Combining Herbicides and Prescribed Burning for Timber and Wildlife Objectives

#### Seth A. Ward, CF, RF President



# Who Is Seth Ward

• Forest Management degree from UF NC Licensed Pesticide Applicator • NC Registered Forester SAF Certified Forester • NC Certified Prescribed Burn Manager Forest Management



# Who We Are

#### Forestry & Environmental Consulting Firm

- Service Lines Include:
  - Forest Management
    - 35,000 Acres
  - Prescribed Burning
  - Herbicide Application
  - GIS
  - Wildlife Management
  - Wetland Delineation & Permitting
  - Timber Inventory
  - Land Management Planning
  - Timber Sale Management



# Timber and Wildlife Objectives

- Timber objective maximize economic returns from timber production, grow better trees, faster
- Wildlife objective improve habitat for desired species (hunting, observation, conservation)

# Herbicide Application

- Timing of applications
  - Site prep, Early rotation
  - Mid-rotation
  - Late rotation
- Typically, midrotation release is best for timber & wildlife objectives



#### **Mid-Rotation Release Herbicide**



Allows for increased tree nutrient uptake Increase timber revenue • Ease of access Remove unwanted vegetation structure • Mitigate wildfire threat Increase evaporation of surface water

### Timing of a Release Application

- Typically following
   1<sup>st</sup> thinning
- Growing season



# **Typical Prescription**



- Chopper, Garlon XRT, Escort, Surfactant
  - For waxy's

Chopper, Accord,
 Escort, and Surfactant
 For non-waxy's

# Examples





# Why Do We Burn?

Wildfire hazard reduction • Control of undesirable species Wildlife habitat improvement Improved access and visibility • Disease control Enhancement of aesthetics Manipulation of woody material decomposition

### Wildfire Hazard Reduction

Removes fuel loading

Reduces flashy fuels
Bay/waxy fuels

 Mitigate timber loss from wildfire



#### **Control of Undesirable Species**

- Fire dependent ecosystems
- Control hardwood competition



### Wildlife Habitat Improvement

- Increased yield of herbs and legumes
- Increase in browse amount and quality
- Openings for feeding and travel
- Increased carrying capacity



# **Combining Herbicide & Fire**

Spray first, then burn

Spray takes place of first 'killing burn'

 Many sites too thick/dangerous to lead with a burn

 Gets fuels on the ground, decreases volatility of subsequent burns

• Wider window to spray than burn

- Weather restrictions
- NC Smoke Management guidelines



Herbicide and fire alone are beneficial...

Combined, the additive effects are notable!

One allows you to do the other...

 A mid-rotation release herbicide application often provides the opportunity to burn

# Questions?

Thank You

Seth A. Ward, RF, CF <u>PremierForesty@gmail.com</u> <u>www.PremierForestry.net</u>

