

EDITOR'S
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OREGON'S Forest Products Industry 1976



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Highlights

INDUSTRY CHARACTERISTICS

- Total number of mills in 1976 was 498:

<u>Type of mill</u>	<u>Number</u>
Sawmills	243
Veneer and plywood	132
Pulp	17
Board	23
Shake and shingle	46
Log export	28
Post, pole, and piling	9

- Lane County led all others with 92 mills with 18 percent of the State total.
- The 88 largest sawmills had 64 percent of total sawmill capacity.
- Only 58 burners operated in the State in 1976.

WOOD CONSUMPTION

- A total of 9,339 million board feet of logs were consumed.
- Pulp and board industry consumed 7.3 million tons of mill residues and off-site roundwood chips.
- Leading counties in roundwood consumption were:

	<u>Million board feet</u>
Lane	1,776
Douglas	1,124
Coos	798
Klamath	570

- Over 31 percent of logs were from young-growth timber.
- Public lands were the source for 56 percent of the log consumption; National Forests provided the largest share, 37 percent.
- Log consumption by industry:

	<u>Percent</u>
Sawmills	57.8
Veneer and plywood	35.4
Log export	5.3
Pulp and board	.8
Shake and shingle	.4
Post, pole, and piling	.3

MILL RESIDUES

- A total of 15.4 million tons of residues were generated:

<u>Type of mill</u>	<u>Tons (dry weight) of residue</u>
Sawmills	8,645,000
Veneer and plywood	6,693,000
Shake and shingle	45,000

- 79 percent of the residue was wood, 21 percent was bark.
- Almost 98 percent of wood residue was used, and 92 percent of bark was used.
- 73 percent of wood residue went to pulp and board industries, 16 percent was used for fuel.
- 76 percent of bark was used for fuel, 15 percent was used for miscellaneous purposes.

OREGON'S FOREST INDUSTRY

REFERENCE ABSTRACT

Howard, James O., and Bruce A. Hiserote.

1978. Oregon's forest products industry, 1976. USDA For. Serv. Resour. Bull. PNW-79, 102 p., illus. Pacific Northwest Forest and Range Experiment Station, Portland, Oregon.

This report presents the findings of a 100-percent canvas of the primary forest products industry in Oregon for 1976. Tabular presentation includes characteristics of the industry log consumption and disposition of mill residues. Accompanying the tables is a descriptive analysis of conditions and trends in the industry.

KEYWORDS: Forest products industry, wood utilization, wood waste utilization, mill operations/products, Oregon.

RESEARCH SUMMARY

Resource Bulletin PNW-79

1978

This report presents the findings of a 100-percent survey of the forest products industry in Oregon. Data were collected by questionnaire for each mill that operated during 1976. The survey included the following sectors: lumber; veneer and plywood; pulp and board; shake and shingle; export; and post, pole, and piling.

There were 498 separate operations identified in the survey, that used a total of 9.3 billion board feet of logs in 1976. The lumber and veneer and plywood sectors were the major users, accounting for 58 percent and 35 percent respectively. In addition the pulp and board industry used about 7.3 million tons of wood fiber, 90 percent of it in the form of mill residues. The industry as a whole generated some 15.4 million tons of residual materials, of which only 3 percent were not used.

Data from the survey are presented in tabular form and significant features of the industry and its raw material usage are discussed in the text. Also included in the text are some comparisons of the current survey with comparable data for 1968 and 1972.

Preface

This report presents the results of a survey of the primary wood processing industry in Oregon for 1972. This survey identifies the raw material inputs and characteristics of the forest products industry. Data are shown separately for the following industries: lumber, veneer and plywood, pulp and board, shake and shingle, post, pole and piling, and export.

Similar surveys were produced in 1968 in cooperation with the Oregon State Department of Forestry and in 1972 with Oregon State University.

Data for the survey were obtained from a 100-percent mail and telephone canvas of all primary wood processing firms in the State. The survey was conducted in 1977. Industry contacts for the survey were based on lists from previous surveys, up-dated using assistance of the Oregon Division of Employment, various directories of the forest products industry, and from information passed on by individual mill owners.

Reliability of the data presented in this report is considered to be high, since the survey was a 100-percent canvas. Information collected from each mill is assumed to be the best available; and whenever possible, the information came from records. In some cases, however, some of the information had to be estimated. Information for individual mills is strictly confidential, and any information that could reveal critical details of an individual operation has been combined with other data to avoid disclosure.

Data for log consumption and product output are actual figures reported by the mills. Subsequent classification of these data, i.e., by species, ownership, origin, degree of manufacturing, etc., are based on percentage distributions provided by the mills and may not agree precisely with other published figures. Statistics on mill residues are based on average factors applied to product output. As such, they may differ from actual volumes for a given mill.

Supporting data are presented in tables 1-78 (Appendix II) at the end of this report. In the tables, "--" indicates the value is either "0" or not available.

Acknowledgments

We appreciate the help of mill owners and operators, who cooperated in order to provide the data for this report, and to the major forest industry associations for their support of this study. Special acknowledgment is made to the following:

- State of Washington, Department of Natural Resources, particularly John A. Bergvall, Forest Analyst, for assistance in processing the data and technical advice on methodology and questionnaires.
- Division of Labor, State of Oregon, for assistance in updating the mill list.

METRIC CONVERSIONS

1 cubic foot = 0.02832 cubic meter

1 ton = 907.1849 kilograms

1 square foot = 0.0929 square meter

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Overview of the Industry

The value of the forest industry to the State and the Nation is widely known. Supported by the greatest timber inventory in the country, Oregon's forest products industry provides over one-fifth of the Nation's wood products. Oregon ranks first in production of lumber, plywood, particleboard, and hardboard and sixth in pulp production. In addition to producing a considerable volume of shakes and shingles and posts, poles and pilings, about one-sixth of the logs exported from the United States pass through Oregon ports. Figure 1 charts the production of some of Oregon's major products over the past 11 years.

Activity of the industry is of great importance to the economy of the State. In 1976 employment in the forest products industry^{1/} amounted to just over 86,000 people, 71 percent associated with the primary processing industries covered in this report. This employment level represents about one-half of all manufacturing-based employment in the State. The payroll for the forest products industry was over \$1.2 billion, exceeding \$1 billion for the 3d year in a row.

Economic impacts such as these indicate the tremendous influence the industry has on the lives of most people. Yet the viability of the industry is even more crucial to many small communities throughout the State. In numerous cases small towns or communities are almost entirely dependent upon the local forest industry for employment.

Decisionmakers and planners need to know about technological advances, existing structure of the industry, how the industry is adapting to a changing timber supply, and how efficiently the timber is used. Trends within the industry are also of importance to many people.

This report provides much of this information. The data presented in this report give an in-depth look at the forest products industry for 1976. In addition coupled with similar reports for 1968 and 1972,^{2/} this report also provides the background for analyzing the dynamic effects of supply and demand on the industry.

^{1/} Includes all employees within Census of Manufacture classification SIC 24 (Lumber and Wood Products), and SIC 26 (Paper and Allied Products).

^{2/} Schuldt, John P., and James O. Howard, "Oregon Forest Industries, 1972 Wood Consumption and Mill Characteristics," Oregon State University Special Report No. 427, Dec. 1974, 113 p.

Manock, Eugene R., et al., "Oregon Timber Industries, 1968, Wood Consumption and Mill Characteristics," State of Oregon Department of Forestry, 1968, 122 p.

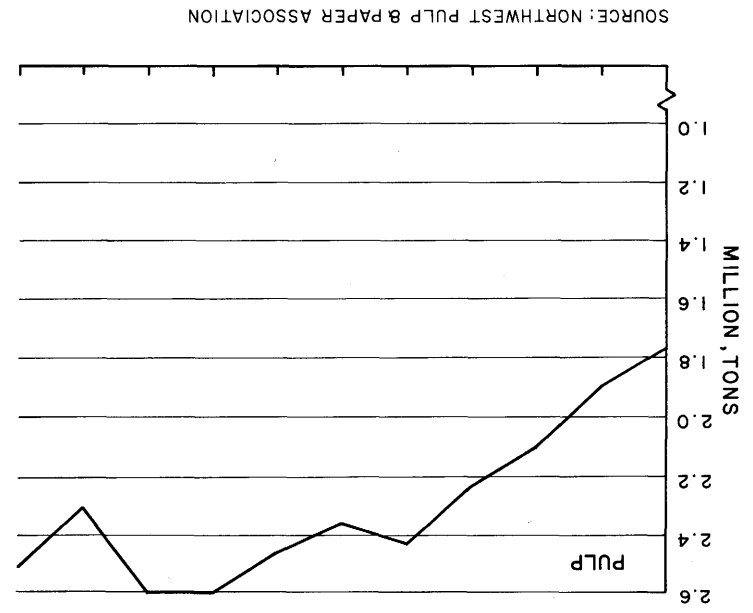
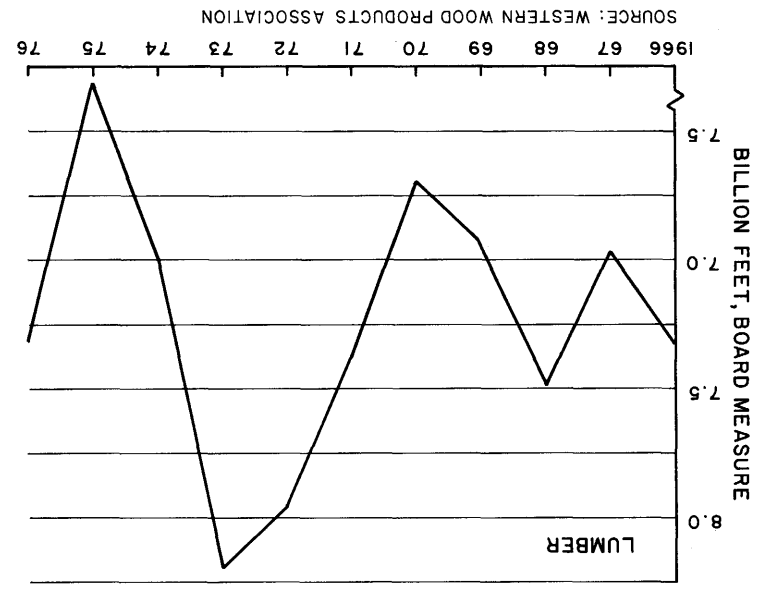
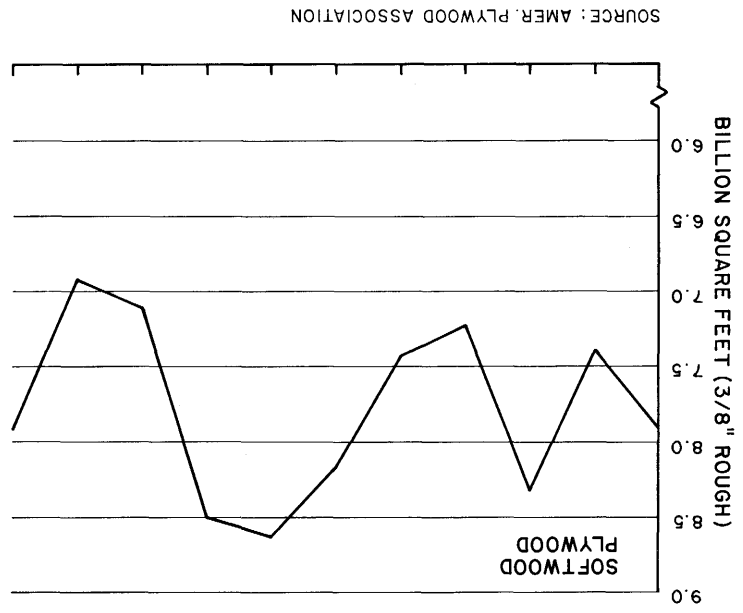
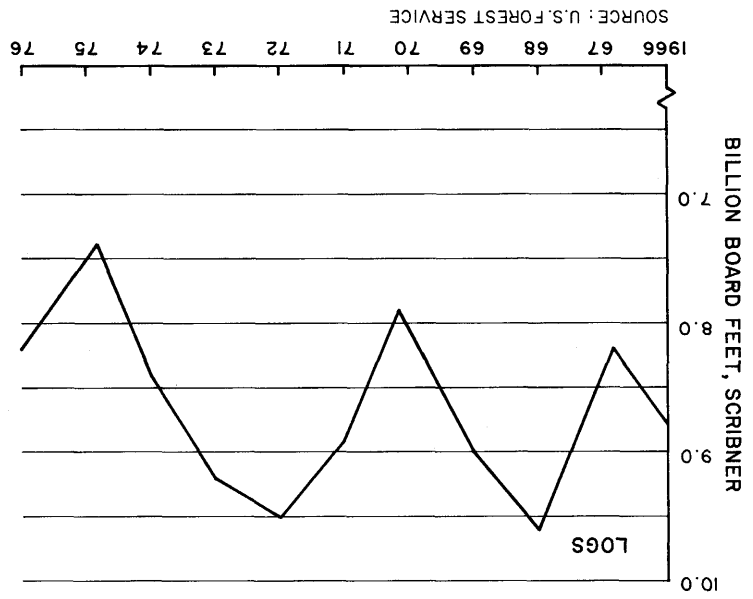


Figure 1.--Output of major timber products in Oregon, 1966-1976.

As used in this study, the forest industry^{3/} refers to six primary log processing and mill-residue-using industries: sawmills, veneer and plywood, pulp and board, shake and shingle, post, pole, and piling, and export (logs only).

The location of the forest industry in Oregon is closely related to the geographic distribution of the timber resource. As would be expected a large share of the industry is situated in the heavily timbered area west of the Cascade Range. This is shown in figure 2 which indicates that 79 percent of the log consumption occurred in western Oregon.

The State has been divided into five resource areas (fig. 3). Designation of these areas reflects both the nature of the timber and the historic marketing structure of the industry. This is borne out by the study data which show that on the average 88 percent of the logs processed in a particular resource area were harvested within the area boundaries.

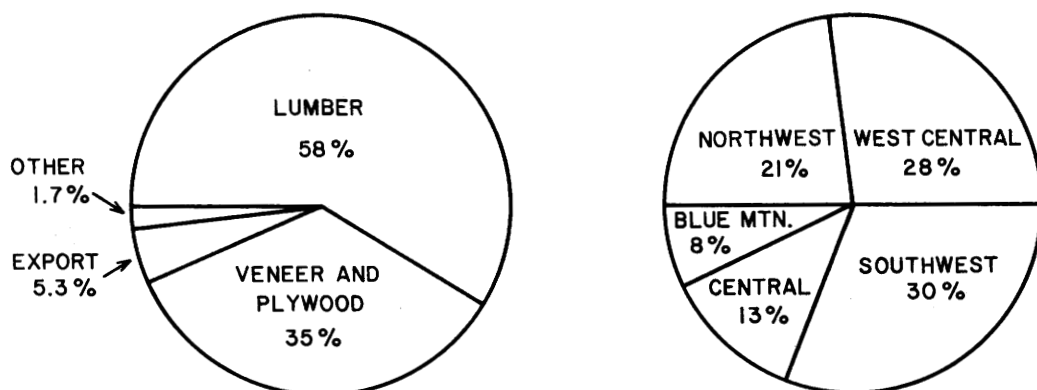


Figure 2.--Distribution of log consumption by resource area and industry, 1976.

^{3/} These industries are also commonly referred to as the "forest products industry" or "timber industries," but may include other operations such as Christmas tree production. The term mill refers to all types of processing plants or separate processes at pulp mills.

Industry Characteristics

TOTAL NUMBER OF MILLS DOWN 5 PERCENT SINCE 1972

In 1976 a total of 498 mills^{4/} were identified by this survey, down 5 percent from 1972. Most of the decline occurred in the sawmill sector which decreased by 19 mills. Also declining somewhat was the export sector with 37 facilities operating in 1976 compared to 48 in 1972. This change appears to reflect two factors. First, the export companies are concentrating their operations in fewer ports while maintaining their total volume of exported logs. Second, export operations have ceased at Port Westward in Columbia County. In 1972, five companies operated at this port.

While the number of mills in western Oregon has decreased, the industry east of the Cascades has increased in size. From 12 percent of all mills in the State in 1968, the east side industry has risen to 15 percent in 1976. During that period, there was an absolute increase of 10 mills. Most of the gains were in the plywood and pulp and board sectors, which added five and four mills respectively.

LARGER SAWMILLS INCREASE IN NUMBER

Statewide, the number of sawmills dropped from 300 in 1968 to 243 in 1976. On the east side, the number remained constant, while the west side has lost 57 mills. During this same period, the largest sawmills, those with an 8-hour shift capacity of 120+ thousand board feet^{5/} (size-class A), increased from 59 to 88, a 49 percent gain. Size-class D mills, those with a capacity of less than 40 thousand board feet per 8-hour shift, dropped from 102 to 51 mills.

Of the 51 class D mills in the State, over half, 27, were operating in the northwest area. Eight of these were portable mills. Two factors are apparent contributors to this situation: (1) the relatively large volume of second-growth timber in the area, and (2) the proportion of small nonindustrial timber holdings is much higher than the statewide average.

SIZE-CLASS A SAWMILLS HAVE 64 PERCENT OF TOTAL CAPACITY

The larger sawmills have increased their share of total capacity one-third since 1968. Between 1968 and 1976, size-class A sawmills increased their proportion of total capacity from 48 percent to 64 percent. The proportion in the other three size classes decreased during the same period. Log consumption by size-class A mills increased from 49 percent of the total in 1968 to 70 percent in 1976. Size-class C and D mills' log consumption dropped from 23 percent to 11 percent.

LITTLE CHANGE IN INDUSTRY-WIDE CAPACITY

Over all, there has been little change in industry capacity since 1972. While sawmill capacity is down somewhat from earlier levels, veneer and plywood capacity is up slightly. This latter figure is difficult to assess due to a change in reporting standards for veneer and layup mills.

Of greater interest was a change in average mill capacity. Since 1968, average 8-hour shift capacity of all sawmills has increased from 76 thousand board feet to 104 thousand board feet. Average capacity

^{4/}As defined for this study, mills refer to identifiable operations at a particular location, whether it be a sawmill, pulping process, or a log export facility.

^{5/}Capacity is rated against lumber production rather than log consumption.

of veneer and plywood mills went up only slightly. Analysis of the data indicate that the increase in average sawmill capacity is due to a decline in smaller mills rather than increasing mill size. This is shown in the following tabulation.

Average 8-hour shift capacity for sawmills,
by size class and average for all mills

	<u>Sawmill size class</u>				
	A	B	C	D	
	(120+ Mbm)	(80-119 Mbm)	(40-79 Mbm)	(<40 Mbm)	(Average)
	<u>Thousand feet, board measure</u>				
1968	185	94	58	15	76
1972	179	96	58	16	97
1976	185	94	60	16	104

FEWER BURNERS OPERATING IN 1976

Tighter environmental regulations and increased value for mill residues led to an 80-percent decline in the use of burners by the residue-producing industries.^{6/} In 1968, there were 291 waste burners operating in the State. In that year, 60 percent of the mills operated a burner. By 1972, only 26 percent of the mills relied on burners to dispose of waste wood and bark. In 1976, there were only 58 burners in use in the State, representing 14 percent of the residue-producing mills.

TWENTY CHIPPING SAWS IN USE IN 1976

A relatively new type of headrig used by the sawmill industry is the chipping saw. This saw is designed to process small logs more efficiently than conventional equipment, while producing high quality chips in the process. This type of saw literally chips the log into a squared or profiled cant, which is then resawn into dimension material, frequently 2x4's. Data for previous surveys is not available; however, in 1976 there were 20 of these saws in operation. Seven of the chipping saws were in the Northwest area. About 6 percent of all lumber production was produced with these saws.

As in the past, band saws continue to be the mainstay of the industry producing 79 percent of the lumber in 1976.

THE USE OF CHIPPERS CONTINUES TO INCREASE

Another piece of equipment used to enhance efficient use of logs is the chipper. This equipment handles both residual portions of sawn logs and entire logs of poorer quality or size which would produce little or no lumber. Chipped material from this equipment has a myriad of uses but is primarily used as plant fuel or sold to pulp mills. Chippers have been prominent in the industry for years but continue to increase in use. In 1968, about 68 percent of the sawmills had chippers, by 1976 this proportion had increased to 85 percent. All but two of the size-class A mills operated chippers, while just less than one-half of size-class D mills used them. Not indicated by this survey is the change in size and efficiency of chippers over the survey period.

^{6/}The residue-producing industry is comprised of sawmills, veneer and plywood mills, and shake and shingle mills.

EQUIPMENT CHANGES IN THE VENEER AND PLYWOOD INDUSTRY

The veneer and plywood industry, while being relatively stable in terms of numbers of mills, has undergone some significant changes in equipment. From 1968 to 1976, the number of cold presses used decreased from 19 to 5, down 74 percent, while the use of hot presses increased from 41 to 79 percent. During this period, the use of core chippers has increased 29 percent. Like the sawmill sector, the number of waste burners has declined significantly going from 66 in 1968 to only 15 in 1976.

SAWMILLS OPERATE FEWER SHIFTS PER DAY

During 1976, sawmills averaged 1.38 shifts per day, while veneer and plywood mills operated 2.24 shifts per day.

Size class A sawmills had the highest average among all sawmills, averaging 1.59 shifts per day, while class D mills averaged only 1.02 shifts per day. In the southwest and Blue Mountain areas, veneer and plywood mills averaged about 2.5 shifts per day; in the other three areas the average was 2.1 shifts per day.

In 1976, sawmills operated an average of 219 days per year, while veneer and plywood mills averaged 245 days per year. As expected, larger mills operated more days than did the smaller mills.

Wood Consumption

LOG CONSUMPTION DOWN FROM 1972

Total log consumption^{7/} for the forest industry in 1976 was 9,339 million board feet, Scribner scale. This represents a 10.5-percent decrease from that reported in 1972 and 7.6-percent less than in 1968.^{8/} As shown in figure 2 sawmills accounted for 58 percent of total log consumption, and veneer and plywood mills consumed 35 percent. Only the export sector showed an absolute increase in log consumption from 1972 to 1976, up 12.8 million board feet, or about 3 percent.

PUBLIC LANDS SHARE OF LOG CONSUMPTION DOWN FROM 1972

As indicated in the following tabulation, log consumption by ownership class had not changed much since 1968. The total public lands share at 56 percent for 1976 is down 5 percent from 1972, but about the same as the 1968 level.

^{7/} Here and elsewhere in this report, log consumption is reported in Scribner log scale.

^{8/} The tables in the 1968 report show a total volume of 9,594,675 thousand board feet; however, export and post, pole, and piling volumes were given elsewhere in that report, bringing the total to 10,102,575 thousand board feet.

Log consumption by ownership class,
all industries for selected years

Public

	<u>National Forest</u>	<u>BLM</u>	<u>Other public</u>	<u>Forest industry</u>	<u>Farmer and miscellaneous private</u>
	Percent				
1968	40	15	2	35	8
1972	40	15	6	34	5
1976	37	13	6	36	8

In absolute terms, public lands accounted for 5,240 million board feet in 1976 with private lands contributing 4,099 million board feet.

ALMOST ONE-THIRD OF LOGS WERE YOUNG GROWTH

In 1976, more than 2.9 billion board feet of young-growth logs (less than 100 years old) were consumed by the forest industry. This represents over 31 percent of total log consumption, up only slightly since 1972, but continuing the upswing since 1968. As in the past, the northwest area industry had the highest proportion, 60 percent, of its logs coming from young-growth timber. Mills on the east side of the State showed a relative decline in consumption of young-growth logs from 24 percent of total consumption in 1972 to 17 percent in 1976. The "other industries" sector reflected the greatest change since 1972. Consumption of young-growth logs increased from 29 percent of total consumption to 50 percent between 1972 and 1976.

LANE COUNTY IS THE LEADER IN LOG CONSUMPTION

The forest industry in Lane County continues to be the largest in the State. Log consumption by all mills in the county was 1,776 million board feet in 1976. This amounted to 19 percent of the State's total, up from 18 percent in 1972. Following Lane County in log consumption were Douglas County with 1,124 million board feet and Coos County with 798 million board feet. On the east side, Klamath County was by far the largest user of logs with 570 million board feet, ranking fourth in the State.

THREE RESOURCE AREAS ARE NET IMPORTERS OF LOGS

Analysis of table 4 indicates that the northwest, west central, and Blue Mountain areas had a net inflow of logs in 1976. The northwest area had the largest net inflow, 405 million board feet. Most of this, 278 million board feet, came from out of State to the export sector. The west central area had a net inflow of 93 million board feet, while the Blue Mountain industry consumed only 4 million board feet, more than originated within the area. The southwest and central Oregon areas had net outflows of 56 million board feet and 30 million board feet, respectively.

The log flow pattern for the State as a whole is illustrated by figure 4.

Overall, 88 percent of the logs consumed within a resource area were harvested in the same area. Only 88 million board feet of logs were reported moving from the east to the west side.

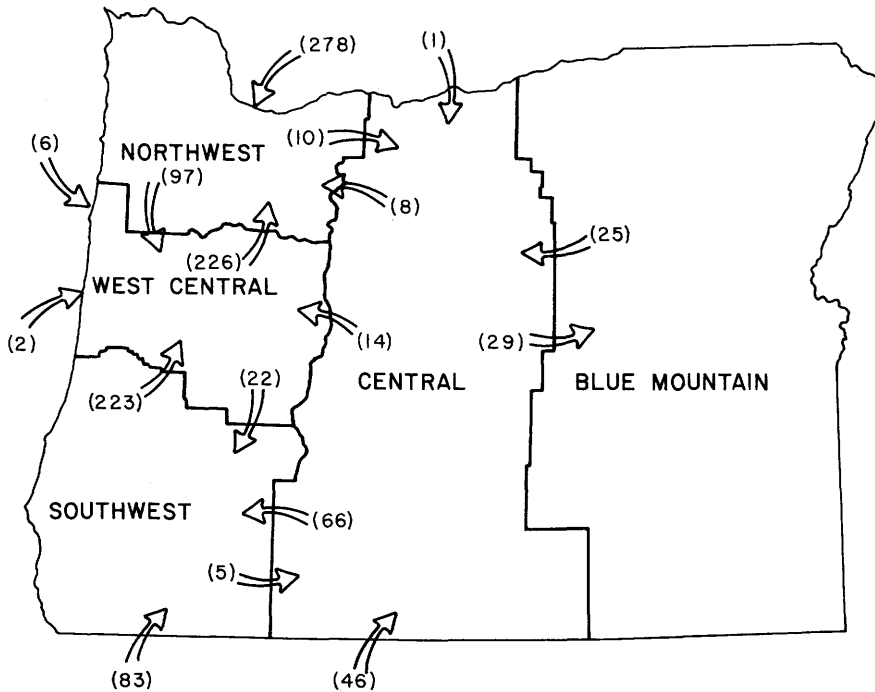


Figure 4.--Flow of logs between resource areas and from out-of-State origins.

