

Feb. 25th workshop outline

Stand Development, Forest History, & San Juan Fire History

Carson Sprenger

1. Brief history of our local dry forests
 - a. Species and Stand Development
 - b. Insects, Disease, & Drought
 - c. What's a Healthy Forest?
2. Role of Fire
 - a. Fire as disturbance agent
 - b. Human use of fire
3. Current Forest Conditions in San Juans
 - a. Effects of fire exclusion / sensation of burning
 - b. Effects of land use history and logging
4. Justification for Management
 - a. Working Forests and Conservation Lands: From Sustainable Timber supply to Restoration Forestry
 - b. Woodlands, Parks, and Urban Interface Lands: Fuel Breaks, Fires Safe Forests, & Veteran Tree Care
5. Forest Management Options for Reducing Fire Risk
 - a. Pre-commercial thinning 101
 1. When does a stand need thinning
 2. Tree selection for reducing stocking density
 3. Slash management options
 4. Examples of PCT
 5. Costs
 - b. Options for mature stands
 1. What makes a harvest commercially/non-commercially viable
 2. Thinning options for different stand types (e.g. age, species composition, objectives)
 3. Slash management options
 4. Costs/revenue

Forest Carbon/Charcoal and Biochar

Kai Hoffman-Krull

National Scale

- National scale for need of forest restoration/ fire risk reduction: 100 million acres in the US
- Forest fire contributions of CO₂ at 5% of fossil fuel emissions
- Forests role in the carbon cycle
- Charcoal as a form of carbon storage

Charcoal's Role in Forest Ecology

- Charcoal as byproduct of old growth fire systems: 4-6% of total biomass
- Soil science of charcoal's benefits
 - Water holding capacity
 - Nutrient retention
 - Metabolic carbon/ organic matter
 - Influence on soil biology
- Influence on plant health
 - Nutrient uptake/ nutrient density
- Longevity: lasts up to 10,000

Biochar Introduction

- Potential to convert biomass waste from forest restoration into a beneficial product for forests, gardens, farms
- Cylinder production method/ plug for future presentations
- Introduce marketing materials for forest landowners to market charcoal

Forest Management Options for Reducing Fire Risk and Improving Carbon Sequestration

Financial and Technical Resources for Small Woodland Owners