SMC Owner Survey 2000: Management Practices on Industrial Lands

Stand Management Cooperative
Draft
David Briggs, SMC Director
Forest Industry Land West of Cascade Crest in Oregon & Washington

- Region Gross: 7,767,000 acres
- SMC Gross: 5,317,423 acres
- Respondent Gross: 2,404,715 acres
- Respondent Net: 2,134,570 acres
- Respondent Net not managed: 214,979 acres
Total Industry & Respondent Acres by State

![Bar chart showing acres by state and type of land (Industry Total, Respondent Gross, Respondent Net, and Respondent Net w/o Mgt) for Oregon and Washington.]
Respondent Acreage by Species

- Douglas-fir: 61%
- W. Hemlock: 13%
- DF/WH: 14%
- TF/Mtn Hem: 6%
- Other Conifer: 2%
- Hardwood: 3%
- Hardwood: 2%
- Nonstocked: 1%

Total: 100%
Respondent Acreage by Site Class

- I, >= 135: 18%
- II, 115-134: 40%
- III, 95-114: 30%
- IV, 75-94: 9%
- V, <= 74: 3%

Legend:
- Blue: I, >= 135
- Red: II, 115-134
- Yellow: III, 95-114
- Light Blue: IV, 75-94
- Brown: V, <= 74
Harvest Unit Size has Declined

![Graph showing harvest unit size over time (1990, 1995, 2000). The graph indicates a decline in harvest unit size from 1990 to 2000. The y-axis represents acres, ranging from 0 to 450. The x-axis represents years (1990, 1995, 2000). The graph includes bars for minimum and average values, with clear indications of the decline.]
Rotation Age by Species

- Douglas-fir
- W. Hemlock
- Other Conifer
- Mixed Conifer
- Hardwood

Years: 0, 10, 20, 30, 40, 50, 60, 70
Site Prep: Acres per 1000 A of Net Timberland

[Graph showing time series of acres per 1000 A for different tree types from 1991 to 2005]
Site Prep: Acres per 1000 A of Species

<table>
<thead>
<tr>
<th>Year</th>
<th>Douglas fir</th>
<th>W. Hemlock</th>
<th>Other Conifer</th>
<th>Mixed Conifer</th>
<th>Hardwood</th>
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Site Prep Method per 1000 A Net Timberland
Pre-emergent Dominates Chemical Site Prep

![Graph showing the percentage of pre-emergent dominance over the years from 1991 to 2005. The data shows an increase in pre-emergent dominance from 1991 to 2000, with a peak in 2001, followed by a slight decrease until 2005.](image-url)
Site Prep Cost per Acre

![Bar chart showing Site Prep Cost per Acre](chart.png)

- Minimum
- Average
- Maximum
Regeneration

![Regeneration Unit Size](image1)

![Regeneration Type](image2)
Regeneration by Species per 1000 A Net Timberland

![Graph showing regeneration by species from 1991 to 2005. The graph includes lines for Douglas-fir, W. Hemlock, Other Conifer, Mixed Conifer, Hardwood, and All Species. The data shows fluctuations in the number of acres per 1000 acres for each species over time.]
Regeneration per 1000 A of Species

[Graph showing regeneration per 1000 Acres from 1991 to 2005 for various species: Douglas-fir, W. Hemlock, Other Conifer, Mixed Conifer, hardwood.]
Stocking Targets at Planting & Age 10

![Bar chart showing trees per acre for different species and ages.](chart.png)
Trends in Douglas fir Planting Stock

[Graph showing trends in planting stock from 1991 to 2005, with different symbols and colors representing various categories such as 1+1, P+1, Small Plug, Large Plug, and Other.]
Trends in Hemlock Planting Stock

- 1+1
- 2+1
- Small Plug
- Large Plug
- Other

Year:
1991
1993
1995
1997
1999
2001
2003
2005
PCT by Species per 1000 A Net Timberland

![Graph showing PCT by Species per 1000 Acres](Image)
PCT Per 1000 A of Species

Acres / 1000 A

- Douglas-fir
- W. Hemlock
- Other Conifer
- Mixed Conifer
- Hardwood

Years:
- 1991
- 1993
- 1995
- 1997
- 1999
- 2001
- 2003
- 2005
PCT Cost Per Acre

minimum average maximum

$0 $50 $100 $150 $200 $250
Commercial Thinning by Species per 1000 A Net Timberland
Commercial Thinning per 1000 A of Species
Commercial Thin Cost Per Acre
% of Total Harvest from Thinning
Fertilization by Species per 1000 A Net Timberland

Graph showing fertilization by species per 1000 acres net timberland from 1991 to 2005. The species include Douglas-fir, W. Hemlock, Other Conifer, Mixed Conifer, Hardwood, and Total. The graph indicates fluctuations in fertilization across the years.
Fertilization per 1000 A of Species
Fertilization Cost per Acre

<table>
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<tr>
<th>$/Acre</th>
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<th>average</th>
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The diagram shows the cost of fertilization per acre with minimum, average, and maximum values for different costs.
Pruning per 1000 A Net Timberland

[Graph showing the pruning per 1000 acres net timberland from 1991 to 2005, with peaks in 1996 and 1999.]
Pruning per 1000 A of Species

![Graph showing pruning per 1000 acres of Species from 1991 to 2005. Peaks in 1996 and 1998, with a decline towards 2005.](image-url)
Pruning Cost Per Tree

<table>
<thead>
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<th>Cost</th>
<th>Minimum</th>
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Future Work

• Categorical data to be summarized

• Compare with prior surveys where possible

• SMC Working Paper