DOUGLAS-FIR ACCOUNTS FOR 60 PERCENT OF LOG CONSUMPTION

Douglas-fir continues to be the predominant species in terms of log consumption. In 1976, a total of 5,632 million board feet of Douglas-fir logs were used by the forest industry, amounting to just over 60 percent of the total. This proportion is slightly lower than in 1972 and down 5 percent from the 1968 level. Increasing in proportion to total consumption were the true firs, ponderosa pine, and lodgepole pine. Lodgepole pine was the only species to show an increase in absolute consumption since 1972.

TWENTY-FOUR MILLS ACCOUNT FOR 38 PERCENT OF SAWMILL LOG CONSUMPTION

As shown in the following tabulation, the largest sawmills have increased their share of total log consumption since 1968.

Number and log consumption of Oregon sawmills^{1/}
by annual consumption class for selected years

Annual consumption class (million board feet)	1968		1972		1976	
	Number of mills	Log consumption	Number of mills	Log consumption	Number of mills	Log consumption
		Million board feet		Million board feet		Million board feet
50.9+	21	1,724	27	2,280	24	2,066
25.0-49.9	72	2,616	68	2,437	61	2,080
5.0-24.9	106	1,391	95	1,316	96	1,170
0.001-4.9	90	132	65	108	53	88
All classes	289	5,863	255	6,141	234	5,404

^{1/}Does not include mills that cut only peeler cores.

In 1976, the 24 largest mills in the State, consuming more than 50 million board feet per year, accounted for 38 percent of total log consumption by the sawmill sector. This is up from 29 percent in 1968 but only slightly higher than in 1972. This was the only size-class of the four to experience a relative gain in proportion over the period of 1968 to 1976. In 1976, there were 85 mills that used 25 million board feet or more of logs. These mills consumed almost 77 percent of the total log consumption by sawmills, while accounting for only 36 percent of the total number of mills.

PULP AND BOARD INDUSTRY WOOD CONSUMPTION UP 8 PERCENT FROM 1972

In 1976, the pulp and board industry consumed 7,296,498 tons of mill residues and off-site roundwood chips, and 71 million board feet of logs. The total wood consumption for 1976 represents an increase of 8 percent over 1972 and is 46 percent higher than in 1968. The most radical change in the raw material supply has been the use of off-site roundwood chips. From 1968 to 1972, the industry moved from consumption of 2,900 tons of off-site chips to 71,000 tons. By 1976, this figure had risen to almost 672,000 tons, an increase of 840 percent since 1972. In part this may be due to a general tightening of the availability of mill residues. This can be seen from the data which show an increase of only 26,724 tons of mill residues from 1972 to 1976, while off-site chips increased 600,299 tons. Both logs and bark showed a decrease in consumption over the same period.

During 1976, pulp mills also reported use of 111,435 tons of wastepaper. Also used by the industry were thousands of tons of wood and bark in the form of hog fuel burned for energy production.

Mill Residues

ALMOST 15.4 MILLION TONS OF RESIDUE PRODUCED DURING 1976

The residue-producing industries (sawmills, veneer and plywood, shake and shingle) generated 15.4 million tons (dry weight) of residue material during 1976. Wood residues accounted for 12.2 million tons, or 79 percent of the total. Sawmills generated 56 percent of all

residue, veneer and plywood mills 43 percent, and shake and shingle mills less than 1 percent. With the greatest concentrations of residue-producing industries, the west central and southwest areas produced a total of 62 percent of the State's total.

ALMOST 98 PERCENT OF WOOD RESIDUE WAS USED

Almost 98 percent of the wood residue generated during 1976 was put to a useful purpose. The remaining 2 percent was either burned or otherwise disposed of. The level of utilization attained in 1976 was 13 percent higher than that in 1968, and 3 percent higher than the 1972 level.

The use of bark has increased dramatically over the survey period. In 1976, about 92 percent of the bark was used, compared to only 57 percent in 1968. In relative terms, 60 percent more bark was used in 1976 than in 1968.

VENEER AND PLYWOOD INDUSTRY HAD HIGHEST RATE OF WOOD RESIDUE USE

The veneer and plywood industry was the leader in disposition of wood residues, finding uses for 99 percent. Sawmills followed closely behind with 97 percent, while shake and shingle mills found uses for only 60 percent. The lower rate of utilization by the shake and shingle industry is primarily attributable to two factors. First, residues are generated in rather small quantities, thus being more difficult to market. Second, western redcedar, the species used almost exclusively, is not heavily demanded by the pulp and board industries.

MOST WOOD RESIDUE GOES TO PULP AND BOARD INDUSTRIES

As seen in the following tabulation, a majority of the wood residue in 1976 was distributed to the pulp and board industries, including export to foreign markets. For bark, however, over three-fourths was used for fuel, either by the producing mill or sold to others.

Disposition of residues for 1968, 1972, and 1976

<u>Disposition</u>	<u>Wood</u>			<u>Bark</u>			<u>Wood and bark</u>		
	<u>1968</u>	<u>1972</u>	<u>1976</u>	<u>1968</u>	<u>1972</u>	<u>1976</u>	<u>1968</u>	<u>1972</u>	<u>1976</u>
Pulp and board	61.6	69.5	73.1	--	1.1	0.6	48.7	55.3	57.9
Fuel	20.0	19.5	15.6	49.8	61.5	75.7	26.3	28.2	28.2
Miscellaneous	5.3	6.1	9.2	7.4	14.9	15.2	5.7	7.9	10.5
Unused	13.1	4.9	2.1	42.8	22.5	8.5	19.3	8.6	3.4

While pointing out general trends in residue use, analysis of the data also points out an interesting situation.

Since the 1972 survey, there has been increased emphasis on alternative fuel sources brought about by restricted supplies and higher prices for petroleum products. Thus it would be expected that residues channeled to fuel would have increased over the past 4 years. As the data above indicates, there was no overall increase in the proportion of residue used for fuel between 1972 and 1976. It is generally accepted, however, that the forest products industry is the largest consumer of mill residues for fuel. Thus, when less product is manufactured and fewer days worked, the industry requires less fuel for its energy needs.

If the forest products industry is the major user, then the proportion of residue used for fuel would remain nearly the same, assuming no major technological changes. Conversely, if other industries used a major share of the residue for fuel, a change in production levels by the forest industry would have less effect on the total volume demanded by all users. To test this assumption, a ratio of residue used for fuel to log consumption has been developed for 1972 and 1976. Product output may have been a better standard to use, but the widely different measurement standard for the various sectors made comparability almost impossible. Analysis of the data indicate that little change occurred in the above ratio between 1972 and 1976. In 1976 the ratio of residue used for fuel to log consumption was 929 pounds per thousand board feet. This is almost the same as for 1972 when the ratio was 927 pounds per thousand board feet. Thus, it appears that the relative stability in the use of residues for fuel between 1972 and 1976 is tied to the level of output of forest industry.

While these data do not indicate a major step toward greater self-sufficiency in terms of energy usage, the literature suggests a definite upward trend into the future. A major issue facing many mills is the conflict between the value of residues when sold for other products and the increasing probability of facing an interruptible supply of conventional energy.

ALMOST TWO-THIRDS OF THE VENEER CORES WERE SENT TO SAWMILLS

Over 99 percent of the cores generated in the production of veneer were used in 1976. Almost two-thirds, 65 percent, were sent to the sawmill sector for subsequent manufacture into sawn products, frequently 2x4's. Most of the remaining volume was chipped for use by the pulp and board industry. In light of increased installation of core chippers, the future may see an upswing in chip production from cores.

LARGEST VOLUMES OF UNUSED RESIDUES WERE IN THE BLUE MOUNTAIN AND SOUTHWEST AREAS

Nearly one-third of the volume of unused wood residues were located in the Blue Mountain area. The market for this material is affected by a relatively small pulp and board industry, and geographic isolation from residue-using industries in other areas of the State. Even with this handicap, the residue producing industry managed to find use for over 91 percent of the wood residues produced.

About one-half of all unused bark was found in the southwest area. The lowest degree of utilization of bark was in the Blue Mountain area, where only 81 percent was used. The southwest area had the second lowest usage at 87 percent. For the State as a whole, over 91 percent was used.

As would be expected, the resource area with the largest pulp and board industry had the highest level of residue utilization. Sawmills in the west central area reported 100-percent utilization of both wood and bark residues. Veneer and plywood mills found use for over 99 percent of residual materials. Over all, less than one-half of 1 percent of the residue generated in the area was not used.

SMALLER SAWMILLS MAKE SIGNIFICANT GAIN IN RESIDUE USE

As the data below show, large sawmills utilized a greater proportion of their residue than did the smaller mills. The advantage of

the larger mills lies in the larger volumes of residues generated and the greater degree of diversification associated with the ownership of these mills.

Percent of wood and bark residue utilized by sawmill size-class

<u>Sawmill Size-class</u>	<u>Wood Residue</u>			<u>Bark Residue</u>		
	<u>1968</u>	<u>1972</u>	<u>1976</u>	<u>1968</u>	<u>1972</u>	<u>1976</u>
A	94.8	95.4	98.3	72.8	79.8	93.4
B	81.5	90.5	95.6	35.2	60.9	88.9
C	74.7	92.6	95.1	45.9	73.5	87.9
D	51.6	82.6	90.9	29.8	64.8	85.8
All mills	84.5	94.0	97.5	54.1	75.3	92.0

The smaller sawmills have made significant gains in utilization of residues since 1968. Much of this is due to increased demand for mill residue coupled with an already high degree of utilization by the larger mills.

It is apparent from these figures that future changes in the residue use picture will be associated with trade-offs among competing alternative uses rather than increases in overall utilization.

Veneer and plywood mills are not categorized by size class, thus making this type of comparison impossible. The fact that 99 percent of wood residues and 91 percent of bark are used, however, indicates that most mills are successful in finding useful disposition of their manufacturing by-products.

The Hardwood Industry

Hardwoods constitute about 8 percent of the sawtimber inventory in western Oregon. Yet hardwoods account for less than 1 percent of the State's log consumption. In 1976, reported consumption of hardwood logs was 65.5 million board feet, 0.7 percent of total consumption, nearly 100 percent of this occurring west of the Cascades.

Although the volume of hardwood log consumption is relatively small, a number of secondary manufacturers rely heavily on hardwood lumber for products such as cabinets, millwork, and furniture stock. What the future holds for the current hardwood resource is very uncertain. Many stands of hardwood are being converted to conifers. Declining supplies of softwood timber, however, may require a new look at the little used hardwoods. Understanding the existing hardwood industry is an important element in the analysis of the supply and demand for hardwood timber.

In this report, hardwood industry refers to mills^{9/} that use hardwood logs almost exclusively. A few mills process small volumes of hardwood logs, but study results show no mills using between 5 and 90 percent hardwood logs. Thus, the hardwood industry includes only those mills using 90+ percent of hardwood logs.

Following the definition above, there were 19 hardwood mills in western Oregon consisting of 18 sawmills and 1 veneer mill. Reported hardwood log consumption of these mills was 45.5 million board feet.

^{9/} These hardwood mills are included in all data and discussion of the sawmill industry as previously identified.

In addition, the pulp and board industry used 16.45 million board feet of hardwood logs, most of this in the southwest area.

ALL HARDWOOD SAWMILLS WERE SMALL

Of the 18 sawmills, only one mill had a capacity exceeding 30 thousand feet, board measure per shift. Total capacity for the sawmills was 301 thousand feet, board measure per 8-hour shift. The sawmills averaged one shift per day and operated an average of 202 days during 1976. The veneer mill operated one shift per day for 180 days.

Most of the mills have been in operation for many years. As of 1976, almost 80 percent had been operating for 10 years or more and five mills exceeded 20 years of operation. There was only one mill that had come on line since 1972.

MOST HARDWOOD MILLS ARE IN NORTHWEST AREA

Geographically, the hardwood mills are scattered throughout western Oregon. Listed below are the counties where the mills were located. As can be seen the northwest area led with 10 mills.

Number of hardwood mills by resource area and county

<u>Northwest</u>	<u>West central</u>	<u>Southwest</u>
Clatsop (1)	Benton (2)	Coos (2)
Columbia (1)	Lane (2)	Douglas (1)
Marion (2)	Lincoln (1)	
Polk (3) ^{10/}	Linn (1)	
Tillamook (3)		

The counties with the greatest log consumption, Tillamook, Coos, and Benton, accounted for 27.5 million board feet, 60 percent of the total.

HARDWOOD MILLS GET 98 PERCENT OF THEIR LOGS FROM OREGON

The industry reported only 905 thousand board feet of logs imported into the State from Washington. The remainder, 98 percent, originated from lands within the State. Approximately 70 percent of the logs consumed in a county originated in the same county. This proportion is slightly higher than for the statewide industry. In terms of origin of logs, Tillamook, Lincoln, and Benton Counties were the largest suppliers, with 9.6, 8.0, and 6.1 million board feet, respectively, 53 percent of the total.

PRIVATE LANDS SUPPLIED A MAJORITY OF LOGS

Logs from private lands accounted for 63 percent of the consumption in 1976. The next largest sources were National Forest and State lands at 15 and 14 percent.

This distribution is quite different from the forest industry as a whole. Overall, 44 percent of the logs come from private lands.

^{10/} Includes one veneer mill.

The explanation for this difference lies in the natural distribution of hardwood stands. Most of the better hardwood stands, particularly red alder, occur in the lower elevations of the Coast and Cascade Ranges and in river bottoms throughout western Oregon. A majority of these lands are privately held and very accessible, thus leading to the log distribution noted above.

HARDWOOD SAWMILLS PRODUCED 42 MILLION BOARD FEET OF LUMBER

In 1976, the hardwood sawmills produced a total of 42 million board feet of sawed products. The dimensions of these products are somewhat different than for softwood lumber due to the specialized needs of the secondary manufacturers, such as cabinet makers and furniture manufacturers. Of the total production, 64 percent was sold rough green and 59 percent was surfaced dry.

OVER 56,000 TONS OF RESIDUES PRODUCED

In the manufacturing process, the hardwood industry generated 42,231 tons of wood residue and 13,796 tons of bark. Over 98 percent of these residues were utilized, slightly higher than the average for all forest product industries. Shown below are the percent disposition of the residue generated.

Residue Disposition of Hardwood Mills

<u>Disposition</u>	<u>Wood</u>	<u>Bark</u>
	- - - - - Percent - - - -	
Pulp and board	59	35
Fuel		
Used by mill	18	24
Sold	14	18
Miscellaneous	8	18
Unused	1	5

Appendix I

MEASUREMENT UNITS

Board foot is the unit of measure used in this report for all wood consumption with the exception of purchased or transferred veneer consumed by plywood mills (square feet, 3/8-inch basis) and mill residues consumed by pulp and board mills (tons, dry weight). Consumption by mills not reported in these units was converted using the following general factors:

1 cord = 500 board feet
 1 ton = 500 board feet
 10.5 squares = 1,000 board foot
 1 lineal foot = 3.8 board feet
 1 cubic foot = 6 board feet
 200 cubic foot unit = 1 bone-dry ton
 1 bone-dry unit = 1.2 bone-dry tons

Board-foot lumber talley is the unit of measure used for lumber production, and square feet 3/8-inch basis for veneer and plywood production; square (100 square feet) for shake and shingle production.

MILL RESIDUES

In this study no attempt was made to get individual mills to quantify the amount of residue produced. Although many mills might be able to specify amounts of residue sold for high value uses, such as pulp chips, the lower value uses such as mulch or fuel are difficult to quantify. Therefore, the mills were only asked to indicate the percentage distribution of the disposal of their residues. These percentages were then applied to residue estimates derived through use of the following factors:

Softwood Sawmill Residue^{1/}

Average quantity of residues developed from
 producing one thousand board feet of lumber

<u>Type of output</u>	<u>Solid volume</u> ^{2/}		<u>Dry weight</u>	
	<u>Cubic feet</u>	<u>Percent</u> ^{3/}	<u>Western</u>	<u>Eastern</u>
			<u>Oregon</u>	<u>Oregon</u>
			- - -	<u>Tons</u> - - -
Wood residues:				
Slabs, edgings, sawmill trim	36	24.5	0.486	0.480
Planer trim	3	2.0	.041	.036
Sawdust	16	10.9	.216	.264
Planer shavings	16	10.9	.216	.192
Total wood residue	71	48.3	.959	.972
Bark	19	12.9	.258	.228
Lumber	57	38.8	.864	.780
Whole log	147	100.0	2.081	1.980

^{1/} Based on data from Oregon mills compiled by Oregon State University, School of Forestry, in 1967, and adjusted for changes in lumber standards in 1974 by James O. Howard, Resource Analyst, Pacific Northwest Forest and Range Experiment Station.

^{2/} Equivalent undried solid volume of residue.

^{3/} Percent of log by volume.

Softwood Plywood Residue^{4/}

Average quantity of residue developed in producing the
equivalent of 1,000 square feet of
3/8-inch plywood

<u>Type of output</u>	<u>Solid volume</u> ^{5/}	<u>Dry weight</u>	<u>Proportion of dry weight</u>
	<u>Cubic feet</u>	<u>Tons</u>	<u>Percent of whole log</u>
Wood residues:			
Log trim	3.4	0.048	4.4
Spur trim, roundup, and veneer clip	19.3	.270	24.3
Core	6.3	.088	7.9
Dry trim and layup loss	6.3	.088	7.9
Sander dust	1.6	.021	1.9
Total wood residue	36.9	.515	46.4
Bark	8.8	.132	11.9
All residues	45.7	.647	58.3
Plywood	34.9	.463	41.7
Whole log	80.6	1.110	100.0

Hardwood Sawmill Residue^{6/}

Average residue developed from producing 1,000 board
feet of lumber using a narrow kerf bandsaw

<u>Type of residue</u>	<u>Dry tons</u>
Coarse	0.60
Shavings	.22
Bark	.34
Sawdust	.23

^{4/} All residue factors, except sander dust and bark, from data collected in various mill studies by the Characterization and Utilization of Western Softwoods and Forest Residues Project, Pacific Northwest Forest and Range Experiment Station, and compiled by James O. Howard, Resource Analyst. Sander dust and bark factors based on data from Oregon mills compiled in 1967 by Oregon State University, School of Forestry.

^{5/} Volumes are based on equivalent green volume.

^{6/} Based on information furnished by Northwest Hardwoods, Inc.

Shingle Mill Residue^{7/}

Average quantity of residue developed in utilizing
1,000 board feet of logs, Scribner scale, or in
producing the equivalent volume of 10.5 squares

<u>Type of residue</u>	<u>Solid volume</u>	<u>Percent</u>	<u>Dry weight per thousand board feet</u>
	<u>Cubic feet</u>		<u>Tons</u>
From shingles:			
Coarse	23	13.7	0.22
Fine	78	46.8	.75
Bark	19	11.5	.28
From shakes:			
Coarse	23	13.7	.22
Fine	24	14.5	.23
Bark	19	11.5	.28
From hip and ridge, and other:			
Coarse	23	13.7	.22
Fine	51	30.6	.49
Bark	19	11.5	.28

DEFINITIONS

Old-growth timber:	Timber at least 100 years old.
Sound log:	Number 3 sawlogs and better in grade and having the following minimum specifications: 6-inch diameter, 12-foot length, 50-board foot net scale.
Utility log:	Logs having the following minimum specifications; 6-inch diameter, 12-foot length, 50+ percent of gross scale chippable.
Young-growth timber:	Timber less than 100 years old.
Mill:	An identifiable operation at one location. For example, a sawmill with a large log and a small log operation would be counted as two mills; also a sulfate and a groundwood pulping process at one location would be counted as two mills.
Off-site roundwood chips:	Chips from logs that are processed at a chipping mill, not as part of a milling operation, then transported to the user.
Apparent log receipts:	The sum of a mill's log consumption and gain or loss in inventory.

^{7/}Based on discussions with the Redcedar Shingle Bureau.

Appendix II

Table 1--Number of mills by type of industry and resource area, Oregon, 1976

Resource area	All industries	Industry				
		Lumber	Veneer and plywood	Pulp and board ^{1/}	Shake and shingle	Other
Northwest	138	70	21	12	15	16
West Central	167	67	53	14	26	3
Southwest	118	54	44	7	4	9
Central	43	29	9	4	--	--
Blue Mountain	32	23	5	3	1	1
All Areas	498	243	132	40	46	28
						9

^{1/} Each pulping process at a multiplant location is considered an individual mill.

^{2/} Represents the number of identifiable operations involved in the export trade.

Table 2--Wood consumption by mills by type of material, resource area, and industry, Oregon, 1976

Resource area and industry	Roundwood			Other ^{1/}	Residue ^{2/}
	All roundwood	Sound logs	Utility logs		

- - - - - Thousand board feet, Scribner log rule - - - - -

					<u>Tons, dry weight</u>
Northwest					
Lumber	1,150,666	1,070,811	79,855	76,498	--
Veneer and plywood	404,617	367,726	36,891	--	--
Pulp and board	56,000	15,000	41,000	--	1,801,241
Shake and shingle	6,553	4,228	2,325	6,370	--
Export	338,690	338,690	--	--	--
Post, pole, and piling	19,345	18,607	738	--	--
Total	1,975,871	1,815,062	160,809	82,868	1,801,241
West Central					
Lumber	1,420,698	1,253,582	167,116	112,693	--
Veneer and plywood	1,177,643	893,699	283,944	--	--
Pulp and board	--	--	--	--	3,085,234
Shake and shingle	26,814	21,517	5,297	2,996	--
Export	20,920	20,920	--	--	--
Post, pole, and piling ^{3/}	6,328	6,328	--	--	--
Total	2,652,403	2,196,046	456,357	115,689	3,085,234
Southwest					
Lumber	1,278,974	1,135,970	143,004	110,603	--
Veneer and plywood	1,349,277	1,105,541	243,736	--	--
Pulp and board	15,000	15,000	--	--	1,725,994
Shake and shingle ^{4/}	3,949	2,489	1,460	610	--
Export	134,944	134,694	250	--	--
Total	2,782,144	2,393,694	388,450	111,213	1,725,994
Central					
Lumber	986,698	964,958	21,740	10,674	--
Veneer and plywood	187,725	180,098	7,627	--	--
Pulp and board ^{5/}	--	--	--	--	684,029
Post, pole, and piling ^{3/}	--	--	--	--	--
Total	1,174,423	1,145,056	29,367	10,674	684,029
Blue Mountain					
Lumber	567,320	539,588	27,732	7,617	--
Veneer and plywood	186,443	186,243	200	--	--
Pulp and board ^{5/}	--	--	--	--	--
Shake and shingle ^{4/}	--	--	--	--	--
Total	753,763	725,831	27,932	7,617	--
All Areas					
Lumber	5,404,356	4,964,909	439,447	318,085	--
Veneer and plywood	3,305,705	2,733,307	572,398	--	--
Pulp and board	71,000	30,000	41,000	--	7,296,498
Shake and shingle	37,316	28,234	9,082	9,976	--
Export	494,554	494,304	250	--	--
Post, pole, and piling	25,673	24,935	738	--	--
Total	9,338,604	8,275,689	1,062,915	328,061	7,296,498

^{1/} Includes peeler cores, cants used by sawmills, blocks, boards, bolts used by shake and shingle mills, and miscellaneous peeled products used by post, pole, and piling mills.

^{2/} Includes residues from the sawmill, veneer and plywood, and shake and shingle industries, plus chips from roundwood chipping plants.

^{3/} West Central and Central combined to avoid disclosure.

^{4/} Southwest and Blue Mountain combined to avoid disclosure.

^{5/} Central and Blue Mountain combined to avoid disclosure.

Table 3--Log flows to mills by State of origin, resource area, and industry, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and industry	Origin					
	All	Oregon	Washington	California	Idaho	Other
Northwest						
Lumber	1,150,666	1,039,197	110,637	--	832	--
Veneer and plywood	404,617	361,448	43,099	--	35	35
Pulp and board	56,000	41,360	14,000	--	--	640
Shake and shingle	6,553	6,313	240	--	--	--
Export	338,690	234,849	103,841	--	--	--
Post, pole, and piling	19,345	14,780	4,565	--	--	--
Total	1,975,871	1,697,947	276,382	--	867	675
West Central						
Lumber	1,420,698	1,418,633	2,065	--	--	--
Veneer and plywood	1,177,643	1,173,643	1,600	2,400	--	--
Shake and shingle	26,814	24,932	1,882	--	--	--
Export	20,920	20,920	--	--	--	--
Post, pole, and piling	6,328	5,762	566	--	--	--
Total	2,652,403	2,643,890	6,113	2,400	--	--
Southwest						
Lumber	1,278,974	1,248,007	--	30,967	--	--
Veneer and plywood	1,349,277	1,299,962	--	49,315	--	--
Pulp and board	15,000	15,000	--	--	--	--
Shake and shingle	3,949	3,949	--	--	--	--
Export	134,944	132,411	--	2,533	--	--
Total	2,782,144	2,699,329	--	82,815	--	--
Central						
Lumber	986,698	964,599	1,050	21,049	--	--
Veneer and plywood	187,725	163,101	--	24,624	--	--
Post, pole, and piling ^{1/}	--	--	--	--	--	--
Total	1,174,423	1,127,700	1,050	45,673	--	--
Blue Mountain						
Lumber	567,320	567,320	--	--	--	--
Veneer and plywood ^{2/}	186,443	186,443	--	--	--	--
Shake and shingle ^{2/}	--	--	--	--	--	--
Total	753,763	753,763	--	--	--	--
All Areas						
Lumber	5,404,356	5,237,756	113,752	52,016	832	--
Veneer and plywood	3,305,705	3,184,597	44,699	76,339	35	35
Pulp and board	71,000	56,360	14,000	--	--	640
Shake and shingle	37,316	35,194	2,122	--	--	--
Export	494,554	388,180	103,841	2,533	--	--
Post, pole, and piling	25,673	20,542	5,131	--	--	--
Total	9,338,604	8,922,629	283,545	130,888	867	675

^{1/} Combined with West Central to avoid disclosure.^{2/} Combined with Southwest to avoid disclosure.

