



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Cost Summary North Fawcett Sale 341-04-12

District: Tillamook

Date: 4/3/03

	Conifer	Hardwood	Total
<b>Gross Timber Sale Value</b>	\$188,633.28	\$17,759.59	\$206,392.87
		<b>Project Work</b>	\$0.00
		<b>Advertised Value</b>	\$206,392.87



# Timber Sale Appraisal

## Timber Description

### North Fawcett

### Sale 341-04-12

"STEWARDSHIP IN FORESTRY"

**District:** Tillamook

**Location:** Sections 22, 23, 24, 25, 26, T2S, R9W, W.M., Tillamook County, Oregon

**Date:** 4/3/03

**Stand Stocking:** 80%

Species	Avg. DBH	Amortized %	Recovery %
Douglas - Fir	12	0	95
Western Hemlock / Fir	15	0	95
Sitka Spruce	16	0	95
Alder (Red)	12	0	95

Volume by Grade	Douglas - Fir	Western Hemlock / Fir	Sitka Spruce	Alder (Red)	Total
2S	0	568	149	0	717
3S	167	888	212	0	1,267
4S	27	150	32	0	209
Camprun	0	0	0	59	59
<b>Total</b>	194	1,606	393	59	2,252

**Comments:** Pond Values Used: 1st Quarter 2003

Other cost (plus profit and risk)  
Brand and paint: \$2.00/MBF X 2252 MBF = \$4504

Other cost (profit and risk included):

Non-project roads:  
Road improvement \$120/Station  
Road construction \$180/Station  
Spur 1  
44 Stations X \$120/Station = \$5280  
Spur 2  
7 Stations X \$180/Station = \$1260  
Spur 3  
17 Stations X \$180/Station = \$3060  
Spur 4  
18 Stations X \$120/Station = \$2160  
Total: \$11760

Surfacing:  
Spur 2 (3"-0")  
7 Stations X 30 yards/Station X \$4.50/yard = \$945  
Spur 3 (3"-0")  
17 Stations X 30 yards/Station X \$4.50/yard = \$2295  
Spur 4 (pit-run)  
18 Stations X 50 yards/Station X \$8.00/yard = \$7200  
Total: \$10,440

Total non-project road cost: \$22,200

Privy: 6 Months X \$160/month = \$960

Total other cost - without profit and risk: \$23,160

Road Maintenance:  
Areas 1-5  
\$500/mile X 6 miles X 1 grading = \$3000  
50 yards/mile X 6 miles X \$4.00/yard = \$1200  
Areas 6-8  
\$500/mile X 4 miles X 1 grading = \$2000  
50 yards/mile X 4 miles X \$7.00/yard = \$1400  
Additional pit run rock for Chopping Block road:  
100 yards X \$8.00/yard = \$800

Total road maintenance = \$8400/2252 MBF = \$3.73/MBF

Hardwood pond value of \$515 obtained locally.



# Timber Sale Appraisal

## Logging Conditions

### North Fawcett

### Sale 341-04-12

"STEWARDSHIP IN FORESTRY"

