



# WMINC

## Signature Lessons & Activities

### #2: What Happened to Our Forests?

#### Enduring Understandings

1. A healthy forest is vital to the ecology of an ecosystem.
2. Early grazing practices greatly reduced the amount of native grasses, breaking the cycle of frequent, low-intensity fires.
3. Past logging activities removed large, fire resistant trees and left understory brush, small trees and logging waste to fuel large intense fires.
4. Meteorology and climatology impact fire dynamics.
5. Forest management practices are complex and have changed over the past century, reflecting changes in both human attitudes and values and our increased knowledge of the interconnectedness of natural systems.
6. Every individual has a role in keeping forests healthy.

#### Essential Questions

1. How do the practices of grazing, logging and fire suppression impact the health of a forest?
2. How are the meteorology and climatology of an area linked?
3. What is the value of a forest? Why might those values differ from person to person and from culture to culture?

4. Is it justified to call a forest fire a 'natural disaster'? A 'catastrophe'? Why or why not?

**By participating in this WMNC lesson:**

*Participants will.....*

- Understand how humans have contributed to existing fire management policies by
  - Comparing and contrasting historical and contemporary fire management policies in the American Southwest.
  - Analyzing natural and human-generated factors that contributed to major fires in Arizona
- Examine how *Grazing* and *Logging* impact the fire conditions and dynamics by
  - Discussing how poor grazing practices impact the characteristics of a fire
  - Discussing how logging practices impact the characteristics of a fire.
- Recognize the impacts upon wildlife from fire by
  - Examining carrying capacities in pre- and post- fire zones
- Use appropriate tools and survey methods to acquire process, and summarize data (maps, photo, charts, tables) to analyze historical data, geographic and geologic maps , aerial photos

## Evidence of Achievement

*Participants will.....*

- Draw conclusions about the future of fires and fire management policies relative to their potential impact on the health of Arizona forests
- Capture personal reflections on their attitudes and behaviors toward fire management in Arizona
- Develop an outline of a classroom presentation appropriate for their professional application, including suggestions on how to accommodate diverse learners.