Table 4--Log flows by county and out-of-State origins,

(Thousand board feet,

Resource area and county of use	Totals	Northwest						
		Clackamas	Clatsop	Columbia	Hood River	Marion	Multnomah	Polk
Northwest								
Clackamas	343,868	256,122	11,280	15,234	1,250	9,386	15,966	3,200
Clatsop and Columbia ^{1/}	628,434	35,345	221,313	105,251	--	--	4,787	--
Hood River	92,253	2,295	--	--	45,760	--	--	--
Marion	118,563	3,234	--	--	--	64,522	--	24
Multnomah	216,210	75,085	5,747	34,179	2,338	8,624	19,718	--
Polk	250,217	24,151	--	--	--	10,448	--	57,461
Tillamook	126,357	--	6,642	1,439	--	--	--	--
Washington	63,450	400	6,581	8,943	--	--	--	--
Yamhill	136,519	--	--	--	--	--	--	22,489
Total	1,975,871	396,632	251,563	165,046	49,348	92,980	40,471	83,174
West Central ^{2/}								
Benton	162,308	--	--	530	--	--	--	845
Lane	1,775,577	339	--	--	--	1,395	--	--
Lincoln	154,148	--	--	--	--	--	--	5,544
Linn	560,370	9,048	--	--	--	76,647	--	1,143
Total	2,652,403	9,387	--	530	--	78,042	--	7,532
Southwest ^{3/}								
Coos	797,787	--	--	--	--	--	--	--
Curry	156,901	--	--	--	--	--	--	--
Douglas	1,123,659	--	--	--	--	--	--	--
Jackson	556,971	--	--	--	--	--	--	--
Josephine	146,826	--	--	--	--	--	--	--
Total	2,782,144	--	--	--	--	--	--	--
Central								
Crook	118,726	365	--	--	--	--	--	--
Deschutes and Lake ^{1/}	273,528	--	--	--	--	--	--	--
Jefferson, Wasco, and Wheeler ^{1/}	212,522	8,360	35	106	1,100	--	--	--
Klamath	569,647	--	--	--	--	--	--	--
Total	1,174,423	8,725	35	106	1,100	--	--	--
Blue Mountain								
Baker and Wallowa ^{1/}	139,493	--	--	--	--	--	--	--
Grant and Harney ^{1/}	273,652	--	--	--	--	--	--	--
Umatilla and Morrow ^{1/}	161,534	--	--	--	--	--	--	--
Union	179,084	--	--	--	--	--	--	--
Total	753,763	--	--	--	--	--	--	--
All Areas	9,338,604	414,744	251,598	165,682	50,448	171,022	40,471	90,706

See footnotes at end of table.

resource area, and county of use, Oregon, 1976

Scribner log rule)

			West Central					
Tillamook	Washington	Yamhill	Benton	Lane	Lincoln	Linn	Coos	Curry
3,233	--	1,309	3,570	3,400	--	6,480	--	--
73,076	10,964	--	--	--	540	3,900	--	--
--	--	--	--	--	--	--	--	--
--	--	48	24	2,260	2,100	46,351	--	--
1,788	5,404	3,251	120	--	360	4,956	--	--
9,770	--	37,288	3,750	--	71,943	35,406	--	--
95,525	4,318	1,569	--	--	16,864	--	--	--
11,292	30,483	4,992	--	--	515	--	--	--
56,821	900	32,413	--	--	23,896	--	--	--
251,505	52,069	80,870	7,464	5,660	116,218	97,093	--	--
--	--	--	87,180	23,205	46,493	2,655	--	--
--	--	--	11,285	1,419,801	7,496	98,190	20,931	--
1,353	--	--	--	11,668	134,879	500	--	--
--	--	--	21,336	16,280	--	429,809	--	--
1,353	--	--	119,801	1,470,954	188,868	531,154	20,931	--
--	--	--	--	1,896	--	--	539,470	69,748
--	--	--	--	--	--	--	8,778	136,647
--	--	--	--	20,523	--	--	49,760	30,170
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	1,288	3,248
--	--	--	--	22,419	--	--	599,296	239,813
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--
252,858	52,069	80,870	127,265	1,499,033	305,086	628,247	620,227	239,813

Table 4--Log flows by county and out-of-State origins.

(Thousand board feet,

Resource area and county of use	Southwest			Central				
	Douglas	Jackson	Josephine	Crook	Deschutes	Jefferson	Klamath	Lake
Northwest								
Clackamas	--	--	--	--	--	--	--	--
Clatsop and Columbia ^{1/}	--	--	--	--	--	--	--	--
Hood River	--	--	--	--	--	--	--	--
Marion	--	--	--	--	--	--	--	--
Multnomah	--	--	--	--	--	18	--	--
Polk	--	--	--	--	--	--	--	--
Tillamook	--	--	--	--	--	--	--	--
Washington	--	--	--	--	38	--	--	--
Yamhill	--	--	--	--	--	--	--	--
Total	--	--	--	--	38	18	--	--
West Central ^{2/}								
Benton	--	--	--	--	--	--	--	--
Lane	197,375	--	--	--	6,000	--	7,812	--
Lincoln	204	--	--	--	--	--	--	--
Linn	4,513	--	--	--	--	--	--	--
Total	202,092	--	--	--	6,000	--	7,812	--
Southwest ^{3/}								
Coos	177,421	1,050	5,499	--	--	--	170	--
Curry	103	--	--	--	--	--	--	--
Douglas	944,849	24,309	47,508	--	--	--	5,800	--
Jackson	41,902	387,858	19,394	--	--	--	55,057	--
Josephine	2,248	47,546	71,787	--	--	--	5,210	--
Total	1,166,523	460,763	144,188	--	--	--	66,237	--
Central								
Crook	--	--	--	91,457	--	--	--	--
Deschutes and Lake ^{1/}	--	--	--	5,553	103,088	63,704	13,537	80,723
Jefferson, Wasco, and Wheeler ^{1/}	--	--	--	--	--	84,788	--	--
Klamath	--	4,568	--	--	9,910	--	292,820	216,676
Total	--	4,568	--	97,010	112,998	148,492	306,357	297,399
Blue Mountain								
Baker and Wallowa ^{1/}	--	--	--	--	--	--	--	--
Grant and Harney ^{1/}	--	--	--	9,900	1,100	--	--	2,200
Umatilla and Morrow ^{1/}	--	--	--	--	--	--	--	--
Union	--	--	--	--	--	--	--	--
Total	--	--	--	9,900	1,100	--	--	2,200
All Areas	1,368,615	465,331	144,188	106,910	120,136	148,510	380,406	299,599

^{1/} Combined to avoid disclosure.

^{2/} Includes one post, pole, and piling plant from Central Oregon; combined to avoid disclosure.

^{3/} Includes one shake and shingle mill from Blue Mountain; combined to avoid disclosure.

resource area, and county of use, Oregon, 1976--Continued

Scribner log rule)

		Blue Mountain							Out-of-State
Wasco	Wheeler	Baker	Grant	Harney	Morrow	Umatilla	Union	Wallowa	
1,723	--	--	--	--	--	--	--	--	11,715
--	--	--	--	--	--	--	--	--	173,258
3,925	--	--	--	--	--	--	--	--	40,273
--	--	--	--	--	--	--	--	--	--
2,154	--	--	--	--	--	--	--	--	52,468
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	206
--	--	--	--	--	--	--	--	--	--
7,802	--	--	--	--	--	--	--	--	277,920
--	--	--	--	--	--	--	--	--	1,400
--	--	--	--	--	--	--	--	--	4,953
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	1,594
--	--	--	--	--	--	--	--	--	7,947
--	--	--	--	--	--	--	--	--	2,533
--	--	--	--	--	--	--	--	--	11,373
--	--	--	--	--	--	--	--	--	740
--	--	--	--	--	--	--	--	--	52,760
--	--	--	--	--	--	--	--	--	15,499
--	--	--	--	--	--	--	--	--	82,905
243	11,307	--	13,190	2,164	--	--	--	--	--
6,923	--	--	--	--	--	--	--	--	--
84,638	22,314	--	1,594	--	7,970	--	--	--	1,617
--	--	--	--	--	--	--	--	--	45,673
91,804	33,621	--	14,784	2,164	7,970	--	--	--	47,290
--	--	80,120	--	--	--	--	11,674	47,699	--
--	--	--	171,631	85,150	--	3,671	--	--	--
--	15,967	--	52,767	--	34,971	39,396	12,433	6,000	--
--	--	4,955	8,021	--	--	26,592	90,417	49,099	--
--	15,967	85,075	232,419	85,150	34,971	69,659	114,524	102,798	--
99,606	49,588	85,075	247,203	87,314	42,941	69,659	114,524	102,798	416,062

Table 5—Log flow to mills from National Forests, by resource area and county, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and county of use	All National Forests	Deschutes	Fremont	Malheur	Mt. Hood	Ochoco	Rogue River	Siskiyou	Siuslaw	Umatilla	Umpqua	Wallowa-Whitman	Willamette	Winema	Out-of-State National Forests
Northwest															
Clackamas	157,242	--	--	--	152,285	--	--	--	2,201	--	--	--	--	--	2,756
Clatsop and Columbia ^{1/}	53,375	--	--	--	25,304	--	--	--	--	--	--	--	--	--	28,071
Hood River	51,515	--	--	--	43,705	--	--	--	--	--	--	--	--	--	7,810
Marion	38,611	--	--	--	--	--	--	--	--	--	--	--	38,611	--	--
Multnomah	69,581	--	--	--	60,351	--	--	--	475	--	--	--	1,148	--	7,607
Polk	48,963	--	--	--	--	--	--	--	48,963	--	--	--	--	--	--
Tillamook	13,640	--	--	--	--	--	--	--	13,640	--	--	--	--	--	--
Washington	70	--	--	--	--	--	--	--	25	--	--	--	--	--	45
Yamhill	38,434	--	--	--	--	--	--	--	38,434	--	--	--	--	--	--
Total	471,431	--	--	--	281,645	--	--	--	103,738	--	--	--	39,759	--	46,289
West Central															
Benton	59,615	--	--	--	--	--	--	--	59,615	--	--	--	--	--	--
Lane	665,284	25,428	--	--	--	--	--	--	155,356	--	41,385	--	436,012	7,103	--
Lincoln	42,159	--	--	--	--	--	--	--	42,039	--	--	--	120	--	--
Linn	214,414	--	--	--	1,440	--	--	--	3,314	--	--	--	209,660	--	--
Total	981,472	25,428	--	--	1,440	--	--	--	260,324	--	41,385	--	645,792	7,103	--
Southwest															
Coos	66,947	--	--	--	--	--	490	37,136	24,222	--	1,255	--	500	--	3,344
Curry	83,964	--	--	--	--	--	--	83,964	--	--	--	--	--	--	--
Douglas	354,489	--	--	--	--	--	10,183	22,098	3,053	--	309,325	--	4,175	5,655	--
Jackson	258,430	--	--	--	--	--	170,870	573	--	--	41,744	--	--	34,055	11,188
Josephine	58,631	--	--	--	--	--	8,282	44,300	--	--	997	--	--	221	4,831
Total	822,461	--	--	--	--	--	189,825	188,071	27,275	--	353,321	--	4,675	39,931	19,363
Central															
Crook	105,926	--	--	7,673	506	97,747	--	--	--	--	--	--	--	--	--
Deschutes	176,196	147,803	23,564	--	--	4,191	--	--	--	--	--	--	--	638	--
Klamath	233,457	41,000	78,705	--	--	--	--	--	--	--	--	--	--	80,919	32,833
Lake	61,527	--	61,527	--	--	--	--	--	--	--	--	--	--	--	--
Jefferson, Wasco, and Wheeler ^{1/}	61,886	--	--	--	47,520	--	--	--	--	14,345	--	--	--	--	21
Total	638,992	188,803	163,796	7,673	48,026	101,938	--	--	--	14,345	--	--	--	81,557	32,854
Blue Mountain															
Baker and Wallowa ^{1/}	105,522	--	--	--	--	--	--	--	--	7,875	--	97,647	--	--	--
Grant and Harney ^{1/}	255,597	1,584	990	191,503	--	51,134	--	--	--	10,386	--	--	--	--	--
Umatilla and Morrow ^{1/}	95,704	--	--	--	--	--	--	--	--	90,304	--	5,400	--	--	--
Union	102,893	--	--	--	--	--	--	--	--	49,014	--	53,879	--	--	--
Total	559,716	1,584	990	191,503	--	51,134	--	--	--	157,579	--	156,926	--	--	--
All Areas	3,474,072	215,815	164,786	199,176	331,111	153,072	189,825	188,071	391,336	171,924	394,706	156,926	690,226	128,591	98,506

^{1/}Combined to avoid disclosure.

Table 6—Log flow to mills from National Forests, by industry and resource area, 1976

(Thousand board feet, Scribner log rule)

Resource area and industry	All National Forests	Deschutes	Fremont	Malheur	Mt. Hood	Ochoco	Rogue River	Siskiyou	Siustaw	Umatilla	Umpqua	Wallowa-Whitman	Willamette	Winema	Out-of-State National Forests
Northwest															
Lumber	322,523	--	--	--	211,993	--	--	--	78,527	--	--	--	1,240	--	30,763
Veneer and plywood	136,504	--	--	--	60,587	--	--	--	24,623	--	--	--	37,371	--	13,923
Shake and shingle	1,286	--	--	--	483	--	--	--	563	--	--	--	--	--	240
Export	9,808	--	--	--	7,342	--	--	--	--	--	--	--	1,148	--	1,318
Post, pole, and piling	1,310	--	--	--	1,240	--	--	--	25	--	--	--	--	--	45
Total	471,431	--	--	--	281,645	--	--	--	103,738	--	--	--	39,759	--	46,289
West Central															
Lumber	484,546	--	--	--	1,440	--	--	--	147,531	--	25,396	--	308,560	1,619	--
Veneer and plywood	491,026	25,428	--	--	--	--	--	--	109,150	--	15,989	--	334,975	5,484	--
Shake and shingle	4,814	--	--	--	--	--	--	--	3,363	--	--	--	1,451	--	--
Export	400	--	--	--	--	--	--	--	280	--	--	--	120	--	--
Post, pole, and piling ^{1/}	707	--	--	--	--	--	--	--	--	--	--	--	686	--	21
Total	981,493	25,428	--	--	1,440	--	--	--	260,324	--	41,385	--	645,792	7,103	21
Southwest															
Lumber	377,589	--	--	--	--	--	72,632	122,089	6,044	--	129,838	--	3,770	23,853	19,363
Veneer and plywood	415,402	--	--	--	--	--	116,703	51,936	8,052	--	222,228	--	405	16,078	--
Pulp and board	600	--	--	--	--	--	--	600	--	--	--	--	--	--	--
Shake and shingle ^{2/}	1,210	--	--	--	--	--	--	10	--	1,200	--	--	--	--	--
Export	28,860	--	--	--	--	--	490	13,436	13,179	--	1,255	--	500	--	--
Total	823,661	--	--	--	--	--	189,825	188,071	27,275	1,200	353,321	--	4,675	39,931	19,363
Central															
Lumber	561,019	164,552	150,180	7,673	48,026	97,747	--	--	--	14,345	--	--	--	60,353	18,143
Veneer and plywood	77,952	24,251	13,616	--	--	4,191	--	--	--	--	--	--	--	21,204	14,690
Post, pole, and piling ^{1/}	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	638,971	188,803	163,796	7,673	48,026	101,938	--	--	--	14,345	--	--	--	81,557	32,833
Blue Mountain															
Lumber	425,466	1,584	990	147,954	--	38,048	--	--	--	118,431	--	118,459	--	--	--
Veneer and plywood	133,050	--	--	43,549	--	13,086	--	--	--	37,948	--	38,467	--	--	--
Shake and shingle ^{2/}	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	558,516	1,584	990	191,503	--	51,134	--	--	--	156,379	--	156,926	--	--	--
All Areas															
Lumber	2,171,143	166,136	151,170	155,627	261,459	135,795	72,632	122,089	232,102	132,776	155,234	118,459	313,570	85,825	68,269
Veneer and plywood	1,253,934	49,679	13,616	43,549	60,587	17,277	116,703	51,936	141,825	37,948	238,217	38,467	372,751	42,766	28,613
Pulp and board	600	--	--	--	--	--	--	600	--	--	--	--	--	--	--
Shake and shingle	7,310	--	--	--	483	--	--	10	3,926	1,200	--	--	1,451	--	240
Export	39,068	--	--	--	7,342	--	490	13,436	13,459	--	1,255	--	1,768	--	1,318
Post, pole, and piling	2,017	--	--	--	1,240	--	--	--	25	--	--	--	686	--	66
Total	3,474,072	215,815	164,786	199,176	331,111	153,072	189,825	188,071	391,337	171,924	394,706	156,926	690,226	128,591	98,506

^{1/} West Central and Central combined to avoid disclosure.^{2/} Southwest and Blue Mountain combined to avoid disclosure.

Table 7--Dependency of mills for logs by ownership

(Number

Resource area and industry	National Forest				State				Bureau of Land Management			
	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
Northwest												
Lumber	37	15	10	8	46	21	2	1	45	23	2	--
Veneer and plywood	8	5	4	4	11	8	2	--	13	8	--	--
Pulp and board	12	--	--	--	10	2	--	--	10	2	--	--
Shake and shingle	11	2	--	2	12	2	1	--	11	3	--	1
Export	12	4	--	--	10	4	2	--	16	--	--	--
Post, pole, and piling	1	2	--	1	3	1	--	--	4	--	--	--
Total	81	28	14	15	92	38	7	1	99	36	2	1
West Central												
Lumber	17	17	18	15	51	13	3	--	31	27	7	2
Veneer and plywood	20	5	15	13	49	3	1	--	27	21	5	--
Shake and shingle	18	4	3	1	24	2	--	--	21	4	1	--
Export	2	1	--	--	3	--	--	--	2	1	--	--
Post, pole, and piling	1	2	--	1	3	1	--	--	2	2	--	--
Total	58	29	36	30	130	19	4	--	83	55	13	2
Southwest												
Lumber	17	17	13	7	45	7	2	--	18	19	11	6
Veneer and plywood	20	10	12	2	38	6	--	--	20	14	6	4
Pulp and board	6	1	--	--	7	--	--	--	6	1	--	--
Shake and shingle	3	1	--	--	4	--	--	--	3	--	--	1
Export	3	3	2	1	9	--	--	--	7	2	--	--
Total	49	32	27	10	103	13	2	--	54	36	17	11
Central												
Lumber	7	1	1	20	28	1	--	--	26	3	--	--
Veneer and plywood	3	1	2	3	9	--	--	--	7	1	1	--
Post, pole, and piling	--	1	--	--	--	1	--	--	1	--	--	--
Total	10	3	3	23	37	2	--	--	34	4	1	--
Blue Mountain												
Lumber	4	2	6	11	23	--	--	--	20	3	--	--
Veneer and plywood	--	--	2	3	5	--	--	--	3	2	--	--
Shake and shingle	--	--	--	1	1	--	--	--	1	--	--	--
Total	4	2	8	15	29	--	--	--	24	5	--	--
All Areas												
Lumber	82	52	48	61	193	42	7	1	140	75	20	8
Veneer and plywood	51	21	35	25	112	17	3	--	70	46	12	4
Pulp and board	18	1	--	--	17	2	--	--	16	3	--	--
Shake and shingle	32	7	3	4	41	4	1	--	36	7	1	2
Export	17	8	2	1	22	4	2	--	25	3	--	--
Post, pole, and piling	2	5	--	2	6	3	--	--	7	2	--	--
Total	202	94	88	93	391	72	13	1	294	136	33	14

origin, resource area, and industry, Oregon, 1976

of mills)

Other public				Forest industry								Farmer and miscellaneous private			
				Own lands				Other industry							
Dependency (percent)															
0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
61	8	1	--	49	10	5	6	33	13	9	15	30	26	5	9
16	5	--	--	12	3	6	--	11	7	--	3	12	9	--	--
11	1	--	--	9	--	--	3	10	2	--	--	9	3	--	--
15	--	--	--	13	--	--	2	11	1	--	3	13	2	--	--
15	--	1	--	15	--	1	--	3	--	2	11	10	5	--	1
4	--	--	--	4	--	--	--	3	--	--	1	1	1	--	2
122	14	2	--	102	13	12	11	71	23	11	33	75	46	5	12
65	1	1	--	45	15	3	4	30	27	4	6	31	25	4	7
52	1	--	--	34	7	7	5	36	11	5	1	39	12	1	1
25	--	--	1	26	--	--	--	14	1	4	7	17	6	1	2
3	--	--	--	3	--	--	--	--	--	1	2	2	1	--	--
4	--	--	--	2	1	1	--	1	2	1	--	1	1	1	1
149	2	1	1	110	23	11	9	81	41	15	16	90	45	7	11
54	--	--	--	31	17	3	3	26	21	3	4	30	18	4	2
44	--	--	--	25	9	5	5	29	10	5	--	30	13	--	1
7	--	--	--	6	1	--	--	6	--	--	1	6	1	--	--
4	--	--	--	4	--	--	--	2	1	--	1	3	--	--	1
9	--	--	--	8	--	1	--	2	--	2	5	7	2	--	--
118	--	--	--	74	27	9	8	65	32	10	11	76	34	4	4
24	3	--	2	18	7	1	3	23	6	--	--	18	10	1	--
8	1	--	--	6	1	--	2	7	2	--	--	5	3	--	1
1	--	--	--	--	1	--	--	--	1	--	--	--	1	--	--
33	4	--	2	24	9	1	5	30	9	--	--	23	14	1	1
23	--	--	--	13	7	2	1	16	6	1	--	6	13	1	3
4	--	1	--	3	2	--	--	4	1	--	--	--	5	--	--
1	--	--	--	1	--	--	--	1	--	--	--	1	--	--	--
28	--	1	--	17	9	2	1	21	7	1	--	7	18	1	3
227	12	2	2	156	56	74	17	128	73	17	25	115	92	15	21
124	7	1	--	80	22	18	12	87	31	10	4	86	42	1	3
18	1	--	--	15	1	--	3	16	2	--	1	15	4	--	--
45	--	--	1	44	--	--	2	28	3	4	11	34	8	1	3
27	--	1	--	26	--	2	--	5	--	5	18	19	8	--	1
9	--	--	--	6	2	1	--	4	3	1	1	2	3	1	3
450	20	4	3	327	81	35	34	268	112	37	60	271	157	18	31

Table 8—Log consumption of all mills by ownership class, resource area and industry, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and industry	All owners	State	National Forest	Bureau of Land Management	Other public	Forest industry		Farmer and miscellaneous private
						Own wood supply	Other wood supply	
Northwest								
Lumber	1,150,666	128,080	322,523	89,500	31,354	245,573	214,673	118,963
Veneer and plywood	404,617	57,134	136,504	33,620	7,874	93,014	49,363	27,108
Pulp and board	56,000	640	--	640	1,200	48,240	1,920	3,360
Shake and shingle	6,553	151	1,286	505	--	413	4,141	57
Export	338,690	26,588	9,808	--	5,093	9,000	179,476	108,725
Post, pole, and piling	19,345	545	1,310	--	--	--	4,865	12,625
Total	1,975,871	213,138	471,431	124,265	45,521	396,240	454,438	270,838
West Central								
Lumber	1,420,698	36,053	484,546	157,478	26,831	398,780	165,424	151,586
Veneer and plywood	1,177,643	16,654	491,026	141,387	2,527	291,477	179,532	55,040
Shake and shingle	26,814	296	4,814	1,883	22	--	12,416	7,383
Export	20,920	--	400	500	--	--	19,620	400
Post, pole, and piling ^{1/}	6,328	95	707	230	--	1,605	986	2,705
Total	2,652,403	53,098	981,493	301,478	29,380	691,862	377,978	217,114
Southwest								
Lumber	1,278,974	47,220	377,589	389,101	--	267,354	124,687	73,023
Veneer and plywood	1,349,277	16,869	415,402	393,190	--	353,686	101,530	68,600
Pulp and board	15,000	--	600	450	--	300	13,350	300
Shake and shingle ^{2/}	3,949	--	1,210	40	--	--	2,354	345
Export	134,944	--	28,860	1,147	--	6,912	88,457	9,568
Total	2,782,144	64,089	823,661	783,928	--	628,252	330,378	151,836
Central								
Lumber	986,698	3,850	561,019	2,932	97,750	292,542	14,682	13,923
Veneer and plywood	187,725	--	77,952	11,521	5,256	69,062	3,843	20,091
Post, pole, and piling ^{1/}	--	--	--	--	--	--	--	--
Total	1,174,423	3,850	638,971	14,453	103,006	361,604	18,525	34,014
Blue Mountain								
Lumber	567,320	--	425,466	3,909	--	62,473	17,991	57,481
Veneer and plywood	186,443	--	133,050	4,523	21,251	13,335	2,706	11,578
Shake and shingle ^{2/}	--	--	--	--	--	--	--	--
Total	753,763	--	558,516	8,432	21,251	75,808	20,697	69,059
All Areas								
Lumber	5,404,356	215,203	2,171,143	642,920	155,935	1,266,722	537,457	414,976
Veneer and plywood	3,305,705	90,657	1,253,934	584,241	36,908	820,574	336,974	182,417
Pulp and board	71,000	640	600	1,090	1,200	48,540	15,270	3,660
Shake and shingle	37,316	447	7,310	2,428	22	413	18,911	7,785
Export	495,554	26,588	39,068	1,647	5,093	15,912	287,553	118,693
Post, pole, and piling	25,673	640	2,017	230	--	1,605	5,851	15,330
Total	9,338,604	334,175	3,474,072	1,232,556	199,158	2,153,766	1,202,016	742,861

^{1/} West Central and Central combined to avoid disclosure.

^{2/} Southwest and Blue Mountain combined to avoid disclosure.

Table 9—Log consumption by mills by species, resource area, and industry, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and industry	All species	Douglas-fir	Hemlock	True firs	Spruce	Ponderosa pine	Lodgepole pine	Western redcedar	Other softwoods	Hardwoods
Northwest										
Lumber	1,150,666	673,718	403,968	10,048	14,600	1,000	4,573	18,974	2,956	20,829
Veneer and plywood	404,617	302,033	38,283	7,160	46,957	2,098	160	216	4,876	2,834
Pulp and board	56,000	13,450	39,940	580	580	--	--	--	--	1,450
Shake and shingle	6,553	--	--	--	--	--	--	6,553	--	--
Export	338,690	103,727	191,255	7,244	28,778	1,363	255	3,755	1,855	458
Post, pole, and piling	19,345	18,066	695	--	--	--	39	545	--	--
Total	1,975,871	1,110,994	674,141	250,032	90,915	4,461	5,027	30,043	9,687	25,571
West Central										
Lumber	1,420,698	1,039,617	271,543	24,665	1,837	--	2,192	59,462	4,136	17,246
Veneer and plywood	1,177,643	1,079,523	64,026	10,165	5,515	1,320	11,814	1,208	3,925	147
Shake and shingle	26,814	--	--	--	--	--	--	26,814	--	--
Export	20,920	9,151	10,187	300	1,282	--	--	--	--	--
Post, pole, and piling ^{1/}	6,328	6,224	--	--	--	35	--	69	--	--
Total	2,652,403	2,134,515	345,756	35,130	8,634	1,355	14,006	87,553	8,061	17,393
Southwest										
Lumber	1,278,974	836,646	79,228	82,492	2,014	140,598	5,906	43,700	80,870	7,520
Veneer and plywood	1,349,277	1,166,024	55,084	76,108	6,963	9,466	412	5,342	29,878	--
Pulp and board	15,000	--	--	--	--	--	--	--	--	15,000
Shake and shingle ^{2/}	3,949	--	--	--	--	--	--	2,749	1,200	--
Export	134,944	75,157	20,528	2,164	3,080	310	--	1,008	32,697	--
Total	2,782,144	2,077,827	154,840	160,764	12,057	150,374	6,318	52,799	144,645	22,520
Central										
Lumber	986,698	90,610	13,844	69,714	--	750,843	56,810	--	4,877	--
Veneer and plywood	187,725	46,994	3,902	93,623	735	20,596	21,875	--	--	--
Post, pole, and piling ^{1/}	--	--	--	--	--	--	--	--	--	--
Total	1,174,423	137,604	17,746	163,337	735	771,439	78,685	--	4,877	--
Blue Mountain										
Lumber	567,320	80,617	--	91,720	8,825	327,514	33,816	--	24,816	12
Veneer and plywood	186,443	90,614	--	52,365	1,082	27,989	--	--	14,393	--
Shake and shingle ^{2/}	--	--	--	--	--	--	--	--	--	--
Total	753,763	171,231	--	144,085	9,907	355,503	33,816	--	39,209	12
All Areas										
Lumber	5,404,356	2,721,208	768,583	278,639	27,276	1,219,955	103,297	122,136	117,655	45,607
Veneer and plywood	3,305,705	2,685,188	161,295	239,421	61,252	61,469	34,261	6,766	53,072	2,981
Pulp and board	71,000	13,450	39,940	580	580	--	--	--	--	16,450
Shake and shingle	37,316	--	--	--	--	--	--	36,116	1,200	--
Export	494,554	188,035	221,970	9,708	33,140	1,673	255	4,763	34,552	458
Post, pole, and piling	25,673	24,290	695	--	--	35	39	614	--	--
Total	9,338,604	5,632,171	1,192,483	528,348	122,248	1,283,132	137,852	170,395	206,479	65,496

^{1/} West Central and Central combined to avoid disclosure.