<b>Combination#: 1</b>	Western Hemlock / Fir	80.04%	
	Sitka Spruce	45.80%	
<b>Yarding Distance:</b>	Medium (800 ft)		<b>Downhill Yarding:</b> No
<b>Logging System:</b>	Cable: Medium Tower >40 - <70		<b>Process:</b> Manual Delimiting
<b>Tree Size:</b>	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
<b>Loads/Day:</b>	5		<b>Bd. Ft./Load:</b> 3,500
<b>Cost/MBF:</b>	\$189.52		
<b>Machines:</b>			
	Log Loader (A)		
	Tower Yarder (Medium)		
<b>Combination#: 2</b>	Western Hemlock / Fir	15.92%	
	Sitka Spruce	54.20%	
<b>Yarding Distance:</b>	Short (400 ft)		<b>Downhill Yarding:</b> Yes
<b>Logging System:</b>	Track Skidder		<b>Process:</b> Manual Falling/Delimiting
<b>Tree Size:</b>	Small / Thinning 12in (130 Bft/tree), 12-17 logs/MBF		
<b>Loads/Day:</b>	8		<b>Bd. Ft./Load:</b> 3,500
<b>Cost/MBF:</b>	\$116.62		
<b>Machines:</b>			
	Log Loader (B)		
	Track Skidder		
<b>Combination#: 3</b>	Douglas - Fir	73.45%	
	Western Hemlock / Fir	3.09%	
	Alder (Red)	65.00%	
<b>Yarding Distance:</b>	Medium (800 ft)		<b>Downhill Yarding:</b> No
<b>Logging System:</b>	Cable: Small Tower <=40		<b>Process:</b> Stroke Delimber
<b>Tree Size:</b>	Small / Thinning 9in (70 Bft/tree), 20+ logs/MBF		
<b>Loads/Day:</b>	6		<b>Bd. Ft./Load:</b> 3,200
<b>Cost/MBF:</b>	\$144.42		
<b>Machines:</b>			
	Log Loader (A)		
	Stroke Delimber (A)		
	Tower Yarder (Small)		
<b>Combination#: 4</b>	Douglas - Fir	26.55%	
	Western Hemlock / Fir	0.96%	
	Alder (Red)	35.00%	





# Timber Sale Appraisal

## Logging Costs

### North Fawcett

### Sale 341-04-12

"STEWARDSHIP IN FORESTRY"

Date: 4/3/03

Operating Seasons: 2.0

Profit & Risk: 20%

Project Costs: \$0

Other Costs (P/R): \$4,504

Slash Disposal: \$0

Other Costs: \$23,160

Road Maintenance: \$3.73

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
0.0	0.0	0.0	0.0

#### Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	3.0	3.2
Western Hemlock / Fir	\$0.00	5.0	3.5
Sitka Spruce	\$0.00	2.0	3.5
Alder (Red)	\$0.00	4.0	2.5

#### Local Pond Values

Date	Species	Grade	Value
4/3/03	Alder (Red)	Camprun	\$515.00



# Timber Sale Appraisal Logging Costs Breakdown North Fawcett Sale 341-04-12

"STEWARDSHIP IN FORESTRY"

Costs	Douglas - Fir	Western Hemlock / Fir	Sitka Spruce	Alder (Red)
<b>Logging</b>	135.27	175.76	150.01	132.36
<b>Road Maintenance</b>	3.93	3.93	3.93	3.93
<b>Fire Protection</b>	2.47	2.47	2.47	0.00
<b>Hauling</b>	46.11	27.68	69.16	40.37
<b>Other (P/R appl.)</b>	2.05	2.05	2.05	0.00
<b>Profit &amp; Risk</b>	37.97	42.38	45.52	35.33
<b>Slash Disposal</b>	0.00	0.00	0.00	0.00
<b>Scaling</b>	2.00	2.00	2.00	2.00
<b>Other</b>	10.56	10.56	10.56	0.00
<b>Total</b>	240.36	266.83	285.70	213.99

<b>Amortization</b>	0.00	0.00	0.00	0.00
<b>Pond Value</b>	518.04	334.21	353.26	515.00
<b>Stumpage</b>	277.68	67.38	67.56	301.01
<b>Amortized</b>	0.00	0.00	0.00	0.00



# Timber Sale Appraisal Summary North Fawcett Sale 341-04-12

"STEWARDSHIP IN FORESTRY"

**Amortized**

	Douglas - Fir	Western Hemlock / Fir	Sitka Spruce	Alder (Red)
<b>MBF</b>	0.00	0.00	0.00	0.00
<b>Value</b>	0.00	0.00	0.00	0.00
<b>Total</b>	0.00	0.00	0.00	0.00

