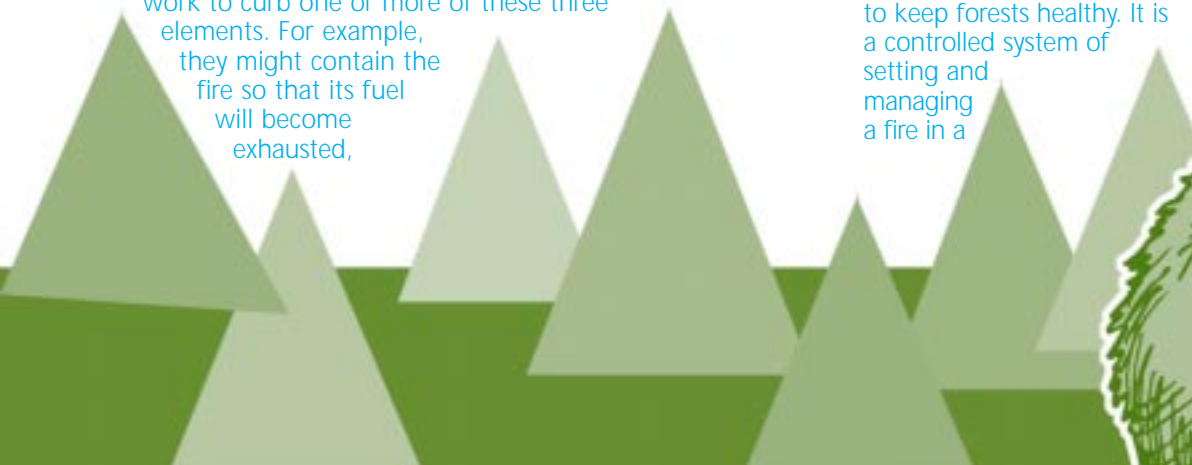
Part A. Distribute the activity masters. Have students complete the True/False quiz. Review the answers as follows:

1. *False.* Heat, oxygen and fuel are the components of the fire triangle. The interaction of the three, as illustrated in the fire triangle (www.smokeybear.com/elements_triangle.asp), is responsible for the creation and maintenance of fire. When managing a wildfire, firefighters work to curb one or more of these three elements. For example, they might contain the fire so that its fuel will become exhausted,

use water to reduce the heat of the fire, or use dirt to smother the fire by reducing its oxygen supply.

2. *True.* Fire occurs naturally in our nation's forests in 25-200-year cycles. Some areas burn even more often—some annually. Without fire or other disturbances, forest vegetation goes through successional changes. Light-loving plants are replaced by shade-loving plants. This is a normal process. Prescribed fires are used to bring the forest back into a condition where light-loving plants are in the majority.

3. *False.* Prescribed fire is used by wildland fire management teams to keep forests healthy. It is a controlled system of setting and managing a fire in a



safe way to keep forests clear of dense vegetation that provides excessive fuel for wildfires. It also aids in the new growth of native vegetation and maintains the many plant and animal species whose habitats depend on periodic fire. Prescribed fire is one of the most effective means of preventing major wildfires.

4. *True.* Hot, dry, and windy conditions cause a wildfire to spread quickly. In addition, lightning strikes from thunderstorms often ignite wildfires.

5. *False.* Since 1991, there have been up to 100,00 wildfires a year.

6. *False.* Firefighters do use water to control wildfires, but they also remove the fire's fuel by cutting down trees or using bulldozers to create a fire break.

7. *False.* Nearly every ecosystem in the country has some kind of plant that is dependent on periodic fire for its survival.

8. *True.* Both directly and indirectly, people are the major cause of wildfires. Carelessly discarded cigarettes and other smoking products, sparks from cars, trains, and power equipment, power lines that spark, campfires left unattended, and arson are all examples of human involvement in wildfires.

9. *True.* Good fires are prescribed fires (see #3). Any unwanted and unplanned fire burning in forest, shrub, or grass, is a bad fire. Because a wildfire's behavior is erratic, wildfires can destroy lives, property, and wild areas (our forests, grasslands, etc.).

10. *False.* Since 2006, wildfires have been increasing due to droughts and extremely high temperatures; more people living in forested areas; and lots of vegetation that burns.

Have students visit the National Interagency Fire Center at www.nifc.gov/fireinfo/nfn.html to track the locations and conditions of wildfires currently burning in the U.S.

Part B. Help students use the Smokey Bear website at www.smokeybear.com to complete Smokey's Field Research Notebook. From the Smokey Bear home page, click on the Only You box and then look for the Fire's Natural Role section. Once there, click on View the Fire Dependent Ecosystem map or go directly to www.smokeybear.com/natural_ecosystem.asp. Assign each student team a different region of the United States based on the map. You might also have students use the school library for additional resources on their selected forest type and to find photographs or make sketches of specific vegetation. After students have completed their research, schedule a *Smokey's Forest Science Day* so students can present their findings to the class.



