Prescribed Burn

FMN
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Taylor Elliott
Jim Wilson

I Smell Fire

- Alarm and fear are first natural responses
- Wild fires of California
- Smokey the Bear-flawed approach
- Multiple causes for wild fires
 - Lightening
 - Spontaneous combustion
 - Safety violations
 - Accidents
 - crime





Beneficial Fires Florida prescribe burning act 1990



FIRE

- Prescribed fires to prevent succession
- Fire is natural disturbance process
 - Recycles nutrients
 - Utilized by surviving plants and new plants
 - New growth provides forage for herbivores
- Fire stimulates many plant species
- Fire renews, reinvigorates and maintains health of fire-adapted plant communities

Prescribed Fire Plan

For the

Coffeen Nature Preserve



Prepared by Matt Phillips Department of Environmental Protection

For the Coffeen Land Trust, Inc.

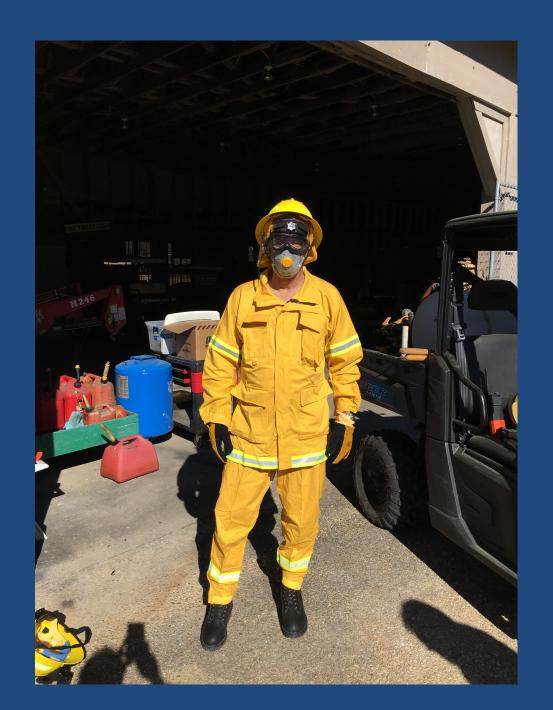
In cooperation with Topsail Hill Preserve State Park

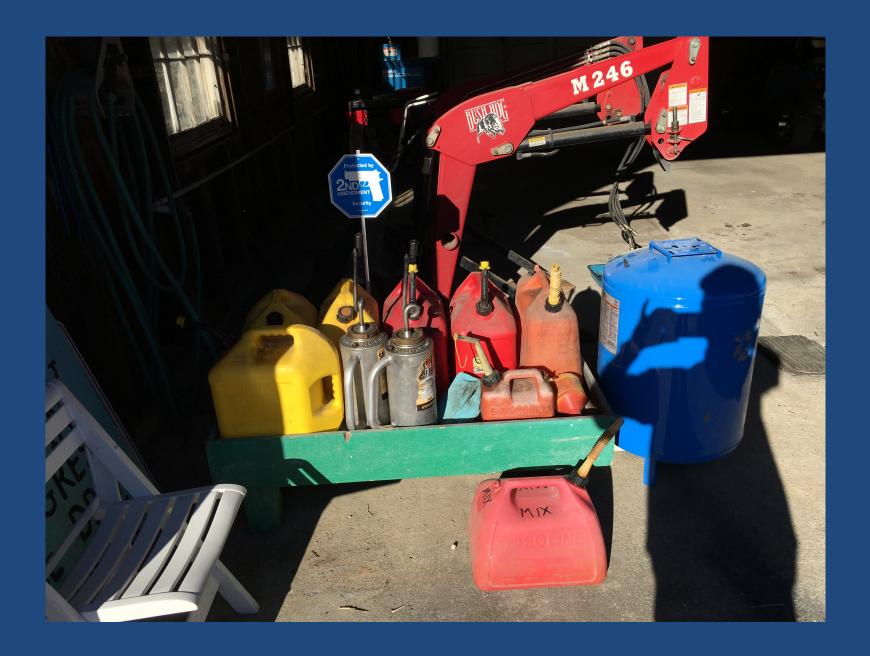
Equipment



PPE

- High top leather boots rubber soles
- Long cotton pants (no shorts)
- Helmet
- Mask filter- official smoke barrier
- Glasses
- Neck drape shields
- Work gloves
- Physical conditioning
 - Exposure to sun, heat, smoke
 - On feet a lot









Prescribed Burn Technique Anatomy

- Firebreak natural barrier
- Back line fuel removed
- Backfire- burning against the wind- 10-20 ft
- Hand line
- Start of first head fire- burn with the wind
- Head fire full effort of fire- takes off- can be fast
- Igniter
- Pump truck
- Drip torch: two parts diesel/one part gasoline. Has loop in neck to PREVENT FLAME from reaching fuel in tank

Safety: Hazards for Fire Team Members

- Dehydration
- Stubbed toes
- Leg grabber (vine and thorns)
- Venomous snakes
- Scared animals
- Safety comes before everything
- Watch out for others
- Follow safety rules

Fire plan in action



The end



When Fire Escapes

- Safety zone: free of fuel- blackened area, forest roads
- In drought conditions: beware under ground burning
- Flapper suppression
 - Low amplitude
 - Water
 - Smoke mask
 - Mopping up

Restoration Projects

- Restoration projects need:
 - People
 - Plan
 - Funds
 - Equipment
 - Native plants reintroduced
 - Burned areas in winter attract snipes
 - Mowed grass rabbits
 - Thatch: loggerhead shrike
 - Song sparrow

Prescribed Fire: 3 Elements

- Burn unit
 - Perimeter created by mowing or tilling
- Conduct under precise weather conditions
 - Wind speed and direction
 - Relative humidity
- Ecological objective
 - Control invasion of woody plants : trees and shrubs
 - Safety reduced fuel load on ground and tree trunks

Fire

- Natural causes
- Burn till encounter natural barrier
- Man: fire as tool. Frequent until colonization by Europeans: agriculture and settlements

Plant Competition: Sunlight

- Trees and shrubs shut out sunlight which starves grasses and plants
- Leads to loss of habitat and habitat fragmentation