**Unamortized**

	Douglas - Fir	Western Hemlock / Fir	Sitka Spruce	Alder (Red)
<b>MBF</b>	194.00	1,606.00	393.00	59.00
<b>Value</b>	277.68	67.38	67.56	301.01
<b>Total</b>	53,869.92	108,212.28	26,551.08	17,759.59

**Gross Timber Sale Value**

**Recovery \$206,392.87**

Prepared by: Ed Keith

Date: 4/3/03

District: Tillamook

Phone: (503) 842-2545





**OREGON DEPARTMENT OF FORESTRY  
CRUISE REPORT**

*North Fawcett*

1. **Type of Sale:** Partial Cut and Clearcut, Recovery
2. **Legal Description:** Sections 22, 23, 24, 25 and 26, T2S, R9W, W.M. Tillamook County, Oregon.
3. **Sale Acreage:** The sale boundaries were plotted on a digital orthophotograph and the acreage was calculated with GIS.

ACREAGES				
Area	Harvest Type	Sale	Total	Net
1	Clearcut	15	15	15
2	Clearcut	3	3	3
3	Partial Cut	6	6	6
4	Partial Cut	10	10	10
5	Partial Cut	77	62	62
6	Partial Cut	10	10	10
7	Partial Cut	15	15	15
8	Clearcut	22	26	22
9	Partial Cut	7	7	7
<b>Total</b>		<b>165</b>	<b>154</b>	<b>150</b>

**Sale acres:**

Area within the Timber Sale Boundary signs.

**Total acres:**

*For accomplishment reporting*

**Clearcut harvest** - Sale acres; plus green tree retention acres outside the sale boundary; less roads and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

**Partial Cut** - Sale acres less areas of low stocking, hardwoods, roads, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

**Net acres:**

*Used for calculating the advertised volume.*

**Clearcut** - Sale acres, less green tree retention, roads, and riparian areas classified as Special Stewardship in LMCS inside the sale boundary.

**Partial Cut** - Same as total acres.

4. **Cruising Procedures:**

**A: Cruise Method:**

A total of 78 plots were taken; 10 in Area 1, 6 in Area 2, 5 in Area 3, 5 in Area 4, 20 in Area 5, 5 in Area 6, 10 in Area 7, 12 in Area 8 and 5 in Area 9. Cruise lines and plots were placed to obtain representative sampling intensities per sale area. All trees and snags were recorded by diameter class. Diameters were measured to the nearest inch, heights to the nearest foot. Trees less than 9" DBH were not sampled. In areas 1, 2, and 8 all sample trees were measured and graded on 14 plots. On every other plot, tree count by diameter and species was recorded. On areas 3-7 and 9, tree count by diameter and species was recorded on all plots and one tree per plot was measured to obtain volume to basal area (VBAR) information.

**B: Plot size**

In areas 1, 2, and 8 a 20 BAF was used for Douglas-fir and hemlock. A 10 BAF was used for other species. On areas 3-7 and 9, a 20 BAF was used for all species. Trees were sighted at 4.5'.

**C: Grading System:** Douglas-fir was measured and graded to a 6" top favoring 40 foot log lengths using Columbia River rules. Alder was measured to an 8" top and graded camprun.

5. **Computation Procedure:** Plot data for areas 1, 2 and 8 was entered into SuperAce for computation of basal area, V-BAR, stand tables and diameters. VBAR trees for areas 3-7 and 9 were entered into Superace to obtain VBAR information, and plot data was entered into spreadsheets to obtain basal areas, stand tables and diameters. These data were entered into the Volume Summary Worksheet to compute sale volumes.
6. **Defect and Breakage:** A 5% reduction for defect and breakage was applied to the volume.
7. **Timber Description:** Area one contains 36 year old Douglas fir and was pre-commercially thinned in 1982. Area two contains 37 year old mixed conifer and alder. Areas 3-7 and 9 contains 60-65 year old mixed conifer with scattered hardwoods. Area eight contains 47 year old mixed conifer and alder. The Douglas-fir on areas 1,2, and 8 has severe symptoms of Swiss Needle Cast and tree growth has slowed.
8. **Cruiser Names/Dates:** Ed Keith, John Pine, October 2002.
9. **Revenue Distribution:**  
100% FDF  
Tax Code: 8-1 (10%), 9-1 (55%), 9-12 (35%)  
Deed Numbers: 49,186  
Rehabilitation Obligated: N/A
10. **Attachments:**  
Volume Summary  
Logging Plan



