

HARVESTING COSTS, TIMBER PRICE TRENDS, AND OPERATIONAL CONSIDERATIONS FOR TIMBER HARVESTING

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OUTLINE

- HARVESTING COST CONSIDERATIONS
- TIMBER PRICES IN TENNESSEE
- OPERATIONAL CONSIDERATIONS FOR HARVEST PLANNING

FACTORS DETERMINING HARVESTING COSTS

LABOR
EQUIPMENT
TRACT CHARACTERISTICS

LABOR COSTS

STATE AVERAGE WAGE FOR LOGGING: \$11.83/hour

RESEARCH PROJECT WAGES/CREW

CREW – FELLER, SKIDDER OPERATOR, LOADER - \$125/DAY

LANDING - \$100/DAY

TOTAL COST/CREW = \$425/DAY + BENEFITS (~\$85/DAY)

USED EQUIPMENT PRICES



1985 Skidder
\$33,000



2004 Skidder
\$180,000



2002 Feller-Buncher
\$82,000



1973 Log Truck
\$24,000

TRACT CHARACTERISTICS

ACCESSIBILITY

TERRAIN

VOLUME/ACRE

AVERAGE TREE SIZE

QUALITY

DISTANCE TO MILLS – HAULING

WET WEATHER CONDITIONS

AVERAGE FELLING TIMES BY DIAMETER CLASS

(seconds)

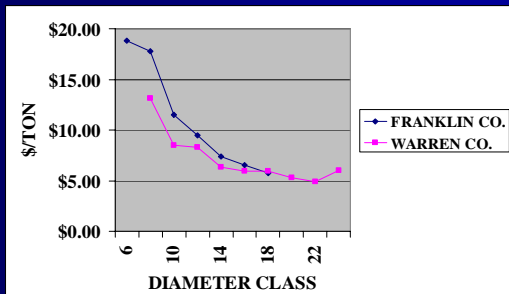
DBH	Walk/Clear	Fell	Limb/Top	Aggregate
8	6.37	27.85	37.98	72.19
10	14.41	27.94	35.13	77.48
12	9.67	43.33	44.48	97.48
14	10.31	41.68	35.26	87.24
16	17.15	70.44	50.02	137.62
18	21.11	104.49	57.94	183.54
20	4.96	96.60	67.47	169.02
22	n/a	132.00	31.50	163.50
24+	9.78	223.16	148.04	380.97

HARVESTING COSTS BY DIAMETER CLASS

(per ton)

DBH	SITE 1	SITE 2	AVERAGE
6	\$18.83		\$18.83
8	\$17.78	\$13.14	\$15.46
10	\$11.50	\$8.51	\$10.01
12	\$9.50	\$8.30	\$8.90
14	\$7.37	\$6.31	\$6.84
16	\$6.51	\$5.96	\$6.24
18	\$5.73	\$5.96	\$5.85
20	-	\$5.31	\$5.31
22	-	\$4.90	\$4.90
24+	-	\$5.99	\$5.99
AVERAGE COST			\$8.83

PER TON PRODUCTION COSTS BY DIAMETER CLASS



**RELATIONSHIP BETWEEN
DELIVERED AND STUMPAGE PRICES**
(per ton)

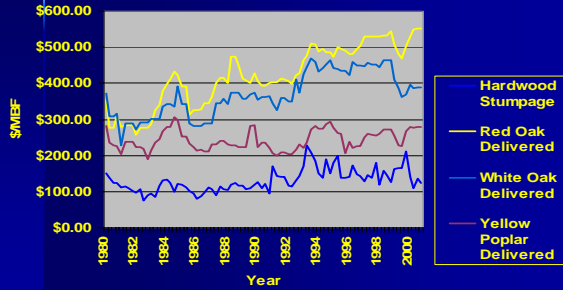
	PINE SAW	OAK SAW	HDWD SAW	PINE PULP	HDWD PULP
DELIVERED PRICE	\$45.00	\$50.00	\$40.00	\$30.00	\$23.50
HARVESTING EXPENSE	\$7.00	\$7.00	\$9.00	\$14.00	\$14.00
TRANSPORTATION	?????	?????	?????	?????	?????
STUMPAGE PRICE	\$28.67	\$28.49	\$23.45	\$5.88	\$4.50
DEL-HARV-STUMP	\$9.33	\$14.51	\$7.55	\$10.12	\$5.00





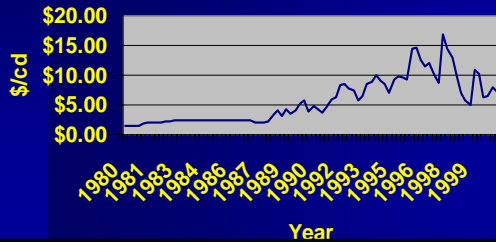
TENNESSEE TIMBER PRICES

Hardwood Sawtimber Real Prices 1980-2000



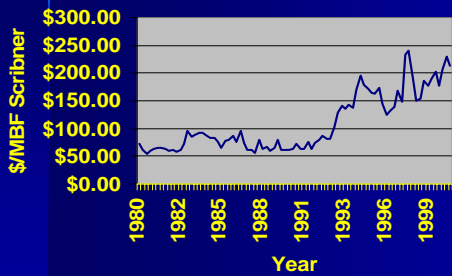
TENNESSEE TIMBER PRICES

Hardwood Pulpwood Stumpage Price 1980-2000



TENNESSEE TIMBER PRICES

Nominal Pine Sawtimber Stumpage Prices 1980-2000



OPERATIONAL CONSIDERATIONS

HARVESTING RESTRICTIONS

**TIME OF HARVESTING, WET WEATHER, PERFORMANCE
BONDS, ENVIRONMENTAL PROTECTION**

VOLUME TO BE HARVESTED

TYPE OF HARVEST

TIME OF YEAR