^{2/} Southwest and Blue Mountain combined to avoid disclosure.

Table 10—Production and disposition of wood and bark residues by mills by use, resource area, and residue-producing industry, Oregon, 1976

(Tons, dry weight)

Resource area and residue-producing industry	All residues	Wood residue						Bark residue					
		All wood	Used ^{1/}				Unused	All bark	Used ^{1/}				Unused
			Total	Pulp and board	Fuel	Miscellaneous			Total	Pulp and board	Fuel	Miscellaneous	
Northwest													
Lumber	2,062,920	1,623,886	1,608,011	1,304,883	252,454	50,674	15,875	439,034	425,027	3,309	276,576	145,142	14,007
Veneer and plywood	965,324	758,399	719,889	460,318	152,621	106,950	38,510	206,925	169,921	--	127,707	42,214	37,004
Shake and shingle	11,336	8,427	2,854	--	502	2,352	5,573	2,909	549	--	130	419	2,360
Total	3,039,580	2,390,712	2,330,754	1,765,201	405,577	159,976	59,958	648,868	595,497	3,309	404,413	187,775	53,371
West Central													
Lumber	2,382,987	1,866,194	1,866,194	1,478,051	353,889	34,254	--	516,793	516,793	3,632	441,422	71,739	--
Veneer and plywood	2,425,450	1,901,148	1,895,039	1,326,239	217,392	351,408	6,109	524,302	518,219	8,675	449,252	60,292	6,083
Shake and shingle	29,841	21,099	14,153	3,178	6,846	4,129	6,946	8,742	4,866	385	4,069	412	3,876
Total	4,838,278	3,788,441	3,775,386	2,807,468	578,127	389,791	13,055	1,049,837	1,039,878	12,692	894,743	132,443	9,959
Southwest													
Lumber	2,165,753	1,697,077	1,625,668	1,376,328	193,148	56,192	71,409	468,676	387,653	2,248	338,128	47,277	81,023
Veneer and plywood	2,648,121	2,119,385	2,115,911	1,511,727	182,770	421,414	3,474	528,736	477,820	--	414,171	63,649	50,916
Shake and shingle ^{2/}	3,707	2,757	2,405	--	2,163	242	352	950	718	--	624	94	232
Total	4,817,581	3,819,219	3,743,984	2,888,055	378,081	477,848	75,235	998,362	866,191	2,248	752,923	111,020	132,171
Central													
Lumber	1,253,388	1,021,454	1,002,113	681,025	290,511	30,577	19,341	231,934	212,779	--	163,750	49,029	19,155
Veneer and plywood	321,872	252,381	244,971	198,354	14,911	31,706	7,410	69,491	54,727	--	49,267	5,460	14,764
Total	1,575,260	1,273,835	1,247,084	879,379	305,422	62,283	26,751	301,425	267,506	--	213,017	54,489	33,919
Blue Mountain													
Lumber	779,625	627,750	556,968	375,499	162,477	18,992	70,782	151,875	121,117	2,280	114,928	3,909	30,758
Veneer and plywood	332,681	259,799	248,330	167,805	68,012	12,513	11,469	72,882	60,199	--	60,199	--	12,683
Shake and shingle ^{2/}	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	1,112,306	887,549	805,298	543,304	230,489	31,505	82,251	224,757	181,316	2,280	175,127	2,909	43,441
All Areas													
Lumber	8,644,673	6,836,361	6,658,954	5,215,786	1,252,479	190,689	177,407	1,808,312	1,663,369	11,469	1,334,804	317,096	144,943
Veneer and plywood	6,693,448	5,291,112	5,224,140	3,664,443	635,706	923,991	66,972	1,402,336	1,280,886	8,675	1,100,596	171,615	121,450
Shake and shingle	44,884	32,283	19,412	3,178	9,511	6,723	12,871	12,601	6,133	385	4,823	925	6,468
Total	15,383,005	12,159,756	11,902,506	8,883,407	1,897,696	1,121,403	257,250	3,223,249	2,950,388	20,529	2,440,223	489,636	272,861

^{1/}Used residues were not necessarily consumed in the area in which they were produced; included are residues exported from Oregon.^{2/}Southwest and Blue Mountain combined to avoid disclosure.

Table 11--Number of sawmills by mill-size class, resource area, and county, Oregon, 1976

Resource area and county	All classes	Mill-size class ^{1/}			
		D	C	B	A
Northwest					
Clackamas	15	6	4	1	4
Clatsop	2	1	--	--	1
Columbia	9	2	1	2	4
Hood River	3	--	--	--	3
Marion	6	2	1	2	1
Multnomah	4	--	1	1	2
Polk	8	1	2	1	4
Tillamook	6	4	--	--	2
Washington	10	7	1	1	1
Yamhill	7	4	--	1	2
Total	70	27	10	9	24
West Central					
Benton	10	2	3	2	3
Lane	38	3	9	10	16
Lincoln	6	2	--	2	2
Linn	13	3	4	3	3
Total	67	10	16	17	24
Southwest					
Coos	12	2	1	4	5
Curry	4	1	1	--	2
Douglas	23	2	5	5	11
Jackson	9	--	--	6	3
Josephine	6	1	--	1	4
Total	54	6	7	16	25
Central					
Crook	6	1	1	3	1
Deschutes	3	1	--	1	1
Jefferson	2	--	--	1	1
Klamath	10	--	3	2	5
Lake	5	--	2	3	--
Wasco	2	--	--	1	1
Wheeler	1	--	--	--	1
Total	29	2	6	11	10
Blue Mountain					
Baker	2	1	--	--	1
Grant	6	2	2	2	--
Harney	2	--	1	--	1
Morrow	1	--	1	--	--
Umatilla	4	--	--	3	1
Union	5	2	1	--	2
Wallowa	3	1	1	1	--
Total	23	6	6	6	5
All Areas	243	51	45	59	88

^{1/}Mill-size class are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

Table 12--Installed 8-hour capacity of sawmills by mill-size class,
resource area, and county, Oregon, 1976

(Thousand board feet, lumber tally)

Resource area and county	Total capacity	Mill-size class ^{1/}			
		D	C	B	A
Northwest					
Clackamas	1,391	91	230	100	970
Clatsop	236	16	--	--	220
Columbia	1,011	26	50	180	755
Hood River	505	--	--	--	505
Marion	395	30	60	180	125
Multnomah	460	--	50	100	310
Polk	805	10	110	80	605
Tillamook	376	51	--	--	325
Washington	364	94	50	100	120
Yamhill	557	82	--	100	375
Total	6,100	400	550	840	4,310
West Central					
Benton	905	60	185	180	480
Lane	5,176	51	530	910	3,685
Lincoln	465	24	--	170	271
Linn	1,067	79	247	315	426
Total	7,613	214	962	1,575	4,862
Southwest					
Coos	1,524	42	50	362	1,070
Curry	385	30	60	--	295
Douglas	2,390	15	325	455	1,595
Jackson	1,150	--	--	550	600
Josephine	980	30	--	100	850
Total	6,429	117	435	1,467	4,410
Central					
Crook	520	5	75	290	150
Deschutes	472	35	--	100	337
Jefferson	205	--	--	80	125
Klamath	1,328	--	190	175	963
Lake	415	--	115	300	--
Wasco	260	--	--	110	150
Wheeler	150	--	--	--	150
Total	3,350	40	380	1,055	1,875
Blue Mountain					
Baker	132	2	--	--	130
Grant	349	14	135	200	--
Harney	262	--	45	--	217
Morrow	70	--	70	--	--
Umatilla	435	--	--	310	125
Union	435	45	50	--	340
Wallowa	166	12	54	100	--
Total	1,849	73	354	610	812
All Areas	25,341	844	2,681	5,547	16,269

^{1/} Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

Table 13--Number of sawmills by mill-size class, resource area, and selected equipment, Oregon, 1976

Resource area and selected equipment	All classes	Mill-size class ^{1/}			
		D	C	B	A
Northwest					
Barker	45	6	8	7	24
Chipper	52	12	10	7	23
Planer	48	9	9	6	24
Burner	7	--	1	2	4
Kiln	24	3	2	1	18
West Central					
Barker	59	4	15	16	24
Chipper	65	8	16	17	24
Planer	54	4	13	15	22
Burner	--	--	--	--	--
Kiln	28	2	4	5	17
Southwest					
Barker	47	2	7	14	24
Chipper	49	4	7	14	24
Planer	48	1	7	16	24
Burner	11	--	--	3	8
Kiln	24	--	3	11	10
Central					
Barker	26	--	6	10	10
Chipper	26	--	6	10	10
Planer	26	1	5	10	10
Burner	6	--	2	2	2
Kiln	24	1	3	11	9
Blue Mountain					
Barker	13	--	4	4	5
Chipper	15	--	5	5	5
Planer	17	3	4	5	5
Burner	10	3	4	1	2
Kiln	11	--	4	2	5
All Areas					
Barker	190	12	40	51	87
Chipper	207	24	44	53	86
Planer	193	18	38	52	85
Burner	34	3	7	8	16
Kiln	111	6	16	30	59

^{1/}Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

Table 14--Number of sawmills by selected equipment, resource area, and county, Oregon, 1976

Resource area and county	Barker	Chipper	Planer	Burner	Kiln
Northwest					
Clackamas	11	11	11	2	4
Clatsop	1	2	2	--	1
Columbia	7	7	6	2	2
Hood River	3	3	3	1	3
Marion	3	5	4	--	2
Multnomah	3	3	4	--	3
Polk	6	8	7	1	3
Tillamook	3	5	3	1	2
Washington	4	3	4	--	2
Yamhill	4	5	4	--	2
Total	45	52	48	7	24
West Central					
Benton	9	10	7	--	2
Lane	34	37	33	--	20
Lincoln	5	6	4	--	--
Linn	11	12	10	--	6
Total	59	65	54	--	28
Southwest					
Coos	10	11	10	--	1
Curry	4	4	2	1	--
Douglas	21	21	21	5	13
Jackson	7	8	9	1	8
Josephine	5	5	6	4	2
Total	47	49	48	11	24
Central					
Crook	5	5	6	--	6
Deschutes	2	2	2	1	2
Jefferson	2	2	2	2	2
Klamath	10	10	10	--	8
Lake	4	4	3	2	4
Wasco	2	2	2	1	1
Wheeler	1	1	1	--	1
Total	26	26	26	6	24
Blue Mountain					
Baker	1	1	1	1	1
Grant	3	3	2	3	2
Harney	1	2	2	--	1
Morrow	1	1	1	--	1
Umatilla	2	3	4	1	2
Union	3	3	5	3	3
Walla	2	2	2	2	1
Total	13	15	17	10	11
All Areas	190	207	193	34	111

Table 15—Number of sawmills by type and size of headrig,¹ resource area, and mill-size class, Oregon, 1976

Resource area and mill-size class ^{2/}	Circular saw				Band saw				Gang saw			Chipping saw			Scragg double-cut saw		
	2 ft.	4 ft.	6 ft.	8+ ft.	4 ft.	6 ft.	8 ft.	10+ ft.	2 ft.	3 ft.	4 ft.	2 ft.	3 ft.	4 ft.	2 ft.	3 ft.	4 ft.
Northwest																	
D	2	12	10	--	1	--	--	--	2	--	--	--	--	--	1	--	--
C	--	1	2	--	--	6	--	--	--	--	--	--	--	--	2	--	--
B	1	1	--	--	3	3	--	--	--	--	--	2	--	--	1	--	--
A	1	1	--	--	5	14	2	1	2	4	--	4	1	--	3	--	--
Total	4	15	12	--	9	23	2	1	4	4	--	6	1	--	7	--	--
West Central																	
D	--	4	2	--	1	2	--	--	1	--	--	1	--	--	--	--	--
C	1	--	1	1	1	6	--	--	--	--	--	1	--	1	4	--	--
B	--	1	--	--	1	12	1	1	1	--	--	--	--	--	2	--	--
A	2	--	2	--	--	14	4	--	1	3	--	2	--	--	1	--	--
Total	3	5	5	1	3	34	5	1	3	3	--	4	--	1	7	--	--
Southwest																	
D	--	4	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--
C	--	--	2	--	1	3	1	--	--	--	--	--	--	--	--	--	--
B	--	2	--	--	--	6	3	3	--	1	--	2	--	--	1	--	--
A	1	1	1	1	1	10	6	3	2	--	1	2	--	1	2	1	--
Total	1	7	3	1	2	21	10	6	2	1	1	4	--	1	3	1	--
Central																	
D	--	--	1	--	--	1	--	--	--	--	--	--	--	--	--	--	--
C	--	--	--	--	1	2	--	1	1	--	--	--	--	--	1	--	1
B	--	1	--	--	1	8	1	--	--	--	--	1	--	--	--	--	--
A	--	--	--	--	1	6	2	1	--	--	--	1	--	--	--	--	--
Total	--	1	1	--	3	17	3	2	1	--	--	2	--	--	1	--	1
Blue Mountain																	
D	--	3	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
C	--	--	1	--	--	2	2	--	--	--	1	1	--	--	--	--	--
B	--	1	2	--	--	2	1	--	1	--	--	--	--	--	2	1	--
A	--	1	--	--	1	3	--	--	1	--	--	--	--	--	2	--	--
Total	--	5	6	--	1	7	3	--	2	--	1	1	--	--	4	1	--
All Areas																	
D	2	23	16	--	2	5	--	--	3	--	--	1	--	--	1	--	--
C	1	1	6	1	3	19	3	1	1	--	1	2	--	1	7	--	1
B	1	6	2	--	5	31	6	4	2	1	--	5	--	--	6	1	--
A	4	3	3	1	8	47	14	5	6	7	1	9	1	1	8	1	--
Total	8	33	27	2	18	102	23	10	12	8	2	17	1	2	22	2	1

^{1/}Sizes of headrigs are upper limits. Thus, the 6-foot size class includes saws 49 through 72 inches.

^{2/}Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

Table 16--Number of sawmills by years of tenure of present ownership, years at present site, and mill-size class, Oregon, 1976

Mill-size class ^{1/} and years at present site	All mills	Tenure of present mill ownership (years)				
		0-2	3-5	6-10	11-20	21+
D:						
0- 2	2	2	--	--	--	--
3- 5	4	--	4	--	--	--
6-10	6	--	2	4	--	--
11-20	23	2	--	--	21	--
21+	16	--	2	1	2	11
Total	51	4	8	5	23	11
C:						
0- 2	3	3	--	--	--	--
3- 5	3	--	3	--	--	--
6-10	1	--	--	1	--	--
11-20	13	1	1	3	7	1
21+	25	3	2	1	4	15
Total	45	7	6	5	11	16
B:						
0- 2	2	2	--	--	--	--
3- 5	1	--	1	--	--	--
6-10	6	--	1	5	--	--
11-20	12	3	3	2	3	1
21+	38	1	4	6	7	20
Total	59	6	9	13	10	21
A:						
0- 2	2	2	--	--	--	--
3- 5	3	--	3	--	--	--
6-10	3	--	--	3	--	--
11-20	17	1	2	1	12	1
21+	63	2	5	10	11	35
Total	88	5	10	14	23	36
All Classes						
0- 2	9	9	--	--	--	--
3- 5	11	--	11	--	--	--
6-10	16	--	3	13	--	--
11-20	65	7	6	6	43	3
21+	142	6	13	18	24	81
Total	243	22	33	37	67	84

^{1/}Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

Table 17--Average number of operating days of sawmills by resource area and mill-size class, Oregon, 1976

Resource area	Average number of operating days per year				
	Mill-size class ^{1/}				Average all classes
	D	C	B	A	
Northwest	182	161	243	240	207
West Central	204	228	221	229	223
Southwest	204	230	216	239	227
Central	140	180	245	247	225
Blue Mountain	129	231	251	254	214
All Areas	181	207	227	238	219

^{1/}Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

Table 18—Wood consumption by sawmills by type of material consumed, resource area, and mill-size class, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and mill-size class ^{1/}	All wood	Roundwood			Other	
		All roundwood	Sound logs	Utility logs	Peeler cores	Cants
Northwest						
D	50,004	40,519	39,889	630	4,684	4,801
C	80,263	75,763	44,273	31,490	4,500	--
B	129,704	102,271	77,471	24,800	27,433	--
A	967,193	932,113	909,178	22,935	35,080	--
Total	1,227,164	1,150,666	1,070,811	79,855	71,697	4,801
West Central						
D	44,904	29,579	23,979	5,600	7,500	7,825
C	154,164	138,717	124,003	14,714	15,447	--
B	329,715	279,815	223,172	56,643	49,900	--
A	1,004,608	972,587	882,428	90,159	32,021	--
Total	1,533,391	1,420,698	1,253,582	167,116	104,868	7,825
Southwest						
D	12,245	12,245	10,045	2,200	--	--
C	72,363	66,650	57,232	9,418	2,880	2,833
B	352,064	340,509	298,486	42,023	11,555	--
A	952,905	859,570	770,207	89,363	93,335	--
Total	1,389,577	1,278,974	1,135,970	143,004	107,770	2,833
Central D and C ^{2/}						
D	94,735	87,035	78,103	8,932	7,700	--
B	217,935	214,961	207,961	7,000	2,974	--
A	684,702	684,702	678,894	5,808	--	--
Total	997,372	986,698	964,958	21,740	10,674	--
Blue Mountain						
D	4,239	4,239	3,139	1,100	--	--
C	140,402	140,402	116,902	23,500	--	--
B	114,656	114,656	111,524	3,132	--	--
A	315,640	308,023	308,023	--	7,617	--
Total	574,937	567,320	539,588	27,732	7,617	--
All Areas						
D	111,392	86,582	77,052	9,530	12,184	12,626
C	541,927	508,567	420,513	88,054	30,527	2,833
B	1,144,074	1,052,212	918,614	133,598	91,862	--
A	3,925,048	3,756,995	3,548,730	208,265	168,053	--
Total	5,722,441	5,404,356	4,964,909	439,447	302,626	15,459

^{1/} Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

^{2/} Combined to avoid disclosure.

Table 19--Log consumption by sawmills by timber age group, resource area, and mill-size class, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and mill-size class ^{1/}	All age groups	Old growth (100+ years)	Young growth (less than 100 years)
Northwest			
D	40,519	3,973	36,546
C	75,763	57,509	18,254
B	102,271	13,531	88,740
A	932,113	281,633	650,480
Total	1,150,666	356,646	794,020
West Central			
D	29,579	5,400	24,179
C	138,717	70,022	68,695
B	279,815	165,369	114,446
A	972,587	773,464	199,123
Total	1,420,698	1,014,255	406,443
Southwest			
D	12,245	1,850	10,395
C	66,650	41,717	24,933
B	340,509	276,940	63,569
A	859,570	658,555	201,015
Total	1,278,974	979,062	299,912
Central Oregon			
D and C ^{2/}	87,035	81,226	5,809
B	214,961	174,810	40,151
A	684,702	567,905	116,797
Total	986,698	823,941	162,757
Blue Mountain			
D	4,239	1,093	3,146
C	140,402	116,345	24,057
B	114,656	85,798	28,858
A	308,023	261,561	46,462
Total	567,320	464,797	102,523
All Areas			
D	86,582	12,316	74,266
C	508,567	366,819	141,748
B	1,052,212	716,448	335,764
A	3,756,995	2,543,118	1,213,877
Total	5,404,356	3,638,701	1,765,655

^{1/}Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

^{2/}Combined to avoid disclosure.

Table 20--Log consumption by sawmills by timber age group, resource area, and county, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and county	All age groups	Old growth (100+ years)	Young growth (less than 100 years)
Northwest			
Clackamas	291,865	111,189	180,676
Clatsop and Columbia ^{1/}	241,142	69,323	171,819
Hood River	92,253	47,068	45,185
Marion	55,440	4,320	51,120
Multnomah	84,696	73,226	11,470
Polk	140,149	42,995	97,154
Tillamook	105,136	1,439	103,697
Washington	51,955	3,785	48,170
Yamhill	88,030	3,301	84,729
Total	1,150,666	356,646	794,020
West Central			
Benton	139,708	60,210	79,498
Lane	977,608	795,704	181,904
Lincoln	74,641	51,599	23,042
Linn	228,741	106,742	121,999
Total	1,420,698	1,014,255	406,443
Southwest			
Coos	382,805	256,275	126,530
Curry	65,090	61,134	3,956
Douglas	519,915	412,771	107,144
Jackson	185,338	129,819	55,519
Josephine	125,826	119,063	6,763
Total	1,278,974	979,062	299,912
Central			
Crook	118,727	107,671	11,056
Deschutes	171,500	115,320	56,180
Jefferson, Wheeler, and Wasco ^{1/}	176,627	158,044	18,583
Klamath	458,157	391,922	66,235
Lake	61,687	50,984	10,703
Total	986,698	823,941	162,757
Blue Mountain			
Baker and Wallowa ^{1/}	110,495	71,292	39,203
Grant and Harney ^{1/}	214,590	192,307	22,283
Umatilla and Morrow ^{1/}	117,261	88,883	28,378
Union	124,974	112,315	12,659
Total	567,320	464,797	102,523
All Areas	5,404,356	3,638,701	1,765,655

^{1/} Combined to avoid disclosure.

Table 21--*Log inventory changes, log consumption, and apparent log receipts by sawmills, by resource area, Oregon, 1976*

(Thousand board feet, Scribner log rule)

Resource area	Log inventory			1976 log consumption	Apparent 1976 log receipts
	January 1, 1976	December 31, 1976	Net change		
Northwest	217,154	247,708	30,554	1,150,666	1,181,220
West Central	191,925	217,559	25,634	1,420,698	1,446,332
Southwest	279,887	288,717	8,830	1,278,974	1,287,804
Central	203,751	211,066	7,315	986,698	994,013
Blue Mountain	118,517	124,817	6,300	567,320	573,620
All Areas	1,011,234	1,089,867	78,633	5,404,356	5,482,989

Table 22—Log consumption by sawmills by ownership class, resource area, and mill-size class, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and mill-size class ^{1/}	All owners	State	National Forest	Bureau of Land Management	Other public	Forest industry		Farmer and miscellaneous private
						Own wood supply	Other wood supply	
Northwest								
D	40,519	1,330	12,767	1,737	49	1,613	15,415	7,608
C	75,763	3,100	13,596	1,582	--	1,860	21,537	34,088
B	102,271	5,392	19,016	8,856	1,030	3,191	57,562	7,224
A	932,113	118,258	277,144	77,325	30,275	238,909	120,159	70,043
Total	1,150,666	128,080	322,523	89,500	31,354	245,573	214,673	118,963
West Central								
D	29,579	3,840	6,346	3,187	--	3,376	7,922	4,908
C	138,717	6,030	46,924	14,059	--	6,779	28,499	36,426
B	279,815	7,959	102,133	78,038	--	11,864	22,739	57,022
A	972,587	18,224	329,143	62,194	26,831	376,761	106,204	53,230
Total	1,420,698	36,053	484,546	157,478	26,831	398,780	165,424	151,586
Southwest								
D	12,245	1,800	455	205	--	600	4,395	4,790
C	66,650	--	21,875	14,385	--	9,795	12,165	8,430
B	340,509	1,290	93,305	100,639	--	71,057	48,166	26,052
A	859,570	44,130	261,954	273,872	--	185,902	59,961	33,751
Total	1,278,974	47,220	377,589	389,101	--	267,354	124,687	73,023
Central D and C ^{2/}								
D	87,035	--	48,275	--	--	33,092	2,376	3,292
B	214,961	--	193,040	243	7,938	1,368	6,056	6,316
A	684,702	3,850	319,704	2,689	89,812	258,082	6,250	4,315
Total	986,698	3,850	561,019	2,932	97,750	292,542	14,682	13,923
Blue Mountain								
D	4,239	--	1,818	--	--	20	--	2,401
C	140,402	--	108,520	--	--	15,419	4,619	11,844
B	114,656	--	83,011	720	--	4,934	5,812	20,179
A	308,023	--	232,117	3,189	--	42,100	7,560	23,057
Total	567,320	--	425,466	3,909	--	62,473	17,991	57,481
All Areas								
D	86,582	6,970	21,386	5,129	49	5,609	27,732	19,707
C	508,567	9,130	239,190	30,026	--	66,945	69,196	94,080
B	1,052,212	14,641	490,505	188,496	8,968	92,414	140,395	116,793
A	3,756,995	184,462	1,420,062	419,269	146,918	1,101,754	300,134	184,396
Total	5,404,356	215,203	2,171,143	642,920	155,935	1,266,722	537,457	414,976

^{1/}Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

^{2/}Combined to avoid disclosure.

Table 23—Log consumption by sawmills by ownership class, resource area, and county, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and county	All owners	State	National Forest	Bureau of Land Management	Other public	Forest industry		Farmer and miscellaneous private
						Own wood supply	Other wood supply	
Northwest								
Clackamas	291,865	4,055	131,889	18,882	7,649	45,033	40,893	43,464
Clatsop and Columbia ^{1/}	241,142	58,911	14,533	2,693	1,967	118,672	25,967	18,399
Hood River	92,253	13,126	51,515	875	17,809	6,000	370	2,558
Marion	55,440	3,800	1,240	1,010	--	--	35,310	14,080
Multnomah	84,696	9,837	47,011	1,406	1,876	5,628	16,000	2,938
Polk	140,149	6,935	37,300	28,126	1,023	22,163	36,664	7,938
Tillamook	105,136	23,399	13,640	9,468	--	32,917	23,625	2,087
Washington	51,955	6,500	--	8,975	1,030	4,700	12,330	18,420
Yamhill	88,030	1,517	25,395	18,065	--	10,460	23,514	9,079
Total	1,150,666	128,080	322,523	89,500	31,354	245,573	214,673	118,963
West Central								
Benton	139,708	5,500	59,390	15,392	--	--	14,751	44,675
Lane	977,608	8,551	313,049	118,907	24,924	362,540	91,726	57,911
Lincoln	74,641	13,252	28,760	1,430	1,907	21,558	5,259	2,475
Linn	228,741	8,750	83,347	21,749	--	14,682	53,688	46,525
Total	1,420,698	36,053	484,546	157,478	26,831	398,780	165,424	151,586
Southwest								
Coos	382,805	36,935	22,735	84,791	--	177,443	33,459	27,442
Curry	65,090	--	53,975	4,950	--	202	3,163	2,800
Douglas	519,915	8,065	153,331	222,236	--	60,193	43,758	32,332
Jackson	185,338	2,220	95,717	40,740	--	21,932	15,929	8,800
Josephine	125,826	--	51,831	36,384	--	7,584	28,378	1,649
Total	1,278,974	47,220	377,589	389,101	--	267,354	124,687	73,023
Central								
Crook	118,727	--	105,926	243	--	3,616	3,526	5,416
Deschutes	171,500	--	147,665	--	1,620	17,810	3,490	915
Jefferson, Wasco, and Wheeler ^{1/}	176,627	--	61,865	--	96,130	15,741	--	2,891
Klamath	458,157	3,850	186,276	2,689	--	255,375	7,666	2,301
Lake	61,687	--	59,287	--	--	--	--	2,400
Total	986,698	3,850	561,019	2,932	97,750	292,542	14,682	13,923
Blue Mountain								
Baker and Wallawa ^{1/}	110,495	--	80,872	--	--	6,871	659	22,093
Grant and Harney ^{1/}	214,590	--	199,044	720	--	3,096	7,601	4,129
Umatilla and Morrow ^{1/}	117,261	--	74,582	--	--	26,513	4,416	11,750
Union	124,974	--	70,968	3,189	--	25,993	5,315	19,509
Total	567,320	--	425,466	3,909	--	62,473	17,991	57,481
All Areas	5,404,356	215,203	2,171,143	642,920	155,935	1,266,722	537,457	414,976

^{1/} Combined to avoid disclosure.

