

Silvicultural & Harvesting Strategies

Objectives

- Revenue
- Disease
- Storm damage
- Wildlife habitat
- Aesthetics
- Forest composition/structure
- Lumber/building materials

Pre-commercial Thinning





PCT vs. CT

- Overstocked: >350 tpa (11'x11')
- Small diameter: <10"
- LCR: <35%
- Low value species
- DIY



Clearcut rationale

- Regenerate Douglas fir
- Storm damage
- Poor quality timber
- Disease
- Hardwood Conversion
- Conversion to non-forest use
- Maximize revenue



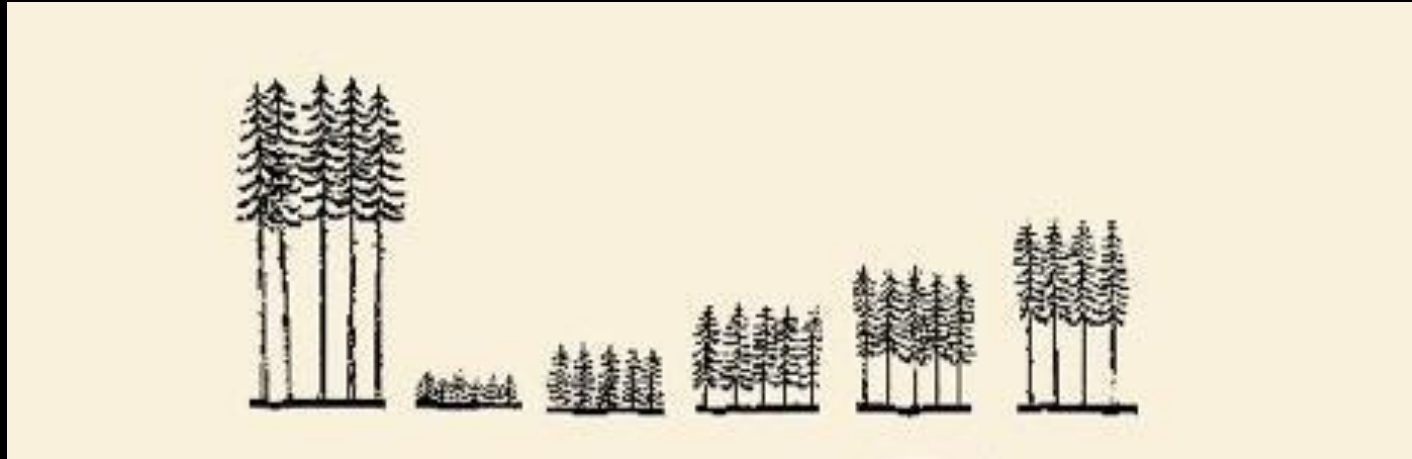
Commercial Thinning



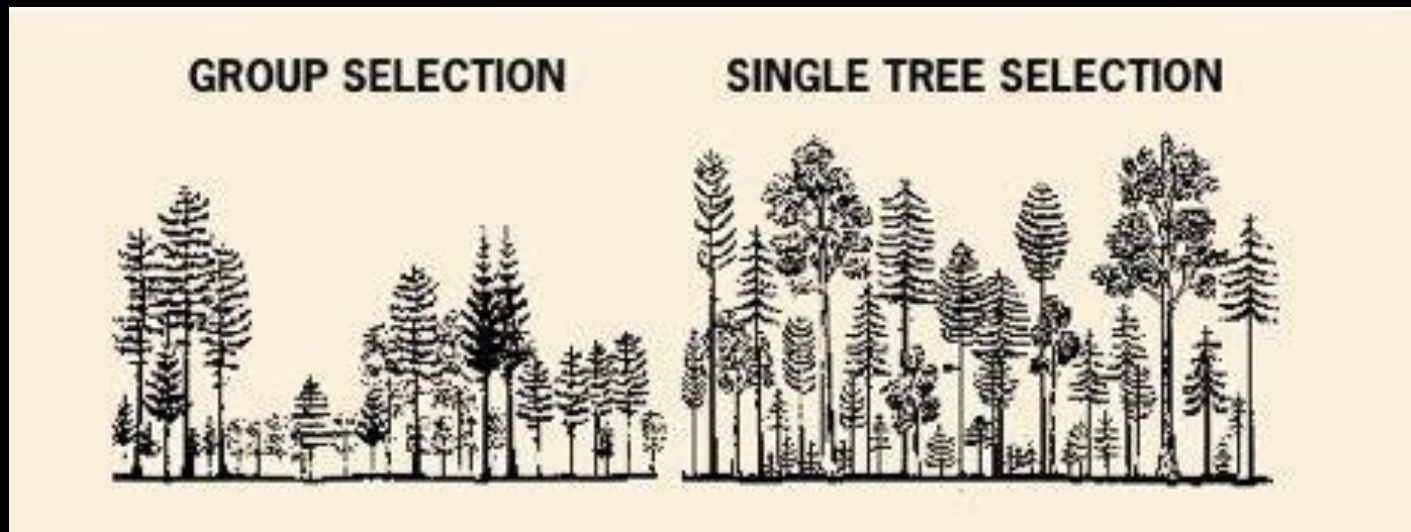
Managing Multi-aged Stands



Uneven-aged Management



Even-aged "age-class" Forestry



Uneven-aged Management System

Traditional thinning

vs. Variable Density Thinning



- Even spacing between trees
- Easier Rx for logger or PCT thinning contractor
- “Reliable” growth & yield
- “Tree Farm” aesthetic
- More common in single-species plantations



- Uneven spacing between trees, gaps
- May require a forester to mark trees for cutting
- Measuring growth is more challenging
- “Natural forest” aesthetic
- More common in multi-species forests
- Promotes natural regeneration
- Better wildlife habitat & forest health



- Thin 30% of trees (20 – 25% volume)
- Thin from below
- Remove low value/defective timber first
- Thin across diameters and species
- Release understory trees or hardwoods
- Protect sensitive sites (steep slopes, streams & wetlands, talus outcrops, oak, etc.)
- Patch cut disease pockets

































Hiring a Logger & Forester



Hiring a logging contractor:

Formal Bid Package or “informal”

1. Operational Rx (cutting guidelines)
