

Fire



Fire History

- Fire present since the beginning of the earth
- Found in carbon deposits in fossil records
- Native Americans used it as a tool



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Fire History

- By the 1800's fire was as commonplace as a hoe
- Peshtigo Fire of 1871
- Great Fire of 1910
- Wildfire suppression became the policy of the USDA Forest Service
- VA Department of Forestry was founded in 1914



Fire History



- CCC built fire trails and lookout towers
- After WWII surplus machinery available to fight wild fires
- Aircraft used to spot fires
- Volunteer fire departments were organized
- Smokey the Bear 1944

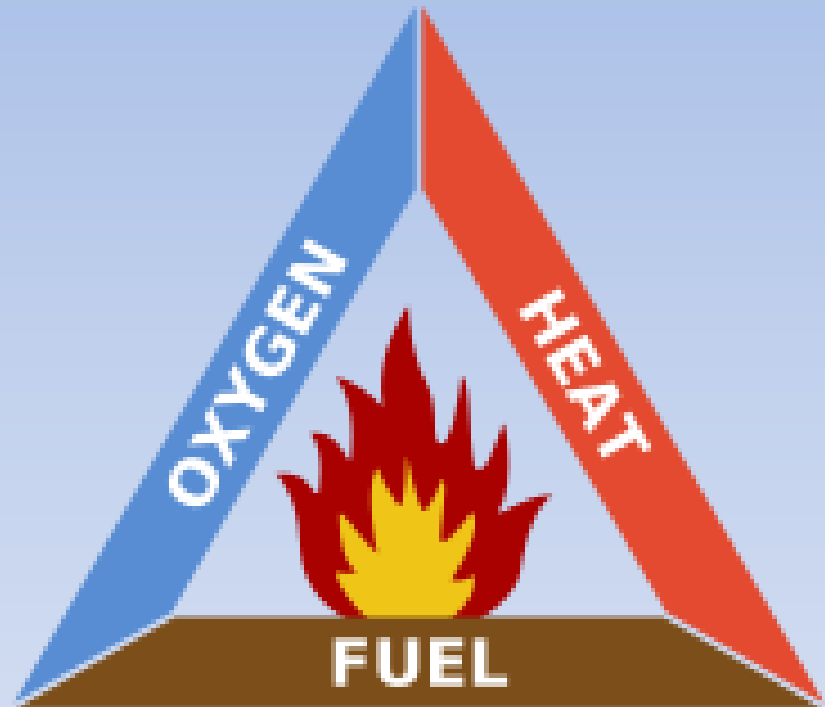


Consequences of Fire Suppression

- Reduction of economic and personal losses:
 - Annual acres burned in VA:
 - 250,000 (early 1900's)
 - 11,000 (today)
- Reduction of ecological benefits:
 - Fuel build-up
 - Loss of early successional habitat
 - Reduction in fire-dependant ecosystems
 - Extreme fires

Consequences of Fire Suppression

- Fire frequency ↓
- Fuel loads ↑
- Fire intensity ↑
- Yellowstone example





Benefits of Fire



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Benefits of Fire

- **Fire-assisted animals**

- Red-cockaded woodpecker
- Bachman's sparrow
- Northern bobwhite quail
- American kestrel
- Fox squirrel

- **Fire-assisted plants**

- Longleaf pine
- Table Mountain pine
- Atlantic white-cedar
- Pitcher plant
- Smooth coneflower
- Wiregrass
- Chaffseed



Benefits of Fire



Field borders and edges
burned every 3 years to
maintain early succession and
cover for wildlife



Understory burning reduces fuel
loads and fosters many species of
forbs and lush new growth for
browse

Prescribed Fire defined

- A fire intentionally ignited by a forest manager to meet specific objectives
- Must consider:
 - Weather conditions
 - Temperature
 - Relative humidity
 - Wind
 - Speed
 - Direction
 - Time of day



How to Burn

- Have a burn plan
- Understand the biology of your forest
- Know your fuels
- Determine when to burn