Table 24--Dependency of sawmills for logs by ownership

(Number

Resource area and mill-size class ^{1/}	National Forest				State				Bureau of Land Management			
	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
Northwest												
D	20	3	2	2	23	4	--	--	23	3	1	--
C	5	3	1	1	9	--	1	--	7	3	--	--
B	6	1	1	1	5	4	--	--	5	4	--	--
A	6	8	6	4	9	13	1	1	10	13	1	--
Total	37	15	10	8	46	21	2	1	45	23	2	--
West Central												
D	4	4	1	1	7	1	2	--	6	3	1	--
C	6	3	4	3	14	1	1	--	9	6	1	--
B	3	5	6	3	11	6	--	--	5	6	4	2
A	4	5	7	8	19	5	--	--	11	12	1	--
Total	17	17	18	15	51	13	3	--	31	27	7	2
Southwest												
D	4	2	--	--	5	1	--	--	5	1	--	--
C	2	1	2	2	7	--	--	--	2	3	2	--
B	4	5	6	1	15	1	--	--	5	6	4	1
A	7	9	5	4	18	5	2	--	6	9	5	5
Total	17	17	13	7	45	7	2	--	18	19	11	6
Central D and C ^{2/}												
D	3	--	--	5	8	--	--	--	8	--	--	--
B	1	1	--	9	11	--	--	--	10	1	--	--
A	3	--	1	6	9	1	--	--	8	2	--	--
Total	7	1	1	20	28	1	--	--	26	3	--	--
Blue Mountain												
D	3	1	--	2	6	--	--	--	6	--	--	--
C	1	--	3	2	6	--	--	--	6	--	--	--
B	--	1	--	5	6	--	--	--	5	1	--	--
A	--	--	3	2	5	--	--	--	3	2	--	--
Total	4	2	6	11	23	--	--	--	20	3	--	--
All Areas												
D	31	10	3	5	41	6	2	--	40	7	2	--
C	17	7	10	13	44	1	2	--	32	12	3	--
B	14	13	13	19	48	11	--	--	30	18	8	3
A	20	22	22	24	60	24	3	1	38	38	7	5
Total	82	52	48	61	193	42	7	1	140	75	20	8

^{1/} Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D - less than 40,000.

^{2/} Combined to avoid disclosure.

origin, resource area, and mill-size class, Oregon, 1976
of mills)

Other public				Forest industry								Farmer and miscellaneous private			
				Own lands				Other industry							
Dependency (percent)															
0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
26	1	--	--	23	1	--	3	14	1	4	8	13	5	4	5
10	--	--	--	8	1	--	1	5	1	1	3	5	3	--	2
8	1	--	--	8	1	--	--	3	3	--	3	6	2	1	--
17	6	1	--	10	7	5	2	11	8	4	1	6	16	--	2
61	8	1	--	49	10	5	6	33	13	9	15	30	26	5	9
10	--	--	--	8	--	2	--	6	2	--	2	1	7	--	2
16	--	--	--	11	4	--	1	6	7	2	1	6	6	1	3
17	--	--	--	12	5	--	--	10	5	1	1	9	5	1	2
22	1	1	--	14	6	1	3	8	13	1	2	15	7	2	--
65	1	1	--	45	15	3	4	30	27	4	6	31	25	4	7
6	--	--	--	5	--	1	--	2	2	1	1	2	2	--	2
7	--	--	--	5	1	1	--	5	1	--	1	3	2	2	--
16	--	--	--	7	6	1	2	6	9	--	1	8	8	--	--
25	--	--	--	14	10	--	1	13	9	2	1	17	6	2	--
54	--	--	--	31	17	3	3	26	21	3	4	30	18	4	2
8	--	--	--	5	2	--	1	6	2	--	--	4	4	--	--
8	2	--	1	9	2	--	--	9	2	--	--	7	3	1	--
8	1	--	1	4	3	1	2	8	2	--	--	7	3	--	--
24	3	--	2	18	7	1	3	23	6	--	--	18	10	1	--
6	--	--	--	5	--	--	1	6	--	--	--	2	2	--	2
6	--	--	--	3	2	1	--	4	1	1	--	3	2	1	--
6	--	--	--	4	2	--	--	4	2	--	--	1	4	--	1
5	--	--	--	1	3	1	--	2	3	--	--	--	5	--	--
23	--	--	--	13	7	2	1	16	6	1	--	6	13	1	3
48	1	--	--	41	1	3	4	28	5	5	11	18	16	4	11
47	--	--	--	32	10	2	3	26	12	4	5	21	17	4	5
55	3	--	1	40	16	1	2	32	21	1	5	31	22	3	3
77	8	2	1	43	29	8	8	42	35	7	4	45	37	4	2
227	12	2	2	156	56	14	17	128	73	17	25	115	92	15	21

Table 25—Log consumption by sawmills by species, resource area, and mill-size class, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and mill-size class ^{1/}	All species	Douglas-fir	Hemlock	True firs	Spruce	Ponderosa pine	Lodgepole pine	Western redcedar	Other softwoods	Hardwoods
Northwest										
D	40,519	12,988	4,275	235	14	--	--	2,158	20	20,829
C	75,763	45,491	19,011	3,526	760	1,000	--	5,975	--	--
B	102,271	70,127	27,565	1,615	--	--	--	2,964	--	--
A	932,113	545,112	353,117	4,672	13,826	--	4,573	7,877	2,936	--
Total	1,150,666	673,718	403,968	10,048	14,600	1,000	4,573	18,974	2,956	20,829
West Central										
D	29,579	4,878	1,322	--	--	--	--	6,133	--	17,246
C	138,717	96,954	8,400	3,118	194	--	--	26,199	3,852	--
B	279,815	217,540	50,110	7,994	284	--	--	3,603	284	--
A	972,587	720,245	211,711	13,553	1,359	--	2,192	23,527	--	--
Total	1,420,698	1,039,617	271,543	24,665	1,837	--	2,192	59,462	4,136	17,246
Southwest										
D	12,245	2,275	380	145	350	80	--	485	1,010	7,520
C	66,650	35,724	6,888	4,128	--	1,200	--	16,190	2,520	--
B	340,509	181,044	15,572	30,796	--	70,939	4,281	6,771	31,106	--
A	859,570	617,603	56,388	47,423	1,664	68,379	1,625	20,254	46,234	--
Total	1,278,974	836,646	79,228	82,492	2,014	140,598	5,906	43,700	80,870	7,520
Central^{2/}										
D and C ^{2/}	87,035	2,956	--	4,797	--	74,080	2,400	--	2,802	--
B	214,961	15,714	4,604	13,237	--	175,081	6,325	--	--	--
A	684,702	71,940	9,240	51,680	--	501,682	48,085	--	2,075	--
Total	986,698	90,610	13,844	69,714	--	750,843	56,810	--	4,877	--
Blue Mountain										
D	4,239	1,663	--	299	120	977	110	--	1,058	12
C	140,402	18,617	--	20,872	2,204	89,218	2,314	--	7,177	--
B	114,656	24,448	--	18,791	650	61,560	8,007	--	1,200	--
A	308,023	35,889	--	51,758	5,851	175,759	23,385	--	15,381	--
Total	567,320	80,617	--	91,720	8,825	327,514	33,816	--	24,816	12
All Areas										
D	86,582	21,804	5,977	679	484	1,057	110	8,776	2,088	45,607
C	508,567	199,742	34,299	36,441	3,158	165,498	4,714	48,364	16,351	--
B	1,052,212	508,873	97,851	72,433	934	307,580	18,613	13,338	32,590	--
A	3,756,995	1,990,789	630,456	169,086	22,700	745,820	79,860	51,658	66,626	--
Total	5,404,356	2,721,208	768,583	278,639	27,276	1,219,955	103,297	122,136	117,655	45,607

^{1/} Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.^{2/} Combined to avoid disclosure.

Table 26—Log consumption by sawmills by species, resource area, and type of material, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and type of material	All species	Douglas-fir	Hemlock	True firs	Spruce	Ponderosa pine	Lodgepole pine	Western redcedar	Other softwoods	Hardwoods
Northwest Soundl/Utility	1,070,809 79,857	627,993 45,725	373,557 30,411	9,881 167	13,684 916	1,000 --	4,306 267	17,202 1,772	2,857 99	20,329 500
Total	1,150,666	673,718	403,968	10,048	14,600	1,000	4,573	18,974	2,956	20,829
West Central Soundl/Utility	1,253,583 167,115	919,683 119,934	235,734 35,809	18,261 6,404	1,837 --	-- --	1,892 300	56,369 3,093	3,761 375	16,046 1,200
Total	1,420,698	1,039,617	271,543	24,665	1,837	--	2,192	59,462	4,136	17,246
Southwest Soundl/Utility	1,135,970 143,004	732,904 103,742	66,022 13,206	75,970 6,522	1,655 359	137,270 3,328	1,625 4,281	36,795 6,905	77,209 3,661	6,520 1,000
Total	1,278,974	836,646	79,228	82,492	2,014	140,598	5,906	43,700	80,870	7,520
Central Soundl/Utility	964,958 21,740	90,367 243	13,844 --	66,563 3,151	-- --	734,656 16,187	55,069 1,741	-- --	4,459 418	-- --
Total	986,698	90,610	13,844	69,714	--	750,843	56,810	--	4,877	--
Blue Mountain Soundl/Utility	539,599 27,721	77,117 3,500	-- --	90,760 960	8,725 100	304,981 22,533	33,597 219	-- --	24,407 409	12 --
Total	567,320	80,617	--	91,720	8,825	327,514	33,816	--	24,816	12
All Areas Soundl/Utility	4,964,919 439,437	2,448,064 273,144	689,157 79,426	261,435 17,204	25,901 1,375	1,177,907 42,048	96,489 6,808	110,366 11,770	112,693 4,962	42,907 2,700
Total	5,404,356	2,721,208	768,583	278,639	27,276	1,219,955	103,297	122,136	117,655	45,607

^{1/} Includes both live and dead logs.

Table 27—Log consumption by sawmills by species, resource area, and county, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and county	All species	Douglas-fir	Hemlock	True firs	Spruce	Ponderosa pine	Lodgepole pine	Western redcedar	Other softwoods	Hardwoods
Northwest										
Clackamas	291,865	204,278	71,093	3,391	760	--	3,570	8,753	20	--
Clatsop and Columbia ^{1/}	241,142	111,664	112,829	--	6,010	--	--	3,448	2,381	4,810
Hood River	92,253	54,797	32,369	3,330	832	--	--	370	555	--
Marion	55,440	27,230	21,630	470	--	--	--	2,370	--	3,740
Multnomah	84,696	65,271	13,268	1,000	906	1,000	1,003	2,248	--	--
Polk	140,149	81,298	55,593	829	--	--	--	--	--	1,600
Tillamook	105,136	31,153	58,867	--	4,908	--	--	--	--	10,208
Washington	51,955	43,250	6,405	515	--	--	--	1,785	--	--
Yamhill	88,030	54,777	31,914	513	355	--	--	--	--	471
Total	1,150,666	673,718	403,968	10,048	14,600	1,000	4,573	18,974	2,956	20,829
West Central										
Benton	139,708	119,297	2,863	218	194	--	--	6,836	--	10,300
Lane	977,608	761,160	152,217	5,015	1,250	--	2,192	50,104	3,750	1,920
Lincoln	74,641	69,682	378	--	109	--	--	272	--	4,200
Linn	228,741	89,478	116,085	19,432	284	--	--	2,250	386	826
Total	1,420,698	1,039,617	271,543	24,665	1,837	--	2,192	59,462	4,136	17,246
Southwest										
Coos	382,805	345,858	18,498	2,159	1,764	--	--	7,976	--	6,550
Curry	65,090	62,890	250	125	250	--	--	450	1,000	125
Douglas	519,915	315,249	45,345	23,757	--	62,021	4,281	35,239	33,178	845
Jackson	185,338	21,674	8,092	45,568	--	75,061	1,000	--	33,943	--
Josephine	125,826	90,975	7,043	10,883	--	3,516	625	35	12,749	--
Total	1,278,974	836,646	79,228	82,492	2,014	140,598	5,906	43,700	80,870	7,520
Central										
Crook	118,727	16,217	3,039	2,087	--	97,084	--	--	300	--
Deschutes	171,500	--	--	4,110	--	149,580	17,810	--	--	--
Jefferson, Wheeler, and Wasco ^{1/}	176,627	60,773	10,805	20,131	--	84,918	--	--	--	--
Klamath	458,157	13,620	--	27,599	--	375,761	36,600	--	4,577	--
Lake	61,687	--	--	15,787	--	43,500	2,400	--	--	--
Total	986,698	90,610	13,844	69,714	--	750,843	56,810	--	4,877	--
Blue Mountain										
Baker and Wallowa ^{1/}	110,495	27,042	--	23,403	1,859	54,390	3,142	--	659	--
Grant and Harney ^{1/}	214,590	10,702	--	7,022	--	187,887	4,779	--	4,200	--
Umatilla and Morrow ^{1/}	117,261	24,350	--	18,976	1,548	59,753	5,149	--	7,485	--
Union	124,974	18,523	--	42,319	5,418	25,484	20,746	--	12,472	12
Total	567,320	80,617	--	91,720	8,825	327,514	33,816	--	24,816	12
All Areas	5,404,356	2,721,208	768,583	278,639	27,276	1,219,955	103,297	122,136	117,655	45,607

^{1/}Combined to avoid disclosure.

Table 28—Production and disposition of wood and bark residues by sawmills, by resource area and mill-size class, Oregon, 1976

(Tons, dry weight)

Resource area and mill-size class ^{1/}	All residues			Wood residue			Bark residue		
	Total	Used ^{2/}	Unused	Total	Used ^{2/}	Unused	Total	Used ^{2/}	Unused
Northwest									
D	56,723	49,110	7,613	44,319	39,545	4,774	12,404	9,565	2,839
C	99,191	99,191	--	78,204	78,204	--	20,987	20,987	--
B	183,501	179,406	4,095	147,515	145,960	1,555	35,986	33,446	2,540
A	1,723,505	1,705,331	18,174	1,353,848	1,344,302	9,546	369,657	361,029	8,628
Total	2,062,920	2,033,038	29,882	1,623,886	1,608,011	15,875	439,034	425,027	14,007
West Central									
D	47,987	47,987	--	36,443	36,443	--	11,544	11,544	--
C	243,974	243,974	--	189,633	189,633	--	54,341	54,341	--
B	465,876	465,876	--	367,036	367,036	--	98,840	98,840	--
A	1,625,150	1,625,150	--	1,273,082	1,273,082	--	352,068	352,068	--
Total	2,382,987	2,382,987	--	1,866,194	1,866,194	--	516,793	516,793	--
Southwest									
D	13,028	11,917	1,111	9,760	8,972	788	3,268	2,945	323
C	118,205	118,205	--	91,623	91,623	--	26,582	26,582	--
B	584,781	522,987	61,794	458,650	422,166	36,484	126,131	100,821	25,310
A	1,449,739	1,360,212	89,527	1,137,044	1,102,907	34,137	312,695	257,305	55,390
Total	2,165,753	2,013,321	152,432	1,697,077	1,625,668	71,409	468,676	387,653	81,023
Central D and C ^{3/}									
D	111,656	103,025	8,631	91,259	85,888	5,371	20,397	17,137	3,260
B	280,426	279,465	961	230,742	229,781	961	49,684	49,684	--
A	861,306	832,402	28,904	699,453	686,444	13,009	161,853	145,958	15,895
Total	1,253,388	1,214,892	38,496	1,021,454	1,002,113	19,341	231,934	212,779	19,155
Blue Mountain									
D	4,320	501	3,819	3,381	383	2,998	939	118	821
C	178,547	139,080	39,467	141,779	118,342	23,437	36,768	20,738	16,030
B	141,936	113,883	28,053	114,290	95,857	18,433	27,646	18,026	9,620
A	454,822	424,621	30,201	368,300	342,386	25,914	86,522	82,235	4,287
Total	779,625	678,085	101,540	627,750	556,968	70,782	151,875	121,117	30,758
All Areas									
D	122,058	109,515	12,543	93,903	85,343	8,560	28,155	24,172	3,983
C	751,573	703,475	48,098	592,498	563,690	28,808	159,075	139,785	19,290
B	1,656,520	1,561,617	94,903	1,318,233	1,260,800	57,433	338,287	300,817	37,470
A	6,114,522	5,947,716	166,806	4,831,727	4,749,121	82,606	1,282,795	1,198,595	84,200
Total	8,644,673	8,322,323	322,350	6,836,361	6,658,954	177,407	1,808,312	1,663,369	144,943

^{1/} Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

^{2/} Residues not necessarily consumed in the area in which they were produced.

^{3/} Combined to avoid disclosure.

Table 29—Production and disposition of wood residue by sawmills, by type of residue use, resource area, and mill-size class, Oregon, 1976

(Tons, dry weight)

Resource area and mill-size class ^{1/}	All types							Coarse ^{2/}						
	Total	Total used ^{3/}	Pulp	Board	Fuel	Miscellaneous	Unused	Total	Total used ^{3/}	Pulp	Board	Fuel	Miscellaneous	Unused
Northwest														
D	44,319	39,545	26,165	2,851	6,221	4,308	4,774	26,187	23,341	17,664	1,658	2,871	1,148	2,846
C	78,204	78,204	39,159	5,037	22,528	11,480	--	44,351	44,351	37,716	1,338	3,990	1,307	--
B	147,515	145,960	91,740	19,351	22,054	12,815	1,555	83,584	83,584	69,305	4,000	10,279	--	--
A	1,353,848	1,344,302	930,212	190,368	201,651	22,071	9,546	755,063	754,313	661,458	28,958	63,127	770	750
Total	1,623,886	1,608,011	1,087,276	217,607	252,454	50,674	15,875	909,185	905,589	786,143	35,954	80,267	3,225	3,596
West Central														
D	36,443	36,443	19,956	8,976	4,436	3,075	--	22,502	22,502	19,632	2,372	447	51	--
C	189,633	189,633	120,014	27,604	40,053	1,962	--	109,318	109,318	107,184	--	2,134	--	--
B	367,036	367,036	227,269	62,967	52,872	23,928	--	208,155	208,155	197,099	--	4,206	6,850	--
A	1,273,082	1,273,082	741,108	270,157	256,528	5,289	--	711,071	711,071	707,232	--	3,839	--	--
Total	1,866,194	1,866,194	1,108,347	369,704	353,889	34,254	--	1,051,046	1,051,046	1,031,147	2,372	10,626	6,901	--
Southwest														
D	9,760	8,972	5,819	1,393	902	858	788	6,273	5,984	5,622	--	362	--	289
C	91,623	91,623	59,371	17,231	14,840	181	--	52,966	52,966	52,966	--	--	--	--
B	458,650	422,166	236,008	100,770	76,682	8,706	36,484	260,052	260,052	213,305	16,224	21,817	8,706	--
A	1,137,044	1,102,907	666,070	289,666	100,724	46,447	34,137	635,811	635,310	621,994	--	3,432	9,884	501
Total	1,697,077	1,625,668	967,268	409,060	193,148	56,192	71,409	955,102	954,312	893,887	16,224	25,611	18,590	790
Central D and C ^{4/}														
D	91,259	85,888	41,194	18,425	25,914	355	5,371	49,674	48,369	41,194	820	6,355	--	1,305
B	230,742	229,781	121,453	23,157	71,147	14,024	961	124,059	124,059	121,453	--	--	2,606	--
A	699,453	686,444	308,948	167,848	193,450	16,198	13,009	379,358	379,358	297,022	45,120	21,018	16,198	--
Total	1,021,454	1,002,113	471,595	209,430	290,511	30,577	19,341	553,091	551,786	459,669	45,940	27,373	18,804	1,305
Blue Mountain														
D	3,381	383	--	--	108	275	2,998	2,017	247	--	--	108	139	1,770
C	141,779	118,342	80,346	1,080	36,681	235	23,437	79,328	74,571	68,583	--	5,753	235	4,757
B	114,290	95,857	42,021	28,588	23,174	2,074	18,433	61,629	54,405	42,021	12,384	--	--	7,224
A	368,300	342,386	156,979	66,485	102,514	16,408	25,914	195,720	191,751	156,979	33,746	1,026	--	3,969
Total	627,750	556,968	279,346	96,153	162,477	18,992	70,782	338,694	320,974	267,583	46,130	6,887	374	17,720
All Areas														
D	93,903	85,343	51,940	13,220	11,667	8,516	8,560	56,979	52,074	42,918	4,030	3,788	1,338	4,905
C	592,498	563,690	340,084	69,377	140,016	14,213	28,808	335,637	329,575	307,643	2,158	18,232	1,542	6,062
B	1,318,233	1,260,800	718,491	234,833	245,929	61,547	57,433	737,479	730,255	643,183	32,608	36,302	18,162	7,224
A	4,831,727	4,749,121	2,803,317	984,524	854,867	106,413	82,606	2,677,023	2,671,803	2,444,685	107,824	92,442	26,852	5,220
Total	6,836,361	6,658,954	3,913,832	1,301,954	1,252,479	190,689	177,407	3,807,118	3,783,707	3,438,429	146,620	150,764	47,894	23,411

See footnotes at end of table.

Table 29—Production and disposition of wood residue by sawmills, by type of residue use, resource area, and mill-size class, Oregon, 1976—Continued

(Tons, dry weight)

Resource area and mill-size class ^{1/}	Shavings							Sawdust						
	Total	Total used ^{2/}	Pulp	Board	Fuel	Miscellaneous	Unused	Total	Total used ^{3/}	Pulp	Board	Fuel	Miscellaneous	Unused
Northwest														
D	6,260	5,836	3,224	498	297	1,817	424	11,872	10,368	5,277	695	3,053	1,343	1,504
C	15,310	15,310	1,443	1,705	8,274	3,688	--	18,543	18,543	--	1,994	10,264	6,285	--
B	27,877	27,877	11,639	9,425	4,055	2,758	--	36,054	34,499	10,796	5,926	7,720	10,057	1,555
A	276,043	272,807	98,493	122,375	51,031	908	3,236	322,742	317,182	170,261	39,035	87,493	20,393	5,560
Total	325,490	321,830	114,799	134,003	63,657	9,371	3,660	389,211	380,592	186,334	47,650	108,530	38,078	8,619
West Central														
D	4,353	4,353	--	2,786	424	1,143	--	9,588	9,588	324	3,818	3,565	1,881	--
C	34,396	34,396	2,029	23,773	8,594	--	--	45,919	45,919	10,801	3,831	29,325	1,962	--
B	65,963	65,963	4,289	42,793	8,903	9,978	--	92,918	92,918	25,881	20,174	39,763	7,100	--
A	267,255	267,255	6,946	174,050	80,970	5,289	--	294,756	294,756	26,930	96,107	171,719	--	--
Total	371,967	371,967	13,264	243,402	98,891	16,410	--	443,181	443,181	63,936	123,930	244,372	10,943	--
Southwest														
D	689	689	--	464	--	225	--	2,798	2,299	197	929	540	633	499
C	16,401	16,401	--	14,963	1,257	181	--	22,256	22,256	6,405	2,268	13,583	--	--
B	89,883	89,883	16,808	66,459	6,616	--	--	108,715	72,231	5,895	18,087	48,249	--	36,484
A	223,488	223,117	5,469	191,525	5,787	20,336	371	277,745	244,480	38,607	98,141	91,505	16,227	33,265
Total	330,461	330,090	22,277	273,411	13,660	20,742	371	411,514	341,266	51,104	119,425	153,877	16,860	70,248
Central D and C ^{4/}														
D	15,933	15,933	--	15,572	6	355	--	25,652	21,586	--	2,033	19,553	--	4,066
C	42,874	42,874	--	23,157	8,299	11,418	--	63,809	62,848	--	--	62,848	--	961
A	132,687	126,419	11,926	91,264	23,229	--	6,268	187,408	180,667	--	31,464	149,203	--	6,741
Total	191,494	185,226	11,926	129,993	31,534	11,773	6,268	276,869	265,101	--	33,497	231,604	--	11,768
Blue Mountain														
D	284	--	--	--	--	--	284	1,080	136	--	--	--	136	944
C	20,977	18,883	11,763	1,080	6,040	--	2,094	41,474	24,888	--	--	24,888	--	16,586
B	21,910	19,222	--	13,462	3,686	2,074	2,688	30,751	22,230	--	2,742	19,488	--	8,521
A	72,400	72,400	--	32,739	23,253	16,408	--	100,180	78,235	--	--	78,235	--	21,945
Total	115,571	110,505	11,763	47,281	32,979	18,482	5,066	173,485	125,489	--	2,742	122,611	136	47,996
All Areas														
D	11,586	10,878	3,224	3,748	721	3,185	708	25,338	22,391	5,798	5,442	7,158	3,993	2,947
C	103,017	100,923	15,235	57,093	24,171	4,424	2,094	153,844	133,192	17,206	10,126	97,613	8,247	20,652
B	248,507	245,819	32,736	155,296	31,559	26,228	2,688	332,247	284,726	42,572	46,929	178,068	17,157	47,521
A	971,873	961,998	122,834	611,953	184,270	42,941	9,875	1,182,831	1,115,320	235,798	264,747	578,155	36,620	67,511
Total	1,334,983	1,319,618	174,029	828,090	240,721	76,778	15,365	1,694,260	1,555,629	301,374	327,244	860,994	66,017	138,631

^{1/}Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.^{2/}Slabs, edgings, trim, spur ends.^{3/}Residues not necessarily consumed in the area in which they were produced.^{4/}Combined to avoid disclosure.

