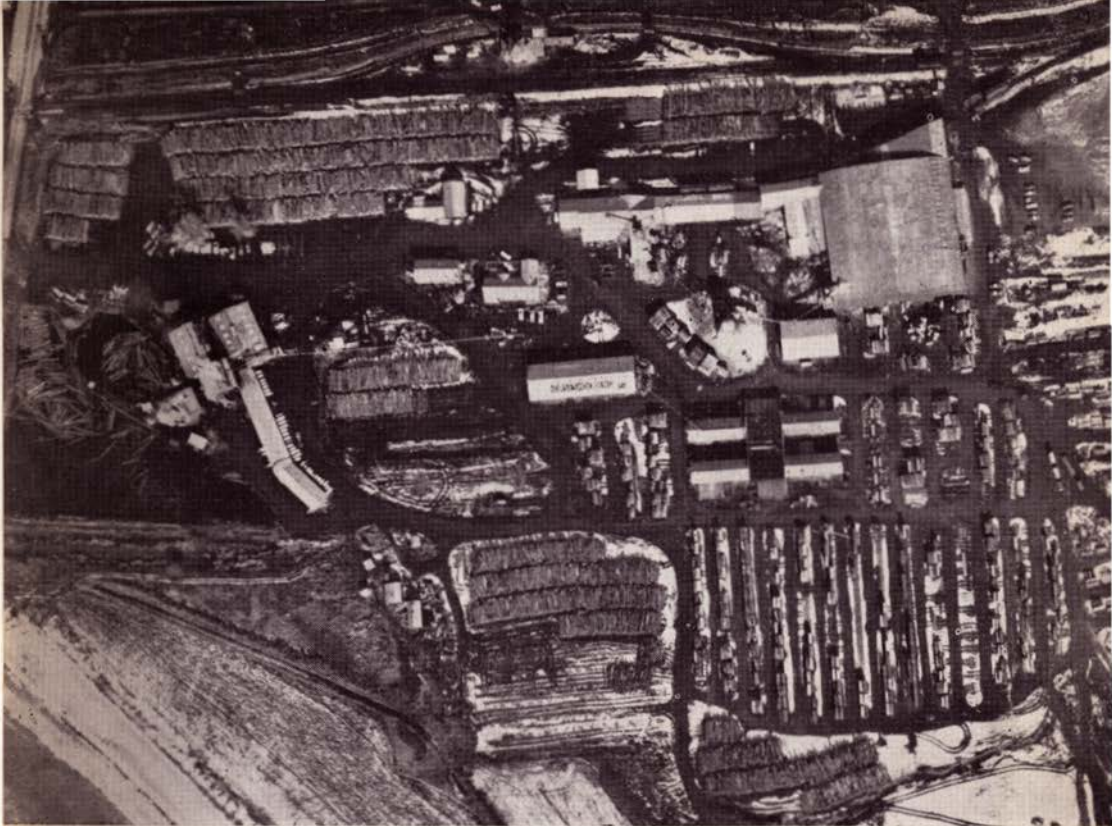




# The Sawmilling Industry Of Southern Idaho

E. L. Williams

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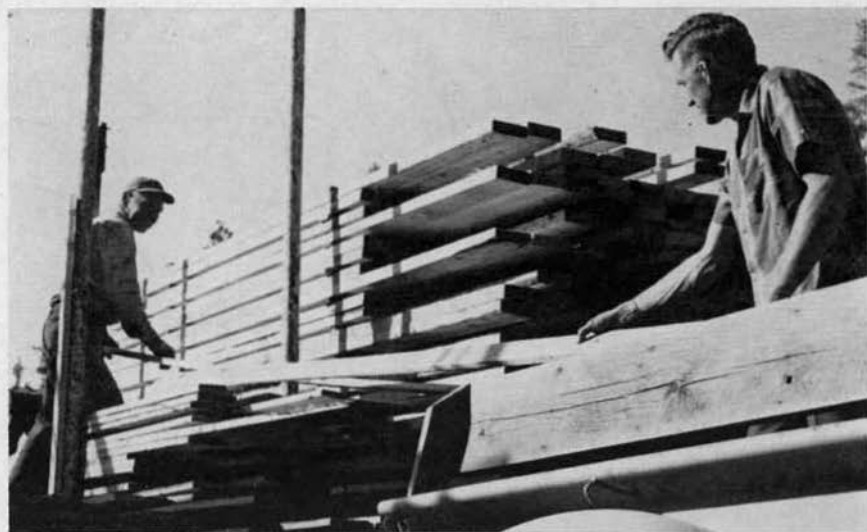
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## *Summary*

