

# Annotated Resource Set (ARS)

## Phase I

1. Title / Content Area:	Smokey Bear and the Indians?!?
2. Developed by:	Deborah Wasylik
3. Grade Level:	8-12
4. Essential Question:	How did the Indians use fire in forest management and how do their practices relate to fire management used in forests through the 20 <sup>th</sup> and 21 <sup>st</sup> centuries?
5. Contextual Paragraph	Traditional Ecological Knowledge (TEK) is a growing area of resource management that draws on the ancient practices of the Indians for inspiration and techniques used to enhance sustainability. One area where TEK is being examined and actually implemented is in Forest Fire Management. This lesson explores the Indian approach to the use of fire as a tool in taming nature and then follows the development of modern practices through the use of relevant primary resources relating to the topic.







<p><b>WILDLAND BURNING BY AMERICAN INDIANS IN VIRGINIA</b></p> <p>Hutch Brown</p>	<p><b>Wildland Fire</b></p>
<p>Earliest settlers discovered Indians performing deliberate burns to benefit tribes</p>	<p>US Forestry Service Wildfire Policy of today</p>
	<p>Wildland fires are a force of nature that can be nearly as impossible to prevent, and as difficult to control, as hurricanes, tornadoes, and floods.</p> <p>When they can be found and set in the right place at the right time, wildland fire can create many environmental benefits, such as reducing grass, brush, and trees that can be large and scarce habitat and increasing water tables. In the wrong place at the wrong time, wildland fire can wreak havoc, devastating lives, homes, communities, and natural and cultural resources.</p> <p>The Forest Service has been managing wildland fire on National Forests and Grasslands for more than 100 years. But the Forest Service doesn't - and can't - act alone. Instead, the Agency works closely with other federal, state, tribal, and local partners.</p> <p>Over the years, the Forest Service has learned that the wildland fire management environment has profoundly changed. Longer fire seasons, higher fire and smoke levels, and changing land uses have altered the behavior and effects of wildland fires. The Wildland Urban Interface (WUI) Area remains the top.</p> <p>To address these challenges, the Forest Service and its other federal, tribal, state, and local partners have developed and are implementing a National Cohesive Wildland Fire Management Strategy that has three key components: Restore Landscapes, Fire Adapted Communities, and Safe and Effective Wildfire Response.</p>
<p><a href="https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev3_000385.pdf">https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev3_000385.pdf</a></p>	<p><a href="https://www.fs.fed.us/managing-land/fire">https://www.fs.fed.us/managing-land/fire</a></p>

Notes/Comments:

Phase II

**Foundations Annotations**

**7. Curriculum Connections**

Science – Biology, Ecology, Environmental Science, AP Environmental Science- value of forests, development of sustainability policies and practices

History – US. History, Honors US History, AP US History – Analyze Indians role in shaping of landscape; study development of US Forestry policies and practices

Language Arts – reading, writing and communication, standard research and reasoning.

Civics- Analyze elements of continuity and change in the United States government and the role of citizens over time.



## 8. Curriculum Standards



### **LS2.A: Interdependent Relationships in Ecosystems**

Interactions of organisms with their environments, both living and nonliving, are shared. (MS-LS2-2)

### **LS2.C: Ecosystem Dynamics, Functioning, and Resilience**

Biodiversity describes the variety of species found in Earth’s terrestrial and oceanic ecosystems. The completeness or integrity of an ecosystem’s biodiversity is often used as a measure of its health. (MS-LS2-5)

### **LS4.D: Biodiversity and Humans**

Changes in biodiversity can influence humans’ resources, such as food, energy, and medicines, as well as ecosystem services that humans rely on—for example, water purification and recycling. (*secondary to MS-LS2-5*)

### **ETS1.B: Developing Possible Solutions**

There are systematic processes for evaluating solutions with respect to how well they meet the criteria and constraints of a problem (*secondary to MS-LS2-5*)

**LS2.A: Interdependent Relationships in Ecosystems**—Organisms, and populations of organisms, are dependent on their environmental interactions both with other living things and with nonliving factors (MS-LS2-1)

**LS4.C: Adaptation**—Adaptation by natural selection acting over generations is one important process by which species change over time in response to changes in environmental conditions. Traits that support successful survival and reproduction in the new environment become more

common; those that do not become less common. Thus, the distribution of traits in a population changes. (MS-LS4-6)

**LS4.D: Biodiversity and Humans**—Changes in biodiversity can influence humans’ resources, such as food, energy, and medicines, as well as ecosystem services that humans rely on (MS-LS2- 5)

**LS2.C: Ecosystem Dynamics, Functioning, and Resilience**—Ecosystems are dynamic in nature; their characteristics can vary over time. Disruptions to any physical or biological component of an ecosystem can lead to shifts in all its populations. (MS-LS2-4)

**LS2.A: Interdependent Relationships in Ecosystems**—Organisms, and populations of organisms, are dependent on their environmental interactions both with other living things and with nonliving factors. (MS-LS2-1)



## 9. Content & Thinking Objectives



Students will be able to:

1. Synthesize information from a variety of sources.
2. Analyze primary source documents.
3. Understand how different cultures have different approaches to the same issues (fire management)
4. Articulate how personal experience and place in history shape their views and attitudes toward the management environment.
5. Conduct research and present pertinent information.
6. Interpret written essays and communicate ideas.
7. Demonstrate the use of a range of strategies, research techniques, and persistence when engaging with difficult texts or examining complex problems or issues.
- 8.