2. Assessment info: (acres, volumes by species)
3. Bid and payment method:
 - Percentage split at mill (aka scale sale)
 - Landowner pays logger for service: per mbf or ton
 - Logger pays landowner for logs: per mbf/ton or lump sum
 - Trucking (off the top)
4. Who markets & sells logs: purchase agreement with mills
5. Specify equipment types or request proposal
6. Site Visit





Hiring a Logger

- Visit past harvest units
- Residual damage
- Landings & skid trails
- Invasive species
- Slopes, streams & other sensitive sites

Hiring a logging contractor:

Contract

1. Straight from bid package
2. Insurance, Performance Bond?
3. Payment Method:
 - Split, trucking off the top
 - Consultant pass through
4. Decide on markets & sorts

Write field version of Cutting Guidelines

- Special protections
- Bucking & sorting instructions
- Simple! 1 page max



Managing the Operation

Pre-work meeting

- Review contract & cutting guidelines with operator
 - Will operator be subbing anything out?
- Finalize layout with operator: landings, road locations, yarding corridors



Managing the Operation

Supervising the Show!

- Value Maximization: felling, bucking, yarding



Managing the Operation

Oversee log loading, load tickets



Managing the Operation

Damage

- Residual trees
- Understory
- Snags



Managing the Operation

Damage

- Soils



Managing the Operation

Suspend Operations?



Finishing Up

1. Load Reports
2. Final Accounting: load summary & cross check with tickets
3. Planting Plan & shrub/invasive control
4. Taxes
5. Set money aside





The End

WSU Ext. Publications

Managing Your Timber Sale
A Primer for Timber Harvesting