In 1962, 53 sawmills were operating in the 34 southern counties of Idaho. They produced 325 million board feet of lumber. Size of mills declined sharply from the western to the eastern part of the region: 20 of the 21 mills sawing over 20 MBF per 8-hour day were located in the westerly counties while 16 of the 28 sawing less than 10 MBF per 8-hour day were located within 60 miles of Wyoming.

There were 406 men working in the sawmilling phase of the lumber industry in 1962. Of this total, 300 worked in mills producing over 20 MBF per 8-hour shift. Only 6 of these 21 mills did not operate year around.

Twenty of the 28 mills sawing less than 10 MBF per 8-hour day had planers. Only 15 of these small mills had edgers.

Output per 8-hour day of mills sawing over 20 MBF was comparable to adjacent sawmilling areas. The mills sawing less than 20 MBF per day produced only about 70 percent of northern Idaho mills of comparable size.

About 85 percent of the sawlogs came from federal land.

Southern Idaho consumers purchased 28 percent of the lumber produced by the mills and 26 percent went to the Midwest.

Residue from only 60 million board feet was utilized through chipping. Since 312 million board feet of lumber were produced by mills in the 20 MBF-or-larger size class, there appears to be room for expanded utilization of these sawmill residues.

### ***Acknowledgments***

The data in this publication were gathered as part of WM-42 and WM-50 regional forest product marketing projects. The Idaho research is a cooperative effort of the College of Forestry, Forest, Wildlife and Range Experiment Station, and the College of Agriculture, Agricultural Experiment Station.

The study was made possible only by the cooperation of the 53 sawmills operating in southern Idaho.

Cover photo credit — Hoff Lumber Company, Horseshoe Bend, Idaho.

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# The Sawmilling Industry Of Southern Idaho

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## INTRODUCTION

Need for lumber in the early mining camps of southern Idaho stimulated this area's first lumber industry. Earliest reports tell of the use of the whip saw. Concerning sawmills, J. H. Hawley in his *History of Idaho* (1) wrote, "The first sawmill in Idaho of which anything definite can be learned was the little one erected by B. L. Warriner on Grimes Creek in the winter of 1862-63." (Actually, the Rev. Henry Spalding had operated a mill at his Lapwai mission in northern Idaho 22 years earlier.)

A large increase occurred in southern Idaho's lumber industry in the early 20th century, coinciding with a major national expansion. The Boise Capital News in its July 23, 1918, issue carried the following article datelined from Cascade:

Between four and five hundred men are now employed here by the Boise-Payette Lumber Company. Two trainloads of logs totaling an average of thirty-five cars are being shipped daily from Cascade to the company's great sawmill at Emmett.

At a later point, this article reports: "This means that about 1,685,000 feet of logs are shipped from here to Emmett each week or 6,740,000 feet a month."

Writing of this period, Hawley says:

The mill of the Boise-Payette Lumber Company at Barberton, above Boise (5 miles), cuts 700,000 feet in two ten-hour shifts, and the putting on of three eight-hour shifts could be made to cut 1,000,000 feet a day. From 350 to 400 men are employed in this mill and about three hundred more are employed at logging camps in the Boise Basin, and on the railroad extending from the camps to the mill.

Comparing this production with 1962, it appears one mill in 1918 could produce nearly half of 1962's total mill output in southern Idaho.

Although none of the mills operating in 1962 date back into the 19th century, Price Valley Lumber Company at Tamarack reported 1900 as its first year of operation. It was followed in 1908 by the Flowers Brothers Mill which is located north of Ketchum.

## THE STUDY

Data for this study was gathered as a part of regional forest marketing projects on lumber production facilities and lumber transportation. The information was collected in 1963 and 1964 and covered the time period 1958 through 1962.

