



WMNC

Signature Lessons & Activities

#7: "Forest Thinning to Prevent Crown Fire"

Enduring Understandings

1. Small trees and woody debris that extend from the forest floor to tree top, or **crown**, can act as "ladders" allowing fire to climb up into the **forest canopy** (treetops).
2. Thinning treatments utilizes tree thinning techniques to eliminate small trees and other **ladder fuels** to reduce the likelihood of fire moving up into the forest canopy.
3. Thinning treatments create safer work areas for firefighters. The results are smaller, less-damaging fires.

Essential Questions

1. What has caused small trees and woody debris to build up?
2. Do Crown Fires benefit forest health as do low intensity fires?
3. How do thinning treatments benefit forest health?

By Participating in this WMNC lesson:

Participants will.....

- Compare and contrast plots that have small trees and other ladder fuels and a plot that has been thinned to improve forest health

- Observe overstocked forests, or dog-hair thickets and observe the general health and future of that stand
- Observe trees and vegetation that are in direct competition for resources such as water, light, soil nutrients, and space.

Evidence of Achievement

Participants will.....

- Draw conclusions about forest health
- Capture personal reflection about the nature and consequences of competition for water, sunlight, soil nutrients, and space
- Discuss the impact of Crown Fires and their impact on forest health