## 10. Inquiry Activities & Strategies



- Why is fire necessary to promote a healthy forest ecosystem?
- In what ways are forests dependent on periodic fires?
- In what ways are Indians dependent on periodic fires?
- What kinds of problems have we created by excluding fire from our forests?
- How has the fire policy of forests changed over time?
- How is the management of forests done by the Indians different than that of the Forest Service and how is it the same (historic changes should be highlighted)
- Ask what they think future generations will think of our actions today and those of the Indians of the past.
- Ask students to list the pros and cons of logging vs. controlled burning to manage the forests of today.
- What brought about the policy where for many years ALL fires were to be extinguished as quickly as possible?
- If you were in charge of a forest, what would your policy be?

The following resources can be used during the analysis and for assessment purposes:

[http://www.loc.gov/teachers/usingprimarysources/resources/Analyzing\\_Books\\_and\\_Other\\_Printed\\_Texts.pdf](http://www.loc.gov/teachers/usingprimarysources/resources/Analyzing_Books_and_Other_Printed_Texts.pdf)

: <http://www.loc.gov/teachers/primary-source-analysis-tool/>



## 11. Assessment Strategies



# Document Analysis Form

## Define the type of document.

Check all that apply:

- Letter    Speech    Photograph    Telegram    Court document  
 Chart    Newspaper    Advertisement    Press release    Memorandum  
 Report    Email    Identification document    Presidential document    Congressional document  
 Patent    Diary entry    Other

Describe it as if you were explaining to someone who can't see it.

*Think about: Is it handwritten or typed? Is it all by the same person? Are there stamps or other marks? What else do you see on it?*

## Observe its parts.

Who wrote it?

Who read/received it?

When is it from?

Where is it from?

## Try to make sense of it.

What is it talking about? What are the main points expressed?

Write one sentence summarizing this document.

Why did the author write it?

Quote evidence from the document that tells you this.

What was happening at the time in history this document was created?

## Use it as historical evidence.

What did you find out from this document that you might not learn anywhere else?

What other documents or historical evidence are you going to use to help you understand this event or topic?



Classroom Discussion Assessment – complete forms such as those provided by Library of Congress for Primary Resources or the one pasted above

Group Work Assessment with appropriate rubrics

Students End of Unit Comprehension can be assessed by summative assessment (test or essay)

## Other Resources

### 12. Web Resources

Salish and Kootenai Tribes Fire History Project - <http://temporarypost4.org>

When the Mountains Roared - <https://www.fs.usda.gov/detail/r1/learning/history-culture/?cid=stelprdb5350042>

America's Forests: A History Of Resiliency And Recovery - <https://youtu.be/EWMejNKegs0>

America's National Forest (The Montana Experience) - <https://youtu.be/D3uNvj5Sc9E>

Historian Lincoln Bramwell on History of the Forest Service - <https://youtu.be/EPRDHe9ZTaA>

Tales of the 1910 Fire Exhibit - <http://content.lib.umt.edu/omeka/exhibits/show/talesofthe1910fire>

Sierra Club: <http://www.sierraclub.org/>

National Park Service: [www.nps.gov](http://www.nps.gov)

Wilderness Society: [www.wilderness.org](http://www.wilderness.org)

Environmental Protection Agency: [www.epa.gov](http://www.epa.gov)

Forest History Society: [www.foresthistory.org](http://www.foresthistory.org)

The Nature Conservancy: [www.tnc.org](http://www.tnc.org)

Public Broadcasting Service: <http://www.pbs.org/nationalparks/history/>



**13. Secondary Sources**



**14. Print and Other Media Resources**



*The Greatest Good: A Forest Service Centennial Film*, and accompanying website: <http://www.foresthistory.org/Education/TGG/Index.htm>

*The Big Burn* <http://www.pbs.org/wgbh/americanexperience/films/burn/>

*Year of the Fires* by Stephen J. Pyne,

*Forty Years a Forester* by Elers Koch

## ARS Component Guide

### Phase I Components

- 1. Title / Content Area:** Provide the title of the ARS. If the title doesn't explicitly denote the sets theme, please also provide a content area (e.g. Environment, Government, Immigration, War/Military, Women's History, etc.).
- 2. Developed by:** Provide your name and any other contributors to the ARS.
- 3. Grade Level:** Provide the grade level(s) for which the set is to be taught.
- 4. Essential Question:** Provide an essential question that encompasses the set theme and that could be used as a launching point for use in the classroom.
- 5. Contextual Paragraph for Resource Set:** Provide a short paragraph explaining the resource set and describing the context in which the set is to be used
- 6. Resource Set:** Provide titles, context, thumbnails and addresses for specific resources. It isn't necessary to provide a thumbnail for all resources (e.g. audio and video files).  
**Important:** Be sure to use a permanent URL and check your hyperlinks for all resources.

### Phase II Components

- 7. Curriculum Standards:** Provide local, state or national standards that could be addressed through the use of the ARS and subsequent activities
- 8. Curriculum Connections:** Provide other curriculum areas to which this set of resources could be applied
- 9. Content & Thinking Objectives:** Provide objectives to be met through the use of the ARS and subsequent activities
- 10. Inquiry Activities & Strategies:** Provide specific strategies and learning activities which the ARS will be used to support
- 11. Assessment Strategies:** Provide assessment methods which will be used to demonstrate student learning after the use of the ARS and subsequent activities

### Other Resources

- 12. Secondary Sources:** Provide any secondary sources that could be used to supplement the ARS
- 13. Web Resources:** Provide links to any additional web resources that could be used to supplement the ARS

**14. Print and Other Media Resources:** Provide other resources that could be used to supplement the ARS