Forest Treasures

This activity helps students understand that wildlands or other natural areas are not only a home to wildlife but also provide important natural resources and products the students use everyday.

Part A. Have students circle the hidden words and then determine how the following products are used: gum (*chewing*), turpentine (*paint*) lumber (*telephone poles, houses, bunk beds, and pencils*), wood pulp (*newspapers, books, and tissues*), maple syrup (*pancakes*), cinnamon and nutmeg (*spices*), coffee beans (*coffee*), cocoa beans (*chocolate candy*), rubber (*tires*), fruit (*pies and*

jellies), nuts, cork (*wine bottles*), and medicine (*many different kinds, including anticancer drugs like Taxol which comes from the bark of a the yew tree*).

Have students select one product and use the Internet or print resources in your school library to trace its progress from the forest to a product. Students may record results in paragraph or flow chart format. Offer classroom time for students to share their work.

Part B. Have students share their forest recreation preference by completing the sentence. Direct students to poll their classmates and family members to complete the survey. Help them combine the data to create a *Forest Recreation Graph* on the chalkboard and determine the top three recreational activities.





Wildfire Detectives

This activity helps students spot careless behavior in the forest and learn how they can help prevent wildfires by recognizing the danger signs.

After determining careless wildfire behaviors, students should write a short story on the back of the worksheet featuring their wildlife prevention strategy. Encourage students to be as detailed as possible in character and story development.

Part A. Help students determine the careless behaviors that lead to wildfire as follows: File #1—leaving a lit barbecue grill unattended, File #2—building a campfire outside of established fire rings and/or near trees with low-hanging branches, File #3—playing with fire in the woods.

Part B. Direct students to the *Prevention* section of the Smokey Bear website at www.smokeybear.com/wildfires.asp to learn about trip planning and to find a comprehensive list of wildfire prevention guidelines. Also have them review the poster included in this program. Have students work in teams to create and organize a new careless behavior case file scenario in Part B. of the activity. To further engage students, have them role-play both the problem and solution in a short skit to present to classmates.



Be a Smokey Song Writer

This activity lets students and families actively participate in the on-going campaign to prevent wildfires by creating a new Smokey Bear song for posting online.

After students complete these lyrics, they can set them to music or create their own Smokey Bear song in their own style.

Tell students that in 1952, Steve Nelson and Jack Rollins wrote a song for Smokey Bear that would cause a debate among Smokey enthusiasts for decades. In order to maintain the correct rhythm, the writers added a "the" between "Smokey" and "Bear." As testament to the song's popularity, Smokey Bear became known as "Smokey The Bear", but in actuality his name never changed, and he is still known correctly as Smokey Bear. Explain that the Ad Council wants students to join in the fun and learning surrounding Smokey and is inviting them to try their hand at Smokey song-writing.

Send the sheet home to parents so they can see what their child is learning about wildfire prevention. After they've created lyrics for their Smokey Bear songs at home, plan a special day for students to share their songs. They can also email their lyrics at smokeysong@smokeybear.com by October 30, 2008. We'll post some of the best songs at www.smokeybear.com. Students can submit their songs individually or you can select class favorites and submit them yourself.

Begin this activity in class by having students go online to read the lyrics to the current Smokey song www.smokeybear.com/vault/name_song.asp. They can hear the song at www.vom.com/wesford/SBHA/SONG/SmokeySONG_ga.shtml. Then tell students that they can use their creativity to write lyrics for a new Smokey song. They can write lyrics to go with any tune in any musical style—rock, rap, Latin, reggae, country, or classical, for example. To get them started, we've included a few lines of rap lyrics.

Internet Resources

- www.smokeybear.com
- www.adcouncil.org
- www.nifc.gov/preved/comm_guide/wildfire/index2.html
- Wildland Fire Communicator's Guide http://wildlandfire.com/docs/wildfire_edu.htm
- Wildfire Education Links www.ymiteacher.com



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Smokey's Forest Science

The Story of Smokey Bear



The time? The early 1950's. *The place?* A forest in New Mexico. *The situation?* An American black bear cub surrounded by a raging wildfire climbs to the top of a tree to escape the flames. What happens? He survives—thanks to firefighters who find and rescue him. They name him Smokey and send him to live at the National Zoo in Washington, D.C.

This real life Smokey Bear became the living symbol of the Forest Service's Smokey Bear campaign that—to this day—works to educate the public about wildfire prevention. Smokey Bear needs your help now more than ever. If our nation's wildlands (forests, grasslands, and rangelands) are destroyed by fire, Smokey and his animal friends have no home and you can't enjoy the great outdoors. It can take your lifetime or longer for a forest to recover from a disastrous wildfire.