# North Fawcett

## Volume Summary

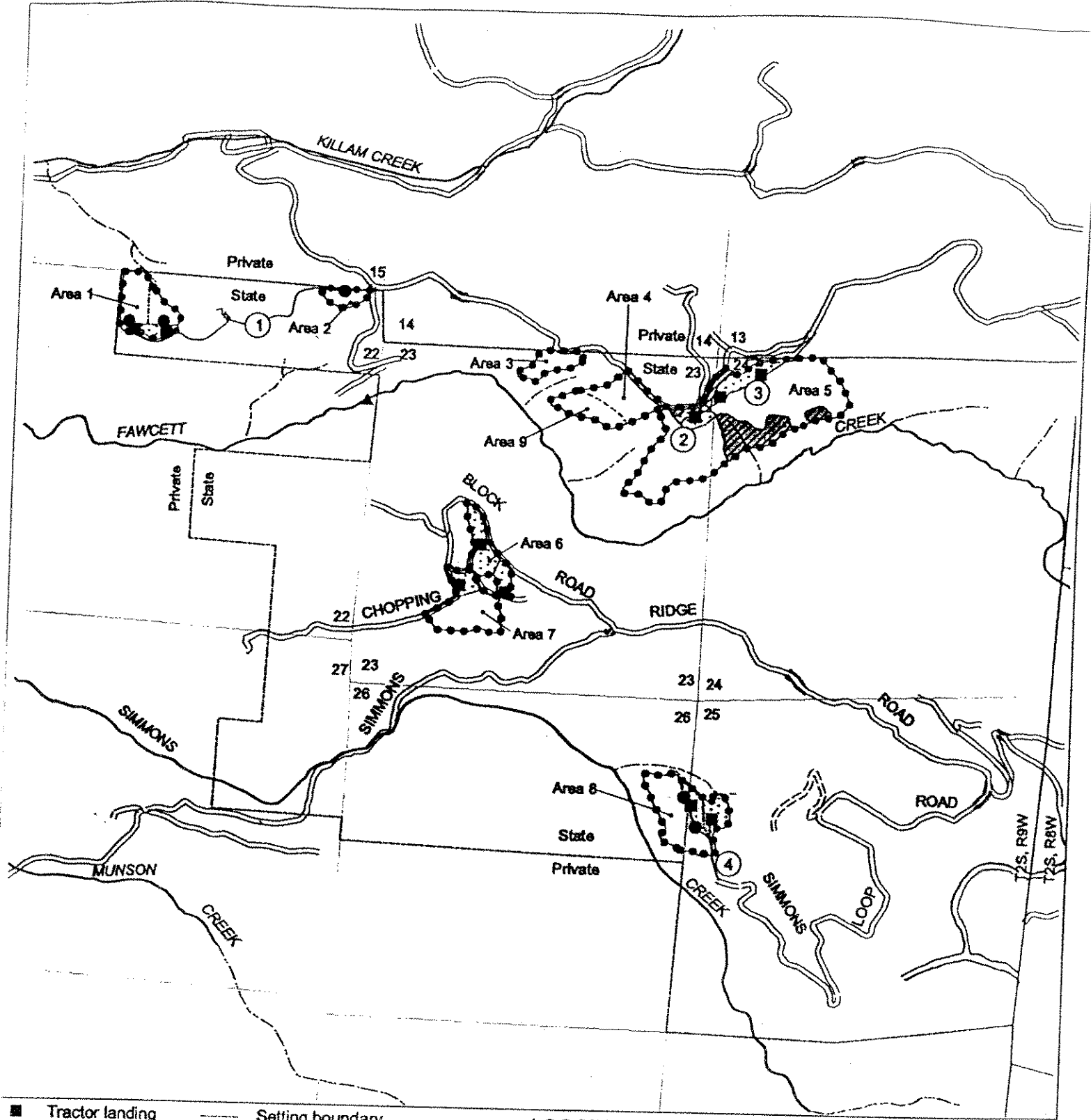
Area 6							
10 acres							
Species	QMD	Basal Area	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Hemlock	17.7	48	163	7.8	78	5%	74
Spruce	18.2	144	141	20.3	203	5%	193
<b>TOTAL</b>							267