Table 30—Production and disposition of bark residue by sawmills by use, resource area, and mill-size class, Oregon, 1976

(Tons, dry weight)

Resource area and mill-size class ^{1/}	All bark	Used ^{2/}					Unused
		Total	Pulp	Board	Fuel	Miscellaneous	
Northwest							
D	12,404	9,565	2,654	--	4,577	2,334	2,839
C	20,987	20,987	--	655	9,654	10,678	--
B	35,986	33,446	--	--	20,092	13,354	2,540
A	369,657	361,029	--	--	242,253	118,776	8,628
Total	439,034	425,027	2,654	655	276,576	145,142	14,007
West Central							
D	11,544	11,544	951	1,161	6,060	3,372	--
C	54,341	54,341	--	--	49,374	4,967	--
B	98,840	98,840	--	--	82,706	16,134	--
A	352,068	352,068	1,520	--	303,282	47,266	--
Total	516,793	516,793	2,471	1,161	441,422	71,739	--
Southwest							
D	3,268	2,945	545	--	1,626	774	323
C	26,582	26,582	--	--	23,768	2,814	--
B	126,131	100,821	--	1,703	96,280	2,838	25,310
A	312,695	257,305	--	--	216,454	40,851	55,390
Total	468,676	387,653	545	1,703	338,128	47,277	81,023
Central D and C ^{3/}							
D and C ^{3/}	20,397	17,137	--	--	17,137	--	3,260
B	49,684	49,684	--	--	47,222	2,462	--
A	161,853	145,958	--	--	99,391	46,567	15,895
Total	231,934	212,779	--	--	163,750	49,029	19,155
Blue Mountain							
D	939	118	--	--	51	67	821
C	36,768	20,738	2,280	--	18,458	--	16,030
B	27,646	18,026	--	--	14,930	3,096	9,620
A	86,522	82,235	--	--	81,489	746	4,287
Total	151,875	121,117	2,280	--	114,928	3,909	30,758
All Areas							
D	28,155	24,172	4,150	1,161	12,314	6,547	3,983
C	159,075	139,785	2,280	655	118,391	18,459	19,290
B	338,287	300,817	--	1,703	261,230	37,884	37,470
A	1,282,795	1,198,595	1,520	--	942,869	254,206	84,200
Total	1,808,312	1,663,369	7,950	3,519	1,334,804	317,096	144,943

^{1/}Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

^{2/}Residues not necessarily consumed in the area in which they were produced.

^{3/}Combined to avoid disclosure.

Table 31—Production and disposition of wood and bark residues by sawmills by resource area and county, Oregon, 1976

(Tons, dry weight)

Resource area and county	All residues			Wood residue			Bark residue		
	Total	Used ^{1/}	Unused	Total	Used ^{1/}	Unused	Total	Used ^{1/}	Unused
Northwest									
Clackamas	484,026	483,937	89	374,472	374,394	78	109,554	109,543	11
Clatsop and Columbia ^{2/}	435,265	434,620	645	340,027	339,939	88	95,238	94,681	557
Hood River	184,169	174,122	10,047	148,666	139,120	9,546	35,503	35,002	501
Martin	82,011	82,011	--	65,783	65,783	--	16,228	16,228	--
Multnomah	141,284	133,157	8,127	111,228	111,228	--	30,056	21,929	8,127
Polk	260,773	256,896	3,877	205,749	204,194	1,555	55,024	52,702	2,322
Tillamook	190,838	190,440	398	149,661	149,661	--	41,177	40,779	398
Washington	112,010	106,459	5,551	90,089	86,293	3,796	21,921	20,166	1,755
Yamhill	172,544	171,396	1,148	138,211	137,399	812	34,333	33,997	336
Total	2,062,920	2,033,038	29,882	1,623,886	1,608,011	15,875	439,034	425,027	14,007
West Central									
Benton	238,544	238,544	--	187,015	187,015	--	51,529	51,529	--
Lane	1,576,169	1,576,169	--	1,226,683	1,226,683	--	349,486	349,486	--
Lincoln	157,973	157,973	--	124,005	124,005	--	33,968	33,968	--
Linn	410,301	410,301	--	328,491	328,491	--	81,810	81,810	--
Total	2,382,987	2,382,987	--	1,866,194	1,866,194	--	516,793	516,793	--
Southwest									
Coos	565,438	514,262	51,176	440,480	421,842	18,638	124,958	92,420	32,538
Curry	88,193	59,286	28,907	68,147	55,049	13,098	20,046	4,237	15,809
Douglas	930,949	909,833	20,716	729,030	717,247	11,783	201,519	192,586	8,933
Jackson	351,397	334,994	16,403	280,526	264,861	15,665	70,871	70,133	738
Josephine	230,176	194,946	35,230	178,894	166,669	12,225	51,282	28,277	23,005
Total	2,165,753	2,013,321	152,432	1,697,077	1,625,668	71,409	468,676	387,653	81,023
Central									
Crook	154,679	154,679	--	124,911	124,911	--	29,768	29,768	--
Deschutes	213,484	210,506	2,978	172,125	169,922	2,203	41,359	40,584	775
Jefferson, Wheeler, and Wasco ^{2/}	204,900	175,035	29,865	166,493	152,523	13,970	38,407	22,512	15,895
Klamath	597,523	597,523	--	491,280	491,280	--	106,243	106,243	--
Lake	82,802	77,149	5,653	66,645	63,477	3,168	16,157	13,672	2,485
Total	1,253,388	1,214,892	38,496	1,021,454	1,002,113	19,341	231,934	212,779	19,155
Blue Mountain									
Baker and Wallowa ^{2/}	127,814	112,580	15,234	101,102	91,912	9,190	26,712	20,668	6,044
Grant and Harney ^{2/}	272,805	255,976	16,829	220,446	211,925	8,521	52,359	44,051	8,308
Umatilla and Morrow ^{2/}	177,718	156,698	21,020	143,265	128,482	14,783	34,453	28,216	6,237
Union	201,288	152,831	48,457	162,937	128,649	38,288	38,351	28,182	10,169
Total	779,625	678,085	101,540	627,750	556,968	70,782	151,875	121,117	30,758
All Areas	8,644,673	8,322,323	322,350	6,836,361	6,658,954	177,407	1,808,312	1,663,369	144,943

^{1/}Residues not necessarily consumed in the area or county in which produced.

^{2/}Combined to avoid disclosure.

Table 32—Production and disposition of wood residue by sawmills by type of residue, use, resource area, and county, Oregon, 1976

(Tons, dry weight)

Resource area and county	All types							Coarse ^{1/}						
	Total	Total used ^{2/}	Pulp	Board	Fuel	Miscellaneous	Unused	Total	Total used ^{2/}	Pulp	Board	Fuel	Miscellaneous	Unused
Northwest														
Clackamas	374,472	374,394	276,030	14,774	57,578	26,012	78	217,645	217,575	212,796	--	3,245	1,534	70
Clatsop and Columbia ^{3/}	340,027	339,939	325,071	13,438	579	851	88	191,451	191,390	188,656	1,782	182	770	61
Hood River	148,666	139,120	77,756	53,177	7,279	908	9,546	79,923	79,173	64,055	15,118	--	--	750
Marion	65,783	65,783	51,321	8,045	5,892	525	--	34,461	34,461	33,488	--	924	49	--
Multnomah	111,228	111,228	85,030	13,497	4,493	8,208	--	63,467	63,467	59,467	4,000	--	--	--
Polk	205,749	204,194	122,418	36,906	42,537	2,333	1,555	109,259	109,259	108,317	--	942	--	--
Tillamook	149,661	149,661	32,534	23,319	93,615	193	--	82,935	82,935	25,979	--	56,885	71	--
Washington	90,089	86,293	16,194	31,471	31,755	6,873	3,796	49,112	46,939	16,194	12,485	17,459	801	2,173
Yamhill	138,211	137,399	100,922	22,980	8,726	4,771	812	80,932	80,390	77,191	2,569	630	--	542
Total	1,623,886	1,608,011	1,087,276	217,607	252,454	50,674	15,875	909,185	905,589	786,143	35,954	80,267	3,225	3,596
West Central														
Benton	187,015	187,015	103,504	29,647	46,878	6,986	--	104,670	104,670	96,392	2,372	--	5,906	--
Lane	1,226,683	1,226,683	724,768	271,995	203,024	26,896	--	700,149	700,149	688,975	--	10,179	995	--
Lincoln	124,005	124,005	77,208	3,183	43,614	--	--	68,531	68,531	--	--	--	--	--
Linn	328,491	328,491	202,867	64,879	60,373	372	--	177,696	177,696	177,249	--	447	--	--
Total	1,866,194	1,866,194	1,108,347	369,704	353,889	34,254	--	1,051,046	1,051,046	1,031,147	2,372	10,626	6,901	--
Southwest														
Coos	440,480	421,842	288,060	72,735	44,606	16,441	18,638	255,803	255,803	243,796	4,920	2,167	4,920	--
Curry	68,147	55,049	42,064	10,367	2,618	--	13,098	42,064	42,064	42,064	--	--	--	--
Douglas	729,030	717,247	424,989	220,959	58,514	12,785	11,783	407,286	407,286	403,427	--	73	3,786	--
Jackson	280,526	264,861	120,421	74,271	70,169	--	15,665	147,393	147,252	112,866	11,304	23,082	--	141
Josephine	178,894	166,669	91,734	30,728	17,241	26,966	12,225	102,556	101,907	91,734	--	289	9,884	649
Total	1,697,077	1,625,668	967,268	409,060	193,148	56,192	71,409	955,102	954,312	893,887	16,224	25,611	18,590	790
Central														
Crook	124,911	124,911	69,276	8,220	38,767	8,648	--	67,059	67,059	64,438	--	15	2,606	--
Deschutes	172,125	169,922	72,093	53,361	39,092	5,376	2,203	92,939	91,634	72,093	11,529	8,012	--	1,305
Jefferson, Wheeler, and Wasco ^{3/}	166,493	152,523	82,360	31,102	39,061	--	13,970	86,650	86,650	81,465	--	5,185	--	--
Klamath	491,280	491,280	212,473	104,203	158,051	16,553	--	270,230	270,230	206,280	33,591	14,161	16,198	--
Lake	66,645	63,477	35,393	12,544	15,540	--	3,168	36,213	36,213	35,393	820	--	--	--
Total	1,021,454	1,002,113	471,595	209,430	290,511	30,577	19,341	553,091	551,786	459,669	45,940	27,373	18,804	1,305
Blue Mountain														
Baker and Walla ^{3/}	101,102	91,912	54,620	11,020	24,183	2,089	9,190	58,018	55,874	54,620	--	1,244	10	2,144
Grant and Harney ^{3/}	220,446	211,925	118,460	11,113	82,281	71	8,521	117,786	117,002	112,378	--	4,617	7	784
Umatilla and Morrow ^{3/}	143,265	128,482	28,525	64,230	35,727	--	14,783	76,198	68,974	22,844	46,130	--	--	7,224
Union	162,937	124,649	77,741	9,790	20,286	16,832	38,288	86,692	79,124	77,741	--	1,026	357	7,568
Total	627,750	556,968	279,346	96,153	162,477	18,992	70,782	338,694	320,974	267,583	46,130	6,887	374	17,720
All Areas	6,836,361	6,658,954	3,913,832	1,301,954	1,252,479	190,689	177,407	3,807,118	3,783,707	3,438,429	146,620	150,764	47,894	23,411

See footnotes at end of table.

Table 32—Production and disposition of wood residue by sawmills by type of residue, use, resource area, and county, Oregon, 1976—Continued

(Tons, dry weight)

Resource area and county	Shavings							Sawdust						
	Total	Total used ^{2/}	Pulp	Board	Fuel	Miscellaneous	Unused	Total	Total used ^{2/}	Pulp	Board	Fuel	Miscellaneous	Unused
Northwest														
Clackamas	65,105	65,105	25,043	14,774	25,237	51	--	91,722	91,714	38,191	--	29,096	24,427	8
Clatsop and Columbia ^{3/}	68,842	68,842	63,194	5,457	191	--	--	79,734	79,707	73,221	6,199	206	81	27
Hood River	27,635	24,399	4,844	14,845	3,802	908	3,236	41,108	35,548	8,857	23,214	3,477	--	5,560
Marion	15,419	15,419	10,856	3,878	566	99	--	15,903	15,903	6,977	4,167	4,382	377	--
Multnomah	19,393	19,393	6,123	6,293	3,089	3,888	--	28,368	28,368	19,440	3,204	1,404	4,320	--
Polk	49,454	49,454	--	36,906	12,548	--	--	47,036	45,481	14,101	--	29,047	2,333	1,555
Tillamook	32,254	32,254	--	23,319	8,920	15	--	34,472	34,472	6,555	--	27,810	107	--
Washington	19,762	19,338	--	8,618	9,284	1,436	424	21,215	20,016	--	10,368	5,012	4,636	1,199
Yamhill	27,626	27,626	4,739	19,913	--	2,974	--	29,653	29,383	18,992	498	8,096	1,797	270
Total	325,490	321,830	114,799	134,003	63,657	9,371	3,660	389,211	380,592	186,334	47,650	108,530	38,078	8,619
West Central														
Benton	39,205	39,205	1,589	18,203	18,333	1,080	--	43,140	43,140	5,523	9,072	28,545	--	--
Lane	234,128	234,128	1,770	179,128	37,900	15,330	--	292,406	292,406	34,023	92,867	154,945	10,571	--
Lincoln	27,035	27,035	6,125	3,183	17,727	--	--	28,439	28,439	2,552	--	25,887	--	--
Linn	71,599	71,599	3,780	42,888	24,931	--	--	79,196	79,196	21,838	21,991	34,995	372	--
Total	371,967	371,967	13,264	243,402	98,891	16,410	--	443,181	443,181	63,936	123,930	244,372	10,943	--
Southwest														
Coos	76,882	76,882	5,657	62,404	--	8,821	--	107,795	89,157	38,607	5,411	42,439	2,700	18,638
Curry	9,300	9,300	--	9,300	--	--	--	16,783	3,685	--	1,067	2,618	--	13,098
Douglas	153,028	153,028	9,065	137,268	6,695	--	--	168,716	156,933	12,497	83,691	51,746	8,999	11,783
Jackson	57,882	57,511	7,555	42,991	6,965	--	371	75,251	60,098	--	19,976	40,122	--	15,153
Josephine	33,369	33,369	--	21,448	--	11,921	--	42,969	31,393	--	9,280	16,952	5,161	11,576
Total	330,461	330,090	22,277	273,411	13,660	20,742	371	411,514	341,266	51,104	119,425	153,877	16,860	70,248
Central														
Crook	23,380	23,380	4,838	8,220	4,280	6,042	--	34,472	34,472	--	--	34,472	--	--
Deschutes	31,296	31,296	--	22,032	3,888	5,376	--	47,890	46,992	--	19,800	27,192	--	898
Jefferson, Wheeler, and Wasco ^{3/}	35,374	29,106	895	19,438	8,773	--	6,268	44,469	36,767	--	11,664	25,103	--	7,702
Klamath	89,720	89,720	6,193	68,579	14,593	355	--	131,330	131,330	--	2,033	129,297	--	--
Lake	11,724	11,724	--	11,724	--	--	--	18,708	15,540	--	--	15,540	--	3,168
Total	191,494	185,226	11,926	129,993	31,534	11,773	6,268	276,869	265,101	--	33,497	231,604	--	11,768
Blue Mountain														
Baker and Wallowa ^{3/}	13,148	13,094	--	11,020	--	2,074	54	29,936	22,944	--	--	22,939	5	6,992
Grant and Harney ^{3/}	42,532	42,172	6,082	11,113	24,977	--	360	60,128	52,751	--	--	52,687	64	7,377
Umatilla and Morrow ^{3/}	28,041	25,353	5,681	15,358	4,314	--	2,688	39,026	34,155	--	2,742	31,413	--	4,871
Union	31,850	29,886	--	9,790	3,688	16,408	1,964	44,395	15,639	--	--	15,572	67	28,756
Total	115,571	110,505	11,763	47,281	32,979	18,482	5,066	173,485	125,489	--	2,742	122,611	136	47,996
All Areas	1,334,983	1,319,618	174,029	828,090	240,721	76,778	15,365	1,694,260	1,555,629	301,374	327,244	860,994	66,017	138,631

^{1/}Coarse residue includes slabs, edgings, sawmill trim, and planer trim.^{2/}Residues not necessarily consumed in the area in which they were produced.^{3/}Combined to avoid disclosure.

Table 33—Production and disposition of bark residue by sawmills by use, resource area, and county, Oregon, 1976

(Tons, dry weight)

Resource area and county	All bark	Used ^{1/}					Unused
		Total	Pulp	Board	Fuel	Miscellaneous	
Northwest							
Clackamas	109,554	109,543	--	--	41,241	68,302	11
Clatsop and Columbia ^{2/}	95,238	94,681	774	655	93,252	--	557
Hood River	35,503	35,002	--	--	34,237	765	501
Marion	16,228	16,228	1,357	--	7,301	7,570	--
Multnomah	30,056	21,929	--	--	335	21,594	8,127
Polk	55,024	52,702	413	--	34,225	18,064	2,322
Tillamook	41,177	40,779	--	--	40,254	525	398
Washington	21,921	20,166	--	--	15,068	5,098	1,755
Yamhill	34,333	33,997	110	--	10,663	23,224	336
Total	439,034	425,027	2,654	655	276,576	145,142	14,007
West Central							
Benton	51,529	51,529	--	1,161	40,409	9,959	--
Lane	349,486	349,486	2,084	--	295,814	51,588	--
Lincoln	33,968	33,968	387	--	33,581	--	--
Linn	81,810	81,810	--	--	71,618	10,192	--
Total	516,793	516,793	2,471	1,161	441,422	71,739	--
Southwest							
Coos	124,958	92,420	310	--	88,756	3,354	32,538
Curry	20,046	4,237	--	--	1,423	2,814	15,809
Douglas	201,519	192,586	235	--	164,862	27,489	8,933
Jackson	70,871	70,133	--	1,703	57,724	10,706	738
Josephine	51,282	28,277	--	--	25,363	2,914	23,005
Total	468,676	387,653	545	1,703	338,128	47,277	81,023
Central							
Crook	29,768	29,768	--	--	29,768	--	--
Deschutes	41,359	40,584	--	--	8,094	32,490	775
Jefferson, Wheeler, and Wasco ^{2/}	38,407	22,512	--	--	22,512	--	15,895
Klamath	106,243	106,243	--	--	89,704	16,539	--
Lake	16,157	13,672	--	--	13,672	--	2,485
Total	231,934	212,779	--	--	163,750	49,029	19,155
Blue Mountain							
Baker and Wallawa ^{2/}	26,712	20,668	--	--	17,572	3,096	6,044
Grant and Harney ^{2/}	52,359	44,051	2,280	--	41,768	3	8,308
Umatilla and Morrow ^{2/}	34,453	28,216	--	--	27,470	746	6,237
Union	38,351	28,182	--	--	28,118	64	10,169
Total	151,875	121,117	2,280	--	114,928	3,909	30,758
All Areas	1,808,312	1,663,369	7,950	3,519	1,334,804	317,096	144,943

^{1/}Residues not necessarily consumed in the area in which they were produced.

^{2/}Combined to avoid disclosure.

Table 34—Lumber production by sawmills by degree of manufacture, resource area, and mill-size class, Oregon, 1976

(Thousand board feet, lumber tally)

Resource area and mill-size class ^{1/}	Green	Kiln-dried	Air-dried	Total	Rough	Surfaced
Northwest						
D	46,438	9,495	15	55,948	26,313	29,635
C	80,358	5,487	--	85,845	14,968	70,877
B	129,937	28,226	8,750	166,913	37,856	129,057
A	807,436	646,115	6,033	1,459,584	197,725	1,261,859
Total	1,064,169	689,323	14,798	1,768,290	276,862	1,491,428
West Central						
D	32,728	11,686	168	44,582	24,421	20,161
C	172,587	39,999	--	212,586	53,342	159,244
B	340,188	72,100	1,717	414,005	140,464	273,541
A	685,898	676,721	1,885	1,364,504	151,257	1,213,247
Total	1,231,401	800,506	3,770	2,035,677	369,484	1,666,193
Southwest						
D	12,335	325	--	12,660	9,465	3,195
C	64,260	33,121	5,653	103,034	27,125	75,909
B	273,519	161,276	68,516	503,311	87,188	416,123
A	845,114	406,871	34,004	1,285,989	251,333	1,034,656
Total	1,195,228	601,593	108,173	1,904,994	375,111	1,529,883
Central D and C^{2/}						
D	16,962	68,238	11,963	97,163	14,171	82,992
B	19,409	202,622	19,664	241,695	18,467	223,228
A	71,218	626,269	12,396	709,883	42,173	667,710
Total	107,589	897,129	44,023	1,048,741	74,811	973,930
Blue Mountain						
D	2,314	--	1,749	4,063	2,580	1,483
C	50,731	97,963	5,118	153,812	48,069	105,743
B	11,960	64,000	43,715	119,675	6,761	112,914
A	3,587	353,220	22,662	379,469	2,391	377,078
Total	68,592	515,183	73,244	657,019	59,801	597,218
All Areas						
D	93,815	21,506	1,932	117,253	62,779	54,474
C	384,898	244,808	22,734	652,440	157,675	494,765
B	775,013	528,224	142,362	1,445,599	290,736	1,154,863
A	2,413,253	2,709,196	76,980	5,199,429	644,879	4,554,550
Total	3,666,979	3,503,734	244,008	7,414,721	1,156,069	6,258,652

^{1/} Mill-size classes are as follows: Class A mills = 120,000+ board-foot capacity per 8-hour shift, B = 80,000-119,999, C = 40,000-79,999, D = less than 40,000.

^{2/} Combined to avoid disclosure.

Table 35--Number of veneer and plywood mills by type of mill, resource area, and county, Oregon, 1976

Resource area and county	All types	Veneer only	Layup only	Veneer and layup
Northwest				
Clackamas	4	2	2	--
Clatsop	1	--	--	1
Columbia	2	1	--	1
Marion	2	2	--	--
Multnomah	3	1	--	2
Polk	4	1	--	3
Tillamook	1	--	--	1
Washington	1	1	--	--
Yamhill	3	1	1	1
Total	21	9	3	9
West Central				
Benton	4	1	3	--
Lane	32	17	6	9
Lincoln	2	1	--	1
Linn	15	4	4	7
Total	53	23	13	17
Southwest				
Coos	9	4	1	4
Curry	3	1	--	2
Douglas	15	6	2	7
Jackson	11	2	3	6
Josephine	6	--	5	1
Total	44	13	11	20
Central				
Deschutes	1	--	--	1
Jefferson	2	1	1	--
Klamath	5	3	--	2
Lake	1	1	--	--
Total	9	5	1	3
Blue Mountain				
Baker	1	1	--	--
Grant	1	1	--	--
Harney	1	--	--	1
Morrow	1	--	--	1
Union	1	--	--	1
Total	5	2	--	3
All Areas	132	52	28	52

Table 36--Installed 8-hour capacity of veneer and plywood mills by type of mill,
resource area, and county, Oregon, 1976

(Thousand square feet, 3/8-inch basis)

Resource area and county	Veneer only	Layup only	Veneer and layup	
			Veneer	Layup
Northwest				
Clackamas	250	197	--	--
Clatsop	--	--	90	110
Columbia	200	--	400	166
Marion	380	--	--	--
Multnomah	25	--	285	325
Polk	125	--	700	975
Tillamook	--	--	380	380
Washington	160	--	--	--
Yamhill	240	80	240	190
Total	1,380	277	2,095	2,146
West Central				
Benton	170	460	--	--
Lane	4,102	953	1,658	1,365
Lincoln	120	--	278	278
Linn	760	607	1,174	1,347
Total	5,152	2,020	3,110	2,990
Southwest				
Coos	496	540	918	967
Curry	160	--	420	320
Douglas	1,380	360	1,457	1,645
Jackson	561	676	2,038	1,750
Josephine	--	770	195	150
Total	2,597	2,346	5,028	4,832
Central				
Deschutes	--	--	150	160
Jefferson	180	180	--	--
Klamath	295	--	370	300
Lake	100	--	--	--
Total	575	180	520	460
Blue Mountain				
Baker	240	--	--	--
Grant	100	--	--	--
Harney	--	--	120	120
Morrow	--	--	312	200
Union	--	--	157	70
Total	340	--	589	390
All Areas	10,044	4,823	11,342	10,818

Table 37--Number of veneer and plywood mills by diameter limit of lathe and resource area, Oregon, 1976

Resource area	Lathe log diameter limit							
	Layup only	20-29	30-39	40-49	50-59	60-69	70-79	80+
Northwest	3	1	--	1	1	3	3	9
West Central	13	--	--	1	3	10	5	21
Southwest	11	--	1	--	--	9	7	16
Central	1	--	3	--	--	3	1	1
Blue Mountain	--	--	1	2	2	--	--	--
All Areas	28	1	5	4	6	25	16	47

Table 38--Number of veneer and plywood mills by size of core produced and resource area, Oregon, 1976

Resource area	Diameter of cores (inches)								No lathe or core
	3	4	5	6	7	8	9	10	
Northwest	--	1	5	4	6	2	--	--	3
West Central	--	1	4	11	11	10	3	--	13
Southwest	1	3	10	11	3	4	1	--	11
Central	1	2	3	1	1	--	--	--	1
Blue Mountain	--	2	2	1	--	--	--	--	--
All Areas	2	9	24	28	21	16	4	--	28

Table 39—Number of veneer and plywood mills having selected equipment by resource area, and county, Oregon, 1976

Resource area and county	4-foot lathe	8-foot lathe	Slicer	Veneer chipper	Core chipper	Cold press	Hot press	Burner
Northwest								
Clackamas	1	2	--	1	1	--	3	--
Clatsop	1	1	--	1	1	--	1	--
Columbia	--	2	--	1	--	--	1	--
Marion	--	2	--	2	2	--	--	1
Multnomah	2	2	1	2	2	--	2	--
Polk	1	4	--	4	2	--	2	--
Tillamook	--	1	--	1	--	--	1	1
Washington	--	1	--	1	--	--	--	--
Yamhill	2	2	--	2	1	--	2	--
Total	7	17	1	15	9	--	12	2
West Central								
Benton	--	1	--	2	--	--	3	--
Lane	9	26	--	26	16	--	15	--
Lincoln	2	1	--	2	2	--	1	--
Linn	3	11	--	9	3	1	11	--
Total	14	39	--	39	21	1	30	--
Southwest								
Coos	6	5	--	6	8	--	5	--
Curry	1	3	--	3	2	--	2	1
Douglas	5	13	--	13	9	--	9	2
Jackson	4	8	1	8	7	--	9	2
Josephine	1	1	--	1	1	--	5	--
Total	17	30	1	31	27	--	30	5
Central								
Deschutes	1	1	--	1	1	--	1	--
Jefferson	--	1	--	1	--	1	1	2
Klamath	3	3	1	5	3	1	2	2
Lake	1	--	--	--	1	--	--	1
Total	5	5	1	7	5	2	4	5
Blue Mountain								
Baker	1	1	--	1	1	1	--	1
Grant	1	--	--	1	1	--	--	1
Harney	--	1	--	1	--	--	1	--
Morrow	1	1	--	1	1	--	1	--
Union	--	1	--	1	1	1	1	1
Total	3	4	--	5	4	2	3	3
All Areas	46	95	3	97	66	5	79	15

Table 40--Number of veneer and plywood mills by years of tenure of present mill ownership, resource area, and years at site, Oregon, 1976

