



WMNC

Signature Lessons & Activities

#3: "The Past Informs the Future"

Enduring Understandings

1. European settlement brought many changes to our forests.
2. Livestock removed much of the native grass cover that fueled low-intensity fires and killed pine seedlings.
3. Past logging activities removed large, fire resistant trees and left understory brush, small trees and logging waste to fuel large intense fires.
4. We can recreate what our forests looked like before Europeans arrived, studying evidence left from logging and surviving old-tree relics.
5. Today's forest management restores forest structure and tree density to a more stable, sustainable form by thinning small diameter trees and leaving the bigger, more mature ones.

Essential Questions

1. What changes did European settlement bring to our forests?
2. How did the removal of native grass cover by livestock impact the pre-settlement forest?
3. Why did past logging practices result in fueling larger and more intense fires?

4. How can studying evidence left from logging and surviving old-tree relics help us recreate our old Pre-settlement Forest?
5. Why does thinning small diameter trees and leaving the bigger, more mature trees help restore forest structure and tree density to a more stable, sustainable form.

By Participating in this WMNC lesson:

Participants will.....

- Understand why European settlement brought many changes to our forest
 - Discuss the overall impact of livestock removing native grasses cover.
 - Discuss the suppression of low-intensity fires in our forest and the impact on forest health
 - Examine how past logging practices impacted and fueled larger hot severe wildfires.
- Understand how we can recreate Pre-Settlement forest by studying evidence left from Logging and surviving old-tree relics
 - Examining logs and stumps from trees harvested here 100 years ago
- Examine the effects of thinning small diameter trees and leaving the bigger, more mature ones
 - Compare and contrast areas where thinning treatments have been applied to areas not treated
- Use appropriate tools and survey methods to acquire, process, and summarize data to include analysis of historical data

Evidence of Achievement

Participants will.....

- Draw conclusion about the changes to our forests as a result of European settlements
- Collect data and use it to formulate a hypothesis about what the forest of the past might have looked like.
- Capture a personal reflection on how studying the forest of the past can help today's forest managers restore our Ponderosa forest to a pre-settlement healthy forest
- Develop and outline of a classroom presentation appropriate for their professional application, including suggestions on how to accommodate diverse learners