Area 7							
15 acres							
Species	QMD	Basal Area	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Hemlock	12.4	154	163	25.1	377	5%	358
<b>TOTAL</b>							358

Area 8							
22 acres							
Species	QMD	Basal Area	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Douglas-fir	12.2	60	81	4.9	108	5%	103
Hemlock	14	22	96	2.1	46	5%	44
Alder	12.5	41.7	68	2.8	62	5%	59
<b>TOTAL</b>							206

Area 9							
7 acres							
Species	QMD	Basal Area	V-BAR	Vol/Acre MBF	Volume MBF	D & B	Net Vol MBF
Hemlock	17	116	163	18.9	132	5%	125
<b>TOTAL</b>							125

TOTAL SALE VOLUME 150 net harvest acres				
Species	QMD	MBF	D&B	Net Vol. (MBF)
Douglas-fir	11.9	204	5%	194
Hemlock	14.1	1691	5%	1606
Spruce	16.5	414	5%	393
Alder	12.5	62	5%	59
<b>TOTAL</b>		2371		2252



**LOGGING PLAN**  
 Timber Sale Contract No. 341-04-12  
 North Fawcett  
 Portions of sections 22, 23, 24, 25 and 26  
 T2S, R9W, W. M.  
 Tillamook County, Oregon



- Tractor landing
- Cable landing
- ▲ Domestic water supply
- ⊗ Block
- ▭ Cable yarding
- ▨ Ground yarding
- ▩ Helicopter yarding
- Buffer zone
- ▨ Non-required thinning
- ⊂ Green tree retention area
- Setting boundary
- Area boundary
- Sale boundary
- Ownership boundary
- Type-F stream
- Type-N stream
- ==== Surfaced road
- Unsurfaced road
- ==== State highway
- ==== County road
- ② Non-project road
- Swing road
- Abandoned road
- OHV trail
- Non-motorized trail

Area	Type of Operation	Acres	
		Sale	Net
1	Clear Cut	15	15
2	Clear Cut	3	3
3	Partial Cut	6	6
4	Partial Cut	10	10
5	Partial Cut	77	62
6	Partial Cut	10	10
7	Partial Cut	15	15
8	Clear Cut	22	22
9	Partial Cut	7	7
<b>Total</b>		<b>165</b>	<b>150</b>



## Oregon Department of Forestry

### WRITTEN PLAN

"STEWARDSHIP IN FORESTRY"

**SALE NAME:** North Fawcett

**PROTECTED WATERS:** Fawcett Creek

**LOCATION:** Portions of Sections 23, 24 T2S R9W, W.M., Tillamook County, Oregon.

**Activity:** Cable Yarding

**Protection measures:** When yarding with cables hanging within or across the streams, cables will be pulled out of the Riparian Management Area (100 feet slope distance from the high water mark of protected waters) prior to rigging the next yarding road.

**Date:** November 26, 2002  
**Prepared by:** Ed Keith, Forester