Whenever you are on a trip in our nation's forests, be sure to remember Smokey Bear's important message—
Only you can prevent wildfires.

Part A. How much do you know about the ecology of wildlands and other natural areas? Take Smokey's True/False quiz to find out!

- _____ 1. Heat, oxygen and fire make up the fire triangle, a term that explains the elements of fire.
- _____ 2. Fire is a natural part of most forest ecosystems.
- _____ 3. Prescribed fire, or the setting and controlling of fire in wildland areas by firefighters, is something that is done only to practice firefighting skills.
- _____ 4. A high danger of wildfire exists when the weather is hot, dry, or windy, or when thunderstorms occur.
- _____ 5. An average of 1,000 wildfires occurs each year in the United States.
- _____ 6. Firefighters can only put out wildfires with water.
- _____ 7. Fire is harmful to every kind of tree and vegetation found in the forest.
- _____ 8. From 2001 to 2006, 8 out of 10 wildfires were started by people.
- _____ 9. Forests experience good fires and bad fires.
- _____ 10. Currently, the number of wildfires has decreased in the United States.

Part B. Use Smokey's Field Research Notebook to investigate the natural cycle of fire and its impact on forest vegetation in different areas of the United States.

Smokey's Field Research Notebook

Area of United States _____

Forest type _____

Frequency of natural fires _____

Forest adaptations to natural fires _____

Effects on forest without natural fire _____





Forest Treasures

Part A. Wildlands and other natural areas cover almost one-third of the Earth's land, and they are home to many different kinds of plants and animals. Forests also give us many resources. Can you find some of them in the Word Search below? Do you know what are they used for?

Word Search Words: cinnamon, cocoa beans, coffee beans, cork, fruit, gum, lumber, maple syrup, medicine, turpentine, nutmeg, nuts, rubber, and wood pulp

Q	E	N	I	T	N	E	P	R	U	T	Z
P	X	T	N	I	C	C	A	B	R	D	W
U	L	N	U	O	N	O	E	M	L	Q	O
R	G	O	T	R	H	F	J	N	S	T	O
Y	W	M	M	Z	P	F	R	U	I	T	D
S	N	A	E	I	R	E	B	M	U	L	P
E	R	N	G	U	M	E	N	U	T	S	U
L	U	N	O	P	F	B	B	T	I	J	L
P	B	I	G	R	O	E	M	S	I	T	P
A	B	C	O	C	O	A	B	E	A	N	S
M	E	D	I	C	I	N	E	X	T	I	E
F	R	O	O	T	T	S	I	C	O	R	K

Part B. Besides giving us many different products we use every day, forests also have other important jobs. They provide oxygen for us to breathe and they absorb carbon dioxide to help fight global warming. They also offer beautiful settings where people can play and relax.

In what ways do your family and friends enjoy our nation's wildlands? Use the chart below to conduct a survey and find out.

Forest Recreation Survey

My favorite way to enjoy the forest is

Name	Friends and Families Favorite Forest Recreation Activity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Use the information to help your teacher make a graph of everyone's favorite forest activities.



Choose one product from the search above. Create a chart and follow the product from its forest roots to the final product. Use the back of this paper to record your findings.



Go to www.smokeybear.com to find out more about how you can help.



Wildfire Detectives

Part A. Be the leader of Smokey's Wildfire Patrol!

Can you find the actions that might lead to wildfire in the case files below? Change the characters' actions to prevent wildfire.

Case File #1

The Jones Family wanted to enjoy a holiday barbeque in the great outdoors. Mr. Jones set up his grill to prepare the family meal. After the family enjoyed their food, Mr. Jones threw the coals onto the vegetation because he thought they were cool. After a fun meal, the Jones Family headed home.

What might happen next: _____

What I would change: _____

Case File #2

It was a very hot and dry morning when Nick and Shelly awoke at their forest campsite. They quickly built a campfire on a patch of dirt near some trees with low hanging, dead branches, away from the campsite's established fire ring. A breeze began to blow, causing the flames to grow taller.

What might happen next: _____

What I would change: _____

Case File #3

Marcus invited Hudson, his best friend, on a weekend trip with his parents to the local mountains. By the afternoon of the second day, they had an idea. Wouldn't it be cool to set twigs on fire and see who could put out their twig fire the quickest by stomping on it? The two got the lighter from the fireplace mantle in the cabin and took it outside to try their experiment.

What might happen next: _____

What I would change: _____

Now, choose one of the scenarios above and—using your fire prevention smarts—write a short story about how one set of characters above was able to enjoy their day in the forest safely. Use the back of this page for writing.

