We can’t do it all with fire:
Integrating silvicultural tools to supplement fire management at Camp Edwards

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Ecosystem Management Drivers

- Pine barrens habitat
- Soldier training
- Fire hazard
- Ecosystem resilience / resistance
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2005 Camp Edwards Wildfire Hazard Model

2012 Barnstable County Wildfire Preparedness Plan, Northeast Forest and Fire Management
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Prescribed Fire Challenges

- Urban/suburban surroundings
- Fuel loading and land use changes
- Unexploded ordnance
- Post-treatment condition, safety
- Limited burn days
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Success requires holistic planning and combining available tools

\[ \text{Success} \approx \text{Objectives Met} >> \text{Challenges} \approx \text{Planning} + \int \text{(tools)} \]
Key Mechanical Treatments

• Mastication
• Harvest (leaving slash or top-wood)
• Whole-tree harvest
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- Whole-tree harvest
• Learning from projects
• Adaptive and growing
• Engaging partners
Benefits of Forestry Integration

• Ecosystem Management Drivers
  • Pine barrens habitat (+)
  • Soldier training (+)
  • Fire hazard (+)
  • Ecosystem resilience / resistance (+)

• Rx Fire Challenges
  • Urban/suburban surroundings (+)
  • Fuel loading and land use changes (+)
  • Unexploded ordnance (+)
  • Post-treatment condition, safety (+)
  • Limited burn days (+)

(+) Improved Condition
(-) Degraded Condition
Assessing costs and benefits

- Greater initial cost ($)
- Greater initial complexity

- Significantly reduced timelines
- Reduced long-term cost ($)
- Greater control over desired/end condition
- Directly address challenges with planning and treatment
Forestry Integration Challenges

- Habitat and soil nutrient concerns
  - Consider your ecosystems, goals, and impacts
- Potential negative impacts for fire (e.g., smolder)
  - Integrate fire manager, forester, and habitat biologist early
  - BMPs and conditions consider fire in unit and adjacent
- Permitting and contracting
  - Strong scopes and planning
  - Coordinate with partners
- Increased initial cost and complexity
  - Prioritization and holistic planning
  - Combine multiple drivers and funding streams