Resource area and years at site	All mills	Tenure of present mill ownership (years)				
		0-2	3-5	6-10	11-20	21+
Northwest						
3- 5	1	--	1	--	--	--
11-20	11	1	2	1	7	--
21+	9	1	--	2	2	4
Total	21	2	3	3	9	4
West Central						
0- 2	1	1	--	--	--	--
6-10	6	--	2	4	--	--
11-20	24	--	3	4	17	--
21+	22	--	3	4	5	10
Total	53	1	8	12	22	10
Southwest						
6-10	2	--	--	2	--	--
11-20	23	3	7	1	12	--
21+	19	2	3	4	2	8
Total	44	5	10	7	14	8
Central						
3- 5	1	--	1	--	--	--
6-10	4	1	2	1	--	--
11-20	4	--	--	2	2	--
Total	9	1	3	3	2	--
Blue Mountain						
6-10	2	--	--	2	--	--
11-20	3	--	--	--	3	--
Total	5	--	--	2	3	--
All Areas						
0- 2	1	1	--	--	--	--
3- 5	2	--	2	--	--	--
6-10	14	1	4	9	--	--
11-20	65	4	12	8	41	--
21+	50	3	6	10	9	22
Total	132	9	24	27	50	22

Table 41--Average number of operating days of veneer and plywood mills
by type of mill and resource area, Oregon, 1976

Resource area	Veneer only	Layup only	Veneer and layup
Northwest	216	262	271
West Central	230	262	242
Southwest	254	256	248
Central	188	230	255
Blue Mountain	273	--	281
All Areas	231	258	252

Table 42--Log consumption by veneer and plywood mills by type of material
and resource area, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area	All types	Sound logs	Utility logs
Northwest	404,617	367,726	36,891
West Central	1,177,643	893,699	283,944
Southwest	1,349,277	1,105,541	243,736
Central	187,725	180,098	7,627
Blue Mountain	186,443	186,243	200
All Areas	3,305,705	2,733,307	572,398

Table 43--Log consumption by veneer and plywood mills by timber age
group and resource area, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area	All age groups	Old growth (100+ years)	Young growth (less than 100 years)
Northwest	404,617	252,605	152,012
West Central	1,177,643	908,863	268,780
Southwest	1,349,277	971,219	378,058
Central	187,725	147,909	39,816
Blue Mountain	186,443	159,324	27,119
All Areas	3,305,705	2,439,920	865,785

Table 44--Log inventory changes, log consumption, and apparent log receipts by veneer and plywood mills by resource area, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area	Log inventory		1976 log consumption	Apparent 1976 log receipts
	January 1, 1976	December 31, 1976		
Northwest	93,378	87,560	404,617	398,799
West Central	157,493	192,143	1,177,643	1,212,293
Southwest	251,323	230,881	1,349,277	1,328,835
Central	54,934	59,380	187,725	192,171
Blue Mountain	97,772	104,571	186,443	193,242
All Areas	654,900	674,535	3,305,705	3,325,340

Table 45—Log consumption by veneer and plywood mills by ownership class, resource area, and county, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and county	All owners	State	National Forest	Bureau of Land Management	Other public	Forest industry		Farmer and miscellaneous private
						Own lands	Other industry	
Northwest								
Clackamas and Marion ^{1/}	91,123	6,400	62,721	1,950	--	8,202	3,900	7,950
Clatsop and Columbia ^{1/}	93,337	23,010	37,897	--	2,427	20,022	--	9,981
Multnomah	35,650	14,139	11,266	209	278	869	8,750	139
Polk	109,017	7,950	11,581	21,155	4,914	43,169	14,407	5,841
Tillamook, Washington, and Yamhill ^{1/}	75,490	5,635	13,039	10,306	255	20,752	22,306	3,197
Total	404,617	57,134	136,504	33,620	7,874	93,014	49,363	27,108
West Central								
Benton and Lincoln ^{1/}	77,259	--	12,636	8,251	--	53,011	895	2,466
Lane	779,558	2,254	347,923	96,992	2,527	205,047	106,374	18,441
Linn	320,826	14,400	130,467	36,144	--	33,419	72,263	34,133
Total	1,177,643	16,654	491,026	141,387	2,527	291,477	179,532	55,040
Southwest								
Coos	264,899	4,395	14,752	54,021	--	149,562	26,262	15,907
Curry	91,761	--	29,979	--	--	34,739	5,291	21,752
Douglas	599,983	12,474	201,158	252,010	--	72,573	49,930	11,838
Jackson and Josephine ^{1/}	392,634	--	169,513	87,159	--	96,812	20,047	19,103
Total	1,349,277	16,869	415,402	393,190	--	353,686	101,530	68,600
Central								
Deschutes, Jefferson, and Lake ^{1/}	76,235	--	30,771	--	5,256	35,894	3,003	1,311
Klamath	111,490	--	47,181	11,521	--	33,168	840	18,780
Total	187,725	--	77,952	11,521	5,256	69,062	3,843	20,091
Blue Mountain								
Baker, Grant, Harney, Morrow, and Union ^{1/}	186,443	--	133,050	4,523	21,251	13,335	2,706	11,578
All Areas	3,305,705	90,657	1,253,934	584,241	36,908	820,574	336,974	182,417

^{1/} Combined to avoid disclosure.

Table 46—Dependency of veneer and plywood mills for logs by ownership origin and resource area, Oregon, 1976
(Number of mills)

Resource area	National Forest					State					Bureau of Land Management					Other public				
	Dependency (percent)																			
	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100				
Northwest	8	5	4	4	11	8	2	--	13	8	--	--	16	5	--	--				
West Central	20	5	15	13	49	3	1	--	27	21	5	--	52	1	--	--				
Southwest	20	10	12	2	38	6	--	--	20	14	6	4	44	--	--	--				
Central	3	1	2	3	9	--	--	--	7	1	1	--	8	1	--	--				
Blue Mountain	--	--	2	3	5	--	--	--	3	2	--	--	4	--	1	--				
All Areas	51	21	35	25	112	17	3	--	70	46	12	4	124	7	1	--				
Resource area	Forest industry					Farmer and miscellaneous private														
	Own lands					Other industry														
	Dependency (percent)																			
	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100								
Northwest	12	3	6	--	11	7	--	3	12	9	--	--								
West Central	34	7	7	5	36	11	5	1	39	12	1	1								
Southwest	25	9	5	5	29	10	5	--	30	13	--	1								
Central	6	1	--	2	7	2	--	--	5	3	--	1								
Blue Mountain	3	2	--	--	4	1	--	--	--	5	--	--								
All Areas	80	22	18	12	87	31	10	4	86	42	1	3								

Table 47—Log consumption by veneer and plywood mills by species, resource area, and county, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and county	All species	Douglas-fir	Hemlock	True firs	Spruce	Ponderosa pine	Lodgepole pine	Western redcedar	Other softwoods	Hardwoods
Northwest										
Clackamas and Marion ^{1/}	91,123	73,105	11,584	4,336	--	2,098	--	--	--	--
Clatsop and Columbia ^{1/}	93,337	58,523	16,730	1,950	12,696	--	--	--	3,438	--
Multnomah	35,650	22,965	633	--	11,616	--	160	216	60	--
Polk	109,017	90,139	6,632	874	8,914	--	--	--	1,378	1,080
Tillamook, Washington, and Yamhill ^{1/}	75,490	57,301	2,704	--	13,731	--	--	--	--	1,754
Total	404,617	302,033	38,283	7,160	46,957	2,098	160	216	4,876	2,834
West Central										
Benton and Lincoln ^{1/}	77,259	73,383	510	--	3,366	--	--	--	--	--
Lane	779,558	735,392	24,732	2,265	1,513	400	11,814	288	3,007	147
Linn	320,826	270,748	38,784	7,900	636	920	--	920	918	--
Total	1,177,643	1,079,523	64,026	10,165	5,515	1,320	11,814	1,208	3,925	147
Southwest										
Coos	264,899	247,571	9,350	--	5,348	412	412	722	1,084	--
Curry	91,761	80,034	1,764	6,584	1,615	1,764	--	--	--	--
Douglas	599,983	544,396	41,967	2,660	--	3,440	--	4,620	2,900	--
Jackson and Josephine ^{1/}	392,634	294,023	2,003	66,864	--	3,850	--	--	25,894	--
Total	1,349,277	1,166,024	55,084	76,108	6,963	9,466	412	5,342	29,878	--
Central										
Deschutes, Jefferson, and Lake ^{1/}	76,235	44,613	735	25,887	735	3,705	560	--	--	--
Klamath	111,490	2,381	3,167	67,736	--	16,891	21,315	--	--	--
Total	187,725	46,994	3,902	93,623	735	20,596	21,875	--	--	--
Blue Mountain										
Baker, Grant, Harney, Morrow, and Union ^{1/}	186,443	90,614	--	52,365	1,082	27,989	--	--	14,393	--
All Areas	3,305,705	2,685,108	161,295	239,421	61,252	61,469	34,261	6,766	53,072	2,981

^{1/} Combined to avoid disclosure.

Table 48—Log consumption by veneer and plywood mills by species, resource area, and type of material, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and type of material	All species	Douglas-fir	Hemlock	True firs	Spruce	Ponderosa pine	Lodgepole pine	Western redcedar	Other softwoods	Hardwoods
Northwest Sound ¹ / Utility	367,725 36,892	270,806 31,227	33,919 4,364	6,760 400	46,275 682	2,098 --	139 21	216 --	4,678 198	2,834 --
Total	404,617	302,033	38,283	7,160	46,957	2,098	160	216	4,876	2,834
West Central Sound ¹ / Utility	893,700 283,943	807,745 271,778	53,145 10,881	9,245 920	5,375 140	1,320 --	11,814 --	1,180 28	3,876 49	-- 147
Total	1,177,643	1,079,523	64,026	10,165	5,515	1,320	11,814	1,208	3,925	147
Southwest Sound ¹ / Utility	1,105,540 243,737	930,881 235,143	51,459 3,625	73,036 3,072	6,816 147	7,716 1,750	412 --	5,342 --	29,878 --	-- --
Total	1,349,277	1,166,024	55,084	76,108	6,963	9,466	412	5,342	29,878	--
Central Sound ¹ / Utility	180,116 7,609	45,509 1,485	3,821 81	90,871 2,752	735 --	19,711 885	19,469 2,406	-- --	-- --	-- --
Total	187,725	46,994	3,902	93,623	735	20,596	21,875	--	--	--
Blue Mountain Sound ¹ / Utility	186,243 200	90,514 100	-- --	52,275 90	1,082 --	27,989 --	-- --	-- --	14,383 10	-- --
Total	186,443	90,614	--	52,365	1,082	27,989	--	--	14,393	--
Total State Sound ¹ / Utility	2,733,324 572,381	2,145,455 539,733	142,344 18,951	232,187 7,234	60,283 969	58,834 2,635	31,834 2,427	6,738 28	52,815 257	2,834 147
Total	3,305,705	2,685,188	161,295	239,421	61,252	61,469	34,261	6,766	53,072	2,981

¹/Includes both live and dead logs.

Table 49—Production and disposition of wood and bark residues by veneer and plywood mills by resource area, and county, Oregon, 1976

(Tons, dry weight)

Resource area and county	All residues			Wood residue			Bark residue		
	Total	Used ^{1/}	Unused	Total	Used ^{1/}	Unused	Total	Used ^{1/}	Unused
Northwest									
Clackamas and Marion ^{2/}	163,158	152,812	10,346	127,177	127,177	--	35,981	25,635	10,346
Clatsop and Columbia ^{2/}	191,076	191,076	--	148,994	148,994	--	42,082	42,082	--
Multnomah	120,963	120,963	--	96,281	96,281	--	24,682	24,682	--
Polk	288,852	281,933	6,919	227,246	220,327	6,919	61,606	61,606	--
Tillamook, Washington, and Yamhill ^{2/}	201,275	143,026	58,249	158,701	127,110	31,591	42,574	15,916	26,658
Total	965,324	889,810	75,514	758,399	719,889	38,510	206,925	169,921	37,004
West Central									
Benton and Lincoln ^{2/}	193,886	193,886	--	155,868	155,868	--	38,018	38,018	--
Lane	1,536,802	1,524,610	12,192	1,185,977	1,179,868	6,109	350,825	344,742	6,083
Linn	694,762	694,762	--	559,303	559,303	--	135,459	135,459	--
Total	2,425,450	2,413,258	12,192	1,901,148	1,895,039	6,109	524,302	518,219	6,083
Southwest									
Coos	437,997	428,374	9,623	348,031	348,031	--	89,966	80,343	9,623
Curry	194,488	190,511	3,977	153,520	153,520	--	40,968	36,991	3,977
Douglas	1,114,740	1,098,251	16,489	895,691	893,290	2,401	219,049	204,961	14,088
Jackson and Josephine ^{2/}	900,896	876,595	24,301	722,143	721,070	1,073	178,753	155,525	23,228
Total	2,648,121	2,593,731	54,390	2,119,385	2,115,911	3,474	528,736	477,820	50,916
Central									
Deschutes, Jefferson, and Lake ^{2/}	156,994	149,563	7,431	123,097	118,558	4,539	33,897	31,005	2,892
Klamath	164,878	150,135	14,743	129,284	126,413	2,871	35,594	23,722	11,872
Total	321,872	299,698	22,174	252,381	244,971	7,410	69,491	54,727	14,764
Blue Mountain									
Baker, Grant, Harney, Morrow, and Union ^{2/}	332,681	308,529	24,152	259,799	248,330	11,469	72,882	60,199	12,683
All Areas	6,693,448	6,505,026	188,422	5,291,112	5,224,140	66,972	1,402,336	1,280,886	121,450

^{1/} Not necessarily used in the area or county in which produced.

^{2/} Combined to avoid disclosure.

Table 50--Production and disposition of wood residue by veneer and plywood mills by type of residue, resource area, and county, Oregon 1976

(Tons, dry weight)

Resource area and county	All types						
	Total	Total used ^{3/}	Pulp	Board	Fuel	Miscellaneous	Unused
Northwest							
Clackamas and Marion ^{4/}	127,177	127,177	85,441	11,051	11,761	18,924	--
Clatsop and Columbia ^{4/}	148,994	148,994	65,366	7,066	54,371	22,191	--
Multnomah	96,281	96,281	68,688	--	15,793	11,800	--
Polk	227,246	220,327	138,499	2,728	42,188	36,912	6,919
Tillamook, Washington, and Yamhill ^{4/}	158,701	127,110	34,050	47,429	28,508	17,123	31,591
Total	758,399	719,889	392,044	68,274	152,621	106,950	38,510
West Central							
Benton and Lincoln ^{4/}	155,868	155,868	98,223	19,135	19,501	19,009	--
Lane	1,185,977	1,179,868	819,511	77,317	96,407	186,633	6,109
Linn	559,303	559,303	252,591	59,462	101,484	145,766	--
Total	1,901,148	1,895,039	1,170,325	155,914	217,392	351,408	6,109
Southwest							
Coos	348,031	348,031	143,320	35,861	26,379	142,471	--
Curry	153,520	153,520	110,625	--	17,784	25,111	--
Douglas	895,691	893,290	594,020	125,435	31,582	142,253	2,401
Jackson and Josephine ^{4/}	722,143	721,070	445,355	57,111	107,025	111,579	1,073
Total	2,119,385	2,115,911	1,293,320	218,407	182,770	421,414	3,474
Central							
Deschutes, Jefferson, and Lake ^{4/}	123,097	118,558	80,672	24,587	1,859	11,440	4,539
Klamath	129,284	126,413	90,455	2,640	13,052	20,266	2,871
Total	252,381	244,971	171,127	27,227	14,911	31,706	7,410
Blue Mountain							
Baker, Grant, Harney, Morrow, and Union ^{4/}	259,799	248,330	138,810	28,995	68,012	12,513	11,469
All Areas	5,291,112	5,224,140	3,165,626	498,817	635,706	923,991	66,972

See footnotes at end of table.

Table 50--Production and disposition of wood residue by veneer and plywood mills by type of residue, resource area, and county, Oregon 1976 (continued)

(Tons, dry weight)

Resource area and county	Coarse ^{1/}						
	Total	Total used ^{3/}	Pulp	Board	Fuel	Miscellaneous	Unused
Northwest							
Clackamas and Marion ^{4/}	123,876	123,876	85,441	11,051	9,575	17,809	--
Clatsop and Columbia ^{4/}	144,204	144,204	65,366	7,066	49,581	22,191	--
Multnomah	92,152	92,152	68,688	--	13,842	9,622	--
Polk	219,694	212,775	138,499	2,728	34,636	36,912	6,919
Tillamook, Washington, and Yamhill ^{4/}	153,151	124,374	34,050	47,429	25,772	17,123	28,777
Total	733,077	697,381	392,044	68,274	133,406	103,657	35,696
West Central							
Benton and Lincoln ^{4/}	152,041	152,041	98,223	15,308	19,501	19,009	--
Lane	1,160,417	1,154,308	819,511	75,755	74,151	184,891	6,109
Linn	517,859	517,859	252,591	54,039	67,157	144,072	--
Total	1,830,317	1,824,208	1,170,325	145,102	160,809	347,972	6,109
Southwest							
Coos	335,251	335,251	143,320	35,861	16,158	139,912	--
Curry	148,017	148,017	110,625	--	12,281	25,111	--
Douglas	867,069	864,668	590,500	123,971	11,099	139,098	2,401
Jackson and Josephine ^{4/}	691,247	690,389	445,355	56,275	80,943	107,816	858
Total	2,041,584	2,038,325	1,289,800	216,107	120,481	411,937	3,259
Central							
Deschutes, Jefferson, and Lake ^{4/}	119,329	115,698	80,672	21,727	1,859	11,440	3,631
Klamath	125,331	122,460	90,455	2,640	9,099	20,266	2,871
Total	244,660	238,158	171,127	24,367	10,958	31,706	6,502
Blue Mountain							
Baker, Grant, Harney, Morrow, and Union ^{4/}	252,673	241,204	138,810	28,995	60,886	12,513	11,469
All Areas	5,102,311	5,039,276	3,162,106	482,845	486,540	907,785	63,035

See footnotes at end of table.

Table 50--Production and disposition of wood residue by veneer and plywood mills by type of residue, resource area, and county, Oregon 1976 (continued)

(Tons, dry weight)

Resource area and county	Fine ^{2/}						
	Total	Total used ^{3/}	Pulp	Board	Fuel	Miscellaneous	Unused
Northwest							
Clackamas and Marion ^{4/}	3,301	3,301	--	--	2,186	1,115	--
Clatsop and Columbia ^{4/}	4,790	4,790	--	--	4,790	--	--
Multnomah	4,129	4,129	--	--	1,951	2,178	--
Polk	7,552	7,552	--	--	7,552	--	--
Tillamook, Washington, and Yamhill ^{4/}	5,550	2,736	--	--	2,736	--	2,814
Total	25,322	22,508	--	--	19,215	3,293	2,814
West Central							
Benton and Lincoln ^{4/}	3,827	3,827	--	3,827	--	--	--
Lane	25,560	25,560	--	1,562	22,256	1,742	--
Linn	41,444	41,444	--	5,423	34,327	1,694	--
Total	70,831	70,831	--	10,812	56,583	3,436	--
Southwest							
Coos	12,780	12,780	--	--	10,221	2,559	--
Curry	5,503	5,503	--	--	5,503	--	--
Douglas	28,622	28,622	3,520	1,464	20,483	3,155	--
Jackson and Josephine ^{4/}	30,896	30,681	--	836	26,082	3,763	215
Total	77,801	77,586	3,520	2,300	62,289	9,477	215
Central							
Deschutes, Jefferson, and Lake ^{4/}	3,768	2,860	--	2,860	--	--	908
Klamath	3,953	3,953	--	--	3,953	--	--
Total	7,721	6,813	--	2,860	3,953	--	908
Blue Mountain							
Baker, Grant, Harney, Morrow, and Union ^{4/}	7,126	7,126	--	--	7,126	--	--
All Areas	188,801	184,864	3,520	15,972	149,166	16,206	3,937

^{1/} Coarse residue includes log trim, cores, veneer clippings, rejected veneer, roundup, spur trim.

^{2/} Fine residue includes sawdust and sander dust.

^{3/} Not necessarily used in the area or county in which produced.

^{4/} Combined to avoid disclosure.

Table 51--Production and disposition of bark residue by veneer and plywood mills by use, resource area, and county, Oregon, 1976

(Tons, dry weight)

Resource area and county	All bark	Total used	Used ^{1/}				Unused
			Pulp	Board	Fuel	Miscellaneous	
Northwest							
Clackamas and Marion ^{2/}	35,981	25,635	--	--	7,788	17,847	10,346
Clatsop and Columbia ^{2/}	42,082	42,082	--	--	42,082	--	--
Multnomah	24,682	24,682	--	--	315	24,367	--
Polk	61,606	61,606	--	--	61,606	--	--
Tillamook, Washington, and Yamhill ^{2/}	42,574	15,916	--	--	15,916	--	26,658
Total	206,925	169,921	--	--	127,707	42,214	37,004
West Central							
Benton and Lincoln ^{2/}	38,018	38,018	--	--	38,018	--	--
Lane	350,825	344,742	--	8,675	279,075	56,992	6,083
Linn	135,459	135,459	--	--	132,159	3,300	--
Total	524,302	518,219	--	8,675	449,252	60,292	6,083
Southwest							
Coos	89,966	80,343	--	--	78,746	1,597	9,623
Curry	40,968	36,991	--	--	23,858	13,133	3,977
Douglas	219,049	204,961	--	--	183,102	21,859	14,088
Jackson and Josephine ^{2/}	178,753	155,525	--	--	128,465	27,060	23,228
Total	528,736	477,820	--	--	414,171	63,649	50,916
Central							
Deschutes, Jefferson, and Lake ^{2/}	33,897	31,005	--	--	31,005	--	2,892
Klamath	35,594	23,722	--	--	18,262	5,460	11,872
Total	69,491	54,727	--	--	49,267	5,460	14,764
Blue Mountain							
Baker, Grant, Harney, Morrow, and Union ^{2/}	72,882	60,199	--	--	60,199	--	12,683
All Areas	1,402,336	1,280,886	--	8,675	1,100,596	171,615	121,450

^{1/} Not necessarily used in the area or county in which produced.

^{2/} Combined to avoid disclosure.

Table 52--Number of pulpmills and board mills by type of operation, resource area, and county, Oregon, 1976

Resource area and county	All mills	Type of pulpmill				Type of board mill		
		Sulfite	Sulfate	Groundwood	Semichemical	Hardboard	Particleboard	Insulation board
Northwest								
Clackamas	3	1	--	2	--	--	--	--
Clatsop	2	--	1	1	--	--	--	--
Columbia	2	--	1	--	--	--	--	1
Hood River	1	--	--	--	--	1	--	--
Marion	1	1	--	--	--	--	--	--
Washington	1	--	--	--	--	1	--	--
Yamhill	2	1	--	1	--	--	--	--
Total	12	3	2	4	--	2	--	1
West Central								
Benton	2	--	--	--	--	1	1	--
Lane	4	--	1	--	--	1	2	--
Lincoln	1	--	1	--	--	--	--	--
Linn	7	1	3	--	--	1	2	--
Total	14	1	5	--	--	3	5	--
Southwest								
Coos	2	1	--	--	--	1	--	--
Douglas	3	--	1	--	--	--	2	--
Jackson	2	--	--	--	--	--	2	--
Total	7	1	1	--	--	1	4	--
Central								
Deschutes	1	--	--	--	--	--	1	--
Klamath	3	--	--	--	--	1	2	--
Total	4	--	--	--	--	1	3	--
Blue Mountain								
Umatilla	2	--	--	--	--	1	--	1
Union	1	--	--	--	--	--	1	--
Total	3	--	--	--	--	1	1	1
All Areas	40	5	8	4	--	8	13	2

Table 53--Installed capacity of pulpmills and board mills by type of mill, resource area, and county, Oregon, 1976

Resource area and county	Type of pulpmill				Type of board mill			
	Sulfite	Sulfate	Groundwood	Semichemical	Hardboard	Particleboard		Insulation board
						MM sq ft 1/8-inch basis	MM sq ft 3/4-inch basis	
----- 24 hrs., tons -----								
Northwest								
Clackamas	174	--	877	--	--	--	--	--
Clatsop	--	825	293	--	--	--	--	--
Columbia	--	730	--	--	--	--	--	150
Hood River	--	--	--	--	100	--	--	--
Marion	248	--	--	--	--	--	--	--
Washington	--	--	--	--	120	--	--	--
Yamhill	250	--	330	--	--	--	--	--
Total	672	1,555	1,500	--	220	--	--	150
West Central								
Benton	--	--	--	--	115	17	--	--
Lane	--	1,200	--	--	1,388	175	--	--
Lincoln	--	1,240	--	--	--	--	--	--
Linn	100	1,050	--	--	106	195	--	--
Total	100	3,490	--	--	1,609	387	--	--
Southwest								
Coos	323	--	--	--	262	--	--	--
Douglas	--	568	--	--	--	695	--	--
Jackson	--	--	--	--	--	150	--	--
Total	323	568	--	--	262	845	--	--
Central								
Deschutes	--	--	--	--	--	148	--	--
Klamath	--	--	--	--	200	102	--	--
Total	--	--	--	--	200	250	--	--
Blue Mountain								
Umatilla	--	--	--	--	78	--	80	--
Union	--	--	--	--	--	149	--	--
Total	--	--	--	--	78	149	80	--
All Areas	1,095	5,613	1,500	--	2,369	1,631	--	230

Table 54--Number of pulpmills and board mills by years of tenure of present ownership, type of mill, and years at site, Oregon, 1976

Mill type and years at site	Tenure of present ownership (years)				
	0-2	3-5	6-10	11-20	21+
Sulfite					
11-20	--	--	--	1	--
21+	--	--	--	2	2
Sulfate					
6-10	--	--	2	--	--
11-20	--	--	--	3	--
21+	--	--	--	1	2
Groundwood					
11-20	--	--	--	1	--
21+	--	--	--	1	2
Hardboard					
11-20	--	--	--	2	--
21+	--	--	--	3	3
Particleboard					
0- 2	2	--	--	--	--
3- 5	1	1	--	--	--
11-20	1	--	2	6	--
Insulation board					
21+	--	--	--	1	1
Total	4	1	4	21	10

Table 55--Average number of operating days of pulp-mills and board mills by resource area, Oregon, 1976

Resource area	Pulp	Board
Northwest	334	297
West Central	346	280
Southwest	271	240
Central	--	275
Blue Mountain	--	340
All Areas	331	280

Table 56—Wood consumption¹ by pulpmills and board mills by type of material consumed and resource area, Oregon, 1976

Resource area	Roundwood			Other					
	Total	Sound logs	Utility logs	Total	Chips		Sawdust	Shavings	Bark
					From mill residue	From roundwood chipping mill			
----- <u>Thousand board feet</u> ----- ----- <u>Tons, dry weight</u> ----- <u>Scribner log rule</u>									
Northwest	56,000	15,000	41,000	1,801,241	1,447,718	39,580	266,896	47,047	--
West Central	--	--	--	3,085,234	1,760,790	559,725	273,463	491,256	--
Southwest	15,000	15,000	--	1,725,994	562,628	39,914	167,432	956,020	--
Central and Blue Mountain ^{2/}	--	--	--	684,029	77,036	32,500	25,208	549,285	--
Total, State	71,000	30,000	41,000	7,296,498	3,848,172	671,719	732,999	2,043,608	--

^{1/}See page 1 of text for discussion of other material consumed.