Part B. Check out www.smokeybear.com to find out more of Smokey's wildfire prevention tips. Then follow your teacher's direction and work in teams to create a new case file showing other careless behaviors in the forest. Use the outline below to organize your thoughts.

Team Case File

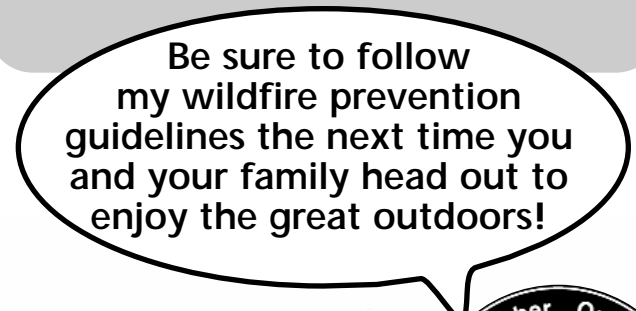
Characters:

1. _____
2. _____
3. _____

Scenario:

Careless Behavior:

Solution:



Be sure to follow my wildfire prevention guidelines the next time you and your family head out to enjoy the great outdoors!



Go to www.smokeybear.com to find out more about how you can help.



Be a Smokey Song Writer

Smokey Bear's theme song was written more than 50 years ago. Now you can flex your musical muscles and show off your wildfire prevention smarts at the same time by writing a new song for Smokey Bear.

Here is the opening of the current song. Visit www.smokeybear.com/vault/name_main.asp to find the entire song.

*With a Ranger's hat and shovel and a pair of dungarees,
You will find him in the forest always sniffin' at the breeze.
People stop and pay attention when he tells 'em to beware,
'Cause ev'rybody knows that he's the Fire Preventin' Bear.*

Chorus:
*Smokey the Bear, Smokey the Bear,
Prowlin' and a growlin' and a sniffin' the air.
He can find a fire before it starts to flame.
That's why they call him Smokey, that was how he got his name.*

Part A. Here's the beginning of a new rap version. Be a lyricist and finish the song.

*When you go in the forest beware,
There's something important in the _____.
It's a big black bear,
And here's something he wants to _____.
Smokey's my name.
Stopping _____ is my _____.*

Now it's your turn. Keep going!

Part B. Now create your own new song for Smokey and send it in! Your song can be in any musical style—rap, country ballad, blues, reggae—or something all your own! Write your lyrics at home and share them in class. Then ask your teacher or parent to help you submit your lyrics for posting on the Smokey Bear website!

A few things to consider when writing your song...

1. When the *Smokey Bear* song was originally written, the word "the" was inserted into Smokey's name to keep the rhythm of the song. But Smokey's official name is *Smokey Bear* and this is how his name must appear in your song lyrics.

2. Only children (age 13 or younger) may submit a song entry!
3. Include the key wildfire prevention rules listed below in the song lyrics. You can change the words to suit the musical style of your song, but keep the information accurate.
 - Never play with matches or lighters.
 - Don't leave a fire unattended.
 - Build campfires away from low-hanging tree branches and any vegetation.
 - Never use any type of fireworks on public lands.
 - Never use stoves, lanterns, or heaters inside a tent.
4. After you share your song with classmates, have your teacher or parent help you email your lyrics to smokeysong@smokeybear.com. Be sure to include your name, school name, city, and state. All the best lyrics received will be posted at the Smokey Bear website for everyone to enjoy. **Deadline for submitting song lyrics: October 30, 2008.**

A Note to Parents

Smokey Bear Needs You...

Smokey Bear, America's beloved symbol of wildfire prevention for more than 60 years, has been the focus of an important education program in your child's class. Sponsored by the Ad Council, National Association of State Foresters, US Forest Service, along with the curriculum specialists at Young Minds Inspired (YMI), the program has taught your child about wildfire prevention and the role your family can play in maintaining and conserving our great outdoor areas.

Talk with your child about your memories of Smokey Bear and ask him or her to tell you about wildfire prevention. Find out about the songs students are writing about Smokey. Help your child submit his or her song lyrics to smokeysong@smokeybear.com. All the best lyrics received will be posted online at the Smokey Bear website, www.smokeybear.com.



Send in your song lyrics to smokeysong@smokeybear.com right away!

Smokey Says...

Only You Can Prevent Wildfires

- Never play with matches or lighters.
- Inspect your campsite before leaving.
- Build campfires away from low-hanging tree branches and all vegetation.
- Never use fireworks on public lands.
- Never use stoves, lanterns, or heaters inside a tent or near combustibles.
- Don't leave a fire unattended.
- Use existing fire rings or build fire rings for camp fires.

Our day in the forest

Paste your photos here.