^{2/}Combined to avoid disclosure.

Table 57--Log consumption by pulpmills and board mills, by timber age group and resource area, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area	All age groups	Old growth (100+ years)	Young growth (less than 100 years)
Northwest	56,000	7,200	48,800
Southwest	15,000	--	15,000
All Areas	71,000	7,200	63,800

Table 58--Log consumption by pulpmills and board mills by ownership class, and resource area, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area	All owners	State	National Forest	Bureau of Land Management	Other public	Forest industry		Farmer and miscellaneous private
						Own lands	Other industry	
Northwest	56,000	640	--	640	1,200	48,240	1,920	3,360
Southwest	15,000	--	600	450	--	300	13,350	300
All Areas	71,000	640	600	1,090	1,200	48,540	15,270	3,660

Table 59—Dependency of pulpmills and board mills for logs by ownership origin and resource area, Oregon, 1976
(Number of mills)

Resource area	National Forest						State						Bureau of Land Management						Other public					
	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
Northwest	12	--	--	--	10	2	--	--	--	10	2	--	--	11	1	--	--	1	--	--	--	--	--	--
Southwest	6	1	--	--	7	--	--	--	--	6	1	--	--	7	--	--	--	--	--	--	--	--	--	--
All Areas	18	1	--	--	17	2	--	--	--	16	3	--	--	18	1	--	--	1	--	--	--	--	--	--

Resource area	Forest industry						Farmer and miscellaneous private					
	Own lands			Other industry								
	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
Northwest	9	--	--	3	10	2	--	--	9	3	--	--
Southwest	6	1	--	--	6	--	--	1	6	1	--	--
All Areas	15	1	--	3	16	2	--	1	15	4	--	--

Table 60--Log consumption by pulpmills and board mills by species, resource area, and type of material, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and type of material	All species	Douglas-fir	Hemlock	True firs	Spruce	Other softwoods	Hardwoods
Northwest	15,000	6,000	9,000	--	--	--	--
Sound ^{1/}	41,000	7,450	30,940	580	580	--	1,450
Utility							
Total	56,000	13,450	39,940	580	580	--	1,450
Southwest	15,000	--	--	--	--	--	15,000
Sound ^{1/}	--	--	--	--	--	--	--
Utility							
Total	15,000	--	--	--	--	--	15,000
All Areas	30,000	6,000	9,000	--	--	--	15,000
Sound ^{1/}	41,000	7,450	30,940	580	580	--	1,450
Utility							
Total	71,000	13,450	39,940	580	580	--	16,450

^{1/}Includes both live and dead logs.

Table 61--Pulpmill and board mill consumption of mill residues and chips from other sources, by State, resource area, and type of material, Oregon, 1976

(Tons, dry weight)

Resource area and type of material	Total volume	Oregon	Washington	California	Idaho	Other
Northwest						
Chip residue	1,447,718	1,063,945	221,487	8,637	110,771	42,878
Chips; other sources	39,580	38,417	319	844	--	--
Sawdust and shavings	313,943	260,297	53,646	--	--	--
Total	1,801,241	1,362,659	275,452	9,481	110,771	42,878
West Central						
Chip residue	1,760,790	1,752,297	--	--	8,493	--
Chips; other sources	559,725	559,725	--	--	--	--
Sawdust and shavings	764,719	764,719	--	--	--	--
Total	3,085,234	3,076,741	--	--	8,493	--
Southwest						
Chip residue	562,628	525,411	--	37,217	--	--
Chips; other sources	39,914	39,116	--	798	--	--
Sawdust and shavings	1,123,452	1,097,011	--	26,441	--	--
Total	1,725,994	1,661,538	--	64,456	--	--
Central and Blue Mountain ^{1/}						
Chip residue	77,036	77,036	--	--	--	--
Chips; other sources	32,500	32,500	--	--	--	--
Sawdust and shavings	574,493	477,283	39,175	2,365	55,670	--
Total	684,029	586,819	39,175	2,365	55,670	--
All Areas						
Chip residue	3,848,172	3,418,689	221,487	45,854	119,264	42,878
Chips; other sources	671,719	669,758	319	1,642	--	--
Sawdust and shavings	2,776,607	2,599,310	92,821	28,806	55,670	--
Total	7,296,498	6,687,757	314,627	76,302	174,934	42,878

^{1/} Combined to avoid disclosure.

Table 62--Number of "other industry" mills by type of industry, resource area, and county, Oregon, 1976

(Number of mills)

Resource area and county	All types	Shake and shingle	Export	Post, pole, and piling
Northwest				
Clackamas	1	1	--	--
Clatsop	10	1	9	--
Columbia	3	2	--	1
Multnomah	10	1	7	2
Polk	2	2	--	--
Tillamook	8	8	--	--
Washington	1	--	--	1
Total	35	15	16	4
West Central				
Benton	1	1	--	--
Lane	18	15	--	3
Lincoln	7	4	3	--
Linn	7	6	--	1
Total	33	26	3	4
Southwest				
Coos	10	1	9	--
Curry	1	1	--	--
Douglas	2	2	--	--
Total	13	4	9	--
Central				
Wasco	1	--	--	1
Blue Mountain				
Umatilla	1	1	--	--
All Areas	83	46	28	9

Table 63--*Installed capacity of "other industry" mills by resource area and county, Oregon, 1976*

Resource area and county	Shake and shingle (8-hour shift)	Post, pole, and piling (yearly)
	<u>Squares</u>	<u>Thousand board feet Scribner log rule</u>
Northwest		
Clackamas	105	--
Clatsop	30	--
Columbia	206	21,200
Multnomah	64	7,820
Polk	150	--
Tillamook	339	--
Washington	--	3,850
Total	894	32,870
West Central		
Benton	32	--
Lane	1,080	13,783
Lincoln	357	--
Linn	479	3,280
Total	1,948	17,063
Southwest		
Coos	25	--
Curry	20	--
Douglas	114	--
Total	159	--
Central		
Wasco	--	710
Blue Mountain		
Umatilla	35	--
All Areas	3,036	50,643

Table 64--*Number of shake and shingle mills with selected equipment by resource area and county, Oregon, 1976*

Resource area and county	Chipper	Barker	Burner
Northwest			
Clackamas	--	--	1
Clatsop	--	--	1
Columbia	--	--	1
Multnomah	1	--	--
Polk	1	--	--
Tillamook	1	--	3
Total	3	--	6
West Central			
Benton	--	--	--
Lane	4	1	--
Lincoln	1	--	1
Linn	3	--	--
Total	8	1	1
Southwest			
Coos	--	--	--
Curry	--	--	--
Douglas	1	--	1
Total	1	--	1
Blue Mountain			
Umatilla	--	--	1
All Areas	12	1	9

Table 65--*Number of "other industry" mills by years of tenure of present ownership, type of mill, and years at site, Oregon, 1976*

Type of mill and years at site	All mills	Tenure of present mill ownership (years)				
		0-2	3-5	6-10	11-20	21+
Shake and shingle						
0- 2	2	2	--	--	--	--
3- 5	6	1	5	--	--	--
6-10	16	2	2	12	--	--
11-20	9	--	1	2	6	--
21+	13	3	--	1	1	8
Total	46	8	8	15	7	8
Post, pole, and piling						
6-10	1	1	--	--	--	--
11-20	3	--	--	2	1	--
21+	5	--	--	--	--	5
Total	9	1	--	2	1	5

Table 66--Average number of operating days per year of "other industry"
mills by type of mill and resource area, Oregon, 1976

Resource area	Shake and shingle	Post, pole, and piling
Northwest	194	187
West Central ^{1/}	193	155
Southwest ^{2/}	218	--
Central ^{1/}	--	--
Blue Mountain ^{2/}	--	--
All Areas	196	169

^{1/} West Central and Central post, pole, and piling combined to avoid disclosure.

^{2/} Southwest and Blue Mountain shake and shingle combined to avoid disclosure.

Table 67--Wood consumption by "other industry" mills by type of material, resource area, and type of mill, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and type of mill	All types	Sound logs	Utility logs	Other
Northwest				
Shake and shingle	12,923	4,228	2,325	6,370
Export	338,690	338,690	--	--
Post, pole, and piling	19,345	18,607	738	--
Total	370,958	361,525	3,063	6,370
West Central				
Shake and shingle	29,810	21,517	5,297	2,996
Export	20,920	20,920	--	--
Post, pole, and piling ^{1/}	6,328	6,328	--	--
Total	57,058	48,765	5,297	2,996
Southwest				
Shake and shingle ^{2/}	4,559	2,489	1,460	610
Export	134,944	134,694	250	--
Total	139,503	137,183	1,710	610
Central				
Post, pole, and piling ^{1/}	--	--	--	--
Blue Mountain				
Shake and shingle ^{2/}	--	--	--	--
All Areas				
Shake and shingle	47,292	28,234	9,082	9,976
Export	494,554	494,304	250	--
Post, pole, and piling	25,673	24,935	738	--
Total	567,519	547,473	10,070	9,976

^{1/} West Central and Central combined to avoid disclosure.

^{2/} Southwest and Blue Mountain combined to avoid disclosure.

Table 68--Log consumption by "other industry" mills by timber age group,
resource area and type of mill, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and type of mill	All age groups	Old growth (100+ years)	Young growth (less than 100 years)
Northwest			
Shake and shingle	6,553	6,387	166
Export	338,690	168,961	169,729
Post, pole, and piling	19,345	2,780	16,565
Total	364,588	178,128	186,460
West Central			
Shake and shingle	26,814	21,165	5,649
Export	20,920	2,410	18,510
Post, pole, and piling ^{1/}	6,328	256	6,072
Total	54,062	23,831	30,231
Southwest			
Shake and shingle ^{2/}	3,949	3,247	702
Export	134,944	102,371	32,573
Total	138,893	105,618	33,275
Central			
Post, pole, and piling ^{1/}	--	--	--
Blue Mountain			
Shake and shingle ^{2/}	--	--	--
All Areas			
Shake and shingle	37,316	30,799	6,517
Export	494,554	273,742	220,812
Post, pole, and piling	25,673	3,036	22,637
Total	557,543	307,577	249,966

^{1/}West Central and Central combined to avoid disclosure.

^{2/}Southwest and Blue Mountain combined to avoid disclosure.

Table 69—Log consumption by "other industry" mills by ownership class, resource area, and type of mill, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and type of mill	All owners	State	National Forest	Bureau of Land Management	Other public	Forest industry		Farmer and miscellaneous private
						Own wood supply	Other wood supply	
Northwest								
Shake and shingle	6,553	151	1,286	505	--	413	4,141	57
Export	338,690	26,588	9,808	--	5,093	9,000	179,476	108,725
Post, pole, and piling	19,345	545	1,310	--	--	--	4,865	12,625
Total	364,588	27,284	12,404	505	5,093	9,413	188,482	121,407
West Central								
Shake and shingle	26,814	296	4,814	1,883	22	--	12,416	7,383
Export	20,920	--	400	500	--	--	19,620	400
Post, pole, and piling ^{1/}	6,328	95	707	230	--	1,605	986	2,705
Total	54,062	391	5,921	2,613	22	1,605	33,022	10,488
Southwest								
Shake and shingle ^{2/}	3,949	--	1,210	40	--	--	2,354	345
Export	134,944	--	28,860	1,147	--	6,912	88,457	9,568
Total	138,893	--	30,070	1,187	--	6,912	90,811	9,913
Central								
Post, pole, and piling ^{1/}	--	--	--	--	--	--	--	--
Blue Mountain								
Shake and shingle ^{2/}	--	--	--	--	--	--	--	--
All Areas								
Shake and shingle	37,316	447	7,310	2,428	22	413	18,911	7,785
Export	494,554	26,588	39,068	1,647	5,093	15,912	287,553	118,693
Post, pole, and piling	25,673	640	2,017	230	--	1,605	5,851	15,330
Total	557,543	27,675	48,395	4,305	5,115	17,930	312,315	141,808

^{1/} West Central and Central combined to avoid disclosure.

^{2/} Southwest and Blue Mountain combined to avoid disclosure.

Table 70—Dependency of "other industry" mills for logs by ownership origin, resource area, and type of mill, Oregon, 1976
(Number of mills)

Resource area	National Forest					State					Bureau of Land Management					Other public				
	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
Northwest																				
Shake and shingle	11	2	--	2	12	2	1	--	11	3	--	1	15	--	--	--				
Export	12	4	--	--	10	4	2	--	16	--	--	--	15	--	1	--				
Post, pole, and piling	1	2	--	1	3	1	--	--	4	--	--	--	4	--	--	--				
Total	24	8	--	3	25	7	3	--	31	3	--	1	34	--	1	--				
West Central																				
Shake and shingle	18	4	3	1	24	2	--	--	21	4	1	--	25	--	--	1				
Export	2	1	--	--	3	--	--	--	2	1	--	--	3	--	--	--				
Post, pole, and piling	1	2	--	1	3	1	--	--	2	2	--	--	4	--	--	--				
Total	21	7	3	2	30	3	--	--	25	7	1	--	32	--	--	1				
Southwest																				
Shake and shingle	3	1	--	--	4	--	--	--	3	--	--	1	4	--	--	--				
Export	3	3	2	1	9	--	--	--	7	2	--	--	9	--	--	--				
Total	6	4	2	1	13	--	--	--	10	2	--	1	13	--	--	--				
Central																				
Post, pole, and piling	--	1	--	--	--	1	--	--	1	--	--	--	1	--	--	--				
Blue Mountain																				
Shake and shingle	--	--	--	1	1	--	--	--	1	--	--	--	1	--	--	--				
All Areas																				
Shake and shingle	32	7	3	4	41	4	1	--	36	7	1	2	45	--	--	1				
Export	17	8	2	1	22	4	2	--	25	3	--	--	27	--	1	--				
Post, pole, and piling	2	5	--	2	6	3	--	--	7	2	--	--	9	--	--	--				
Total	51	20	5	7	69	11	3	--	68	12	1	2	81	--	1	1				

Table 70—Dependency of "other industry" mills for logs by ownership origin, resource area, and type of mill, Oregon, 1976—Continued
(Number of mills)

Resource area	Forest industry								Farmer and miscellaneous private			
	Own lands				Other industry							
	0	1-32	33-66	67-100	0	1-32	33-66	67-100	0	1-32	33-66	67-100
Northwest												
Shake and shingle	13	--	--	2	11	1	--	3	13	2	--	--
Export	15	--	1	--	3	--	2	11	10	5	--	1
Post, pole, and piling	4	--	--	--	3	--	--	1	1	1	--	2
Total	32	--	1	2	17	1	2	15	24	8	--	3
West Central												
Shake and shingle	26	--	--	--	14	1	4	7	17	6	1	2
Export	3	--	--	--	--	--	1	2	2	1	--	--
Post, pole, and piling	2	1	1	--	1	2	1	--	1	1	1	1
Total	31	1	1	--	15	3	6	9	20	8	2	3
Southwest												
Shake and shingle	4	--	--	--	2	1	--	1	3	--	--	1
Export	8	--	1	--	2	--	2	5	7	2	--	--
Total	12	--	1	--	4	1	2	6	10	2	--	1
Central												
Post, pole, and piling	--	1	--	--	--	1	--	--	--	1	--	--
Blue Mountain												
Shake and shingle	1	--	--	--	1	--	--	--	1	--	--	--
All Areas												
Shake and shingle	44	--	--	2	28	3	4	11	34	8	1	3
Export	26	--	2	--	5	--	5	18	19	8	--	1
Post, pole, and piling	6	2	1	--	4	3	1	1	2	3	1	3
Total	76	2	3	2	37	6	10	30	55	19	2	7

Table 71—Log consumption by "other industry" mills by species, type of mill, and type of material, Oregon, 1976
(Thousand board feet, Scribner log rule)

Industry and type of material	All species	Douglas-fir	Hemlock	True firs	Spruce	Ponderosa pine	Lodgepole pine	Western redcedar	Other softwoods	Hardwoods
Shake and shingle										
Sound ^{1/}	28,234	--	--	--	--	--	--	28,234	--	--
Utility	9,082	--	--	--	--	--	--	7,882	1,200	--
Total	37,316	--	--	--	--	--	--	36,116	1,200	--
Export										
Sound ^{1/}	494,304	188,035	221,970	9,708	33,140	1,673	255	4,513	34,552	458
Utility	250	--	--	--	--	--	--	--	250	--
Total	494,554	188,035	221,970	9,708	33,140	1,673	255	4,513	34,802	458
Post, pole, and piling										
Sound ^{1/}	24,935	23,643	625	--	--	35	18	614	--	--
Utility	738	647	70	--	--	--	21	--	--	--
Total	25,673	24,290	695	--	--	35	39	614	--	--
All Mills										
Sound ^{1/}	547,473	211,678	222,595	9,708	33,140	1,708	273	33,361	34,552	458
Utility	10,070	647	70	--	--	--	21	7,882	1,450	--
Total	557,543	212,325	222,665	9,708	33,140	1,708	294	41,243	36,002	458

^{1/} Includes both live and dead logs.

Table 72—Log consumption by "other industry" mills by species, resource area, and type of mill, Oregon, 1976
(Thousand board feet, Scribner log rule)

Resource area and type of mill	All species	Douglas-fir	Hemlock	True firs	Spruce	Ponderosa pine	Lodgepole pine	Western redcedar	Other softwoods	Hardwoods
Northwest										
Shake and shingle	6,553	--	--	--	--	--	--	6,553	--	--
Export	338,690	103,727	191,255	7,244	28,778	1,363	255	3,755	1,855	458
Post, pole, and piling	19,345	18,066	695	--	--	--	39	545	--	--
Total	364,588	121,793	191,950	7,244	28,778	1,363	294	10,853	1,855	458
West Central										
Shake and shingle	26,814	--	--	--	--	--	--	26,814	--	--
Export	20,920	9,151	10,187	300	1,282	--	--	--	--	--
Post, pole, and piling ^{1/}	6,328	6,224	--	--	--	35	--	69	--	--
Total	54,062	15,375	10,187	300	1,282	35	--	26,883	--	--
Southwest										
Shake and shingle ^{2/}	3,949	--	--	--	--	--	--	2,749	1,200	--
Export	134,944	75,157	20,528	2,164	3,080	310	--	758	32,947	--
Total	138,893	75,157	20,528	2,164	3,080	310	--	3,507	34,147	--
Central										
Post, pole, and piling ^{1/}	--	--	--	--	--	--	--	--	--	--
Blue Mountain										
Shake and shingle ^{2/}	--	--	--	--	--	--	--	--	--	--
All Areas										
Shake and shingle	37,316	--	--	--	--	--	--	36,116	1,200	--
Export	494,554	188,035	221,970	9,708	33,140	1,673	255	4,513	34,802	458
Post, pole, and piling	25,673	24,290	695	--	--	35	39	614	--	--
Total	557,543	212,325	222,665	9,708	33,140	1,708	294	41,243	36,002	458

^{1/}West Central and Central combined to avoid disclosure.

^{2/}Southwest and Blue Mountain combined to avoid disclosure.

Table 73—Sound log consumption by "other industry" mills by species, resource area, and type of mill, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and type of mill	All species	Douglas-fir	Hemlock	True firs	Spruce	Ponderosa pine	Lodgepole pine	Western redcedar	Other softwoods	Hardwoods
Northwest										
Shake and shingle	4,228	--	--	--	--	--	--	4,228	--	--
Export	338,690	103,727	191,255	7,244	28,778	1,363	255	3,755	1,855	458
Post, pole, and piling	18,607	17,419	625	--	--	--	18	545	--	--
Total	361,525	121,146	191,880	7,244	28,778	1,363	273	8,528	1,855	458
West Central										
Shake and shingle	21,517	--	--	--	--	--	--	21,517	--	--
Export	20,920	9,151	10,187	300	1,282	--	--	--	--	--
Post, pole, and piling	6,328	6,224	--	--	--	35	--	69	--	--
Total	48,765	15,375	10,187	300	1,282	35	--	21,586	--	--
Southwest										
Shake and shingle ^{2/}	2,489	--	--	--	--	--	--	2,489	--	--
Export	134,694	75,157	20,528	2,164	3,080	310	--	758	32,697	--
Total	137,183	75,157	20,528	2,164	3,080	310	--	3,247	32,697	--
Central										
Post, pole, and piling ^{1/}	--	--	--	--	--	--	--	--	--	--
Blue Mountain										
Shake and shingle ^{2/}	--	--	--	--	--	--	--	--	--	--
All Areas										
Shake and shingle	28,234	--	--	--	--	--	--	28,234	--	--
Export	494,304	188,035	221,970	9,708	33,140	1,673	255	4,513	34,562	458
Post, pole, and piling	24,935	23,643	625	--	--	35	18	614	--	--
Total	547,473	211,678	222,595	9,708	33,140	1,708	273	33,361	34,552	458

^{1/} West Central and Central combined to avoid disclosure.^{2/} Southwest and Blue Mountain combined to avoid disclosure.

Table 74—Utility log consumption by "other industry" mills by species, resource area, and type of mill, Oregon, 1976

(Thousand board feet, Scribner log rule)

Resource area and type of mill	All species	Douglas-fir	Hemlock	True firs	Spruce	Ponderosa pine	Lodgepole pine	Western redcedar	Other softwoods	Hardwoods
Northwest										
Shake and shingle	2,325	--	--	--	--	--	--	2,325	--	--
Export	--	--	--	--	--	--	--	--	--	--
Post, pole, and piling	738	647	70	--	--	--	21	--	--	--
Total	3,063	647	70	--	--	--	21	2,325	--	--
West Central										
Shake and shingle	5,297	--	--	--	--	--	--	5,297	--	--
Export	--	--	--	--	--	--	--	--	--	--
Post, pole, and piling	--	--	--	--	--	--	--	--	--	--
Total	5,297	--	--	--	--	--	--	5,297	--	--
Southwest										
Shake and shingle ^{2/}	1,460	--	--	--	--	--	--	260	1,200	--
Export	250	--	--	--	--	--	--	--	250	--
Total	1,710	--	--	--	--	--	--	260	1,450	--
Central										
Post, pole, and piling ^{1/}	--	--	--	--	--	--	--	--	--	--
Blue Mountain										
Shake and shingle ^{2/}	--	--	--	--	--	--	--	--	--	--
All Areas										
Shake and shingle	9,082	--	--	--	--	--	--	7,882	1,200	--
Export	250	--	--	--	--	--	--	--	250	--
Post, pole, and piling	738	647	70	--	--	--	21	--	--	--
Total	10,070	647	70	--	--	--	21	7,882	1,450	--

^{1/}West Central and Central combined to avoid disclosure.

^{2/}Southwest and Blue Mountain combined to avoid disclosure.

Table 75--Production and disposition of wood and bark residues by shake and shingle mills by resource area, Oregon, 1976
(Tons, dry weight)

Resource area	All residues			Wood residue			Bark residue		
	Total	Used ^{1/}	Unused	Total	Used ^{1/}	Unused	Total	Used ^{1/}	Unused
Northwest	11,336	3,403	7,933	8,427	2,854	5,573	2,909	549	2,360
West Central	29,841	19,019	10,822	21,099	14,153	6,946	8,742	4,866	3,876
Southwest and Blue Mountain ^{2/}	3,707	3,123	584	2,757	2,405	352	950	718	232
All Areas	44,884	25,545	19,339	32,283	19,412	12,871	12,601	6,133	6,468

^{1/} Not necessarily used in the resource area in which they were produced.

^{2/} Combined to avoid disclosure.

*Table 76—Production and disposition of wood residues by shake and shingle mills by type of residue,
use, and resource area, Oregon, 1976*
(Tons, dry weight)

Resource area	All types						
	Total	Total used ^{3/}	Pulp	Board	Fuel	Miscellaneous	Unused
Northwest	8,427	2,854	--	--	502	2,352	5,573
West Central	21,099	14,153	3,178	--	6,846	4,129	6,946
Southwest and Blue Mountain ^{4/}	2,757	2,405	--	--	2,163	242	352
All Areas	32,283	19,412	3,178	--	9,511	6,723	12,871

Resource area	Coarse ^{1/}						
	Total	Total used ^{3/}	Pulp	Board	Fuel	Miscellaneous	Unused
Northwest	2,526	906	--	--	175	731	1,620
West Central	6,895	5,100	2,847	--	1,955	298	1,795
Southwest and Blue Mountain ^{4/}	748	615	--	--	491	124	133
All Areas	10,169	6,621	2,847	--	2,621	1,153	3,548

Resource area	Fine ^{2/}						
	Total	Total used ^{3/}	Pulp	Board	Fuel	Miscellaneous	Unused
Northwest	5,901	1,948	--	--	327	1,621	3,953
West Central	14,204	9,053	331	--	4,891	3,831	5,151
Southwest and Blue Mountain ^{4/}	2,009	1,790	--	--	1,672	118	219
All Areas	22,114	12,791	331	--	6,890	5,570	9,323

^{1/}End block trim, spalts.

^{2/}Splints and sawdust.

^{3/}Not necessarily used in the resource area in which they were produced.

^{4/}Combined to avoid disclosure.

Table 77--Production and disposition of bark residues by shake and shingle mills by use and resource area, Oregon, 1976
(Tons, dry weight)

Resource area	Bark					
	Total	Total used ^{1/}	Pulp and board	Fuel	Miscellaneous	Unused
Northwest	2,909	549	--	130	419	2,360
West Central	8,742	4,866	385	4,069	412	3,876
Southwest and Blue Mountain ^{2/}	950	718	--	624	94	232
All Areas	12,601	6,133	385	4,823	925	6,468

^{1/} Not necessarily used in the resource area in which they were produced.

^{2/} Combined to avoid disclosure.

Table 78--Product output by "other industries" by type of mill and resource area, Oregon, 1976

Resource area	Shake and shingle	Shipments		
		Export	Post, pole, and piling	
			Treated	Untreated
	<u>Squares</u>		<u>Thousand board feet, Scribner log rule</u>	
Northwest	635,266	338,690	1,843	30,700
West Central	328,942	20,920	6,288	2,305
Southwest	35,640	134,694	--	--
Central	--	--	^{1/}	^{1/}
Blue Mountain	^{2/}	--	--	--
All Areas	999,848	494,304	8,131	33,005

^{1/} Combined with West Central to avoid disclosure.

^{2/} Combined with Southwest to avoid disclosure.

Howard, James O., and Bruce A. Hiserote.
1978. Oregon's forest products industry, 1976. USDA
For. Serv. Resour. Bull. PNW-79, 102 p., illus.
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KEYWORDS: Forest products industry, wood utilization,
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The FOREST SERVICE, U.S. Department of Agriculture is dedicated to the principle of multiple management of the Nation's forest resources for sustained yields of wood, wildlife, and recreation. Through forestry research, cooperation with the land and private forest owners, and management of the National Forests and National Grasslands, it strives — as directed by Congress — to provide increasingly greater service to a growing Nation.

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