Someone from management of every operating commercial sawmill in the study area was visited and provided information on the sawmill facilities. Mills indicating lumber export from the state were interviewed again for lumber destination information.

The study was conducted to provide information regarding the size and operating methods of southern Idaho's lumber industry. This information can provide guidance for expansion of existing facilities and further processing of southern Idaho's forest products.

Data is classified largely by mill size based on thousand board feet (MBF) production per 8-hour shift.

## THE AREA

This study included all of Idaho located south of Idaho county, or essentially that portion of the state south of the Salmon river. According to Wilson (4), this part of Idaho contains 8 million acres of commercial forest land. Presently, 65 per cent of this land is classified as sawtimber and 25 percent as poletimber.

Only 600,000 acres of this commercial forest land are privately owned. The remaining 7,400,000 acres are publicly owned. The U. S. Forest Service manages 93 percent of the publicly owned commercial forest land.

Wilson reported there were 54.3 billion board feet of sawtimber in southern Idaho in 1962 (4). The species breakdown in billion board feet was:

|                      |      |
|----------------------|------|
| Douglas-fir .....    | 25.2 |
| Ponderosa pine ..... | 12.4 |
| True firs .....      | 7.3  |
| Spruce .....         | 4.8  |
| Lodgepole .....      | 3.6  |
| Larch .....          | .5   |
| Other .....          | .5   |

It should be noted that commercial sawtimber stands in southern Idaho have somewhat lighter stocking than in northern Idaho. The average volume per acre in southern Idaho's commercial sawtimber stands is 9.9 MBF on the International 1/4 inch scale while in northern Idaho it is 16.5. For this and other reasons the sawmills in southern Idaho generally secure their logs from a larger area than do northern Idaho mills of comparable size.

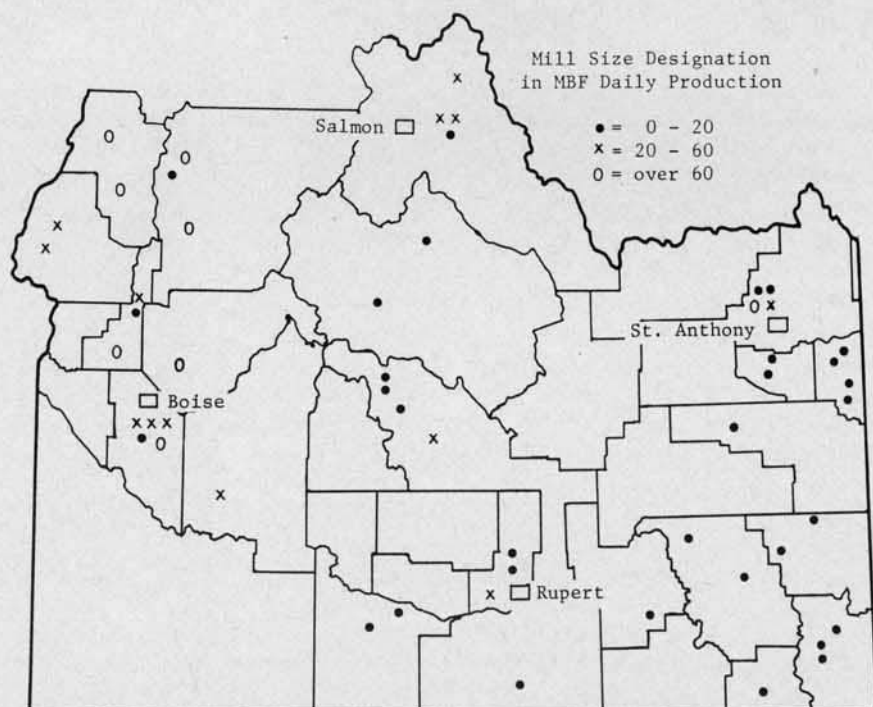


Fig. 1. Location of southern Idaho sawmills by size.

## THE SAWMILLS

In 1962, there were 53 sawmills producing lumber for sale in southern Idaho (Fig. 1). These mills sawed approximately 325 million board feet of lumber per year. Although the larger mills marketed the major volume of lumber, only 2 of the 53 mills reported sawing 100 MBF or more per 8-hour shift while 28 produced less than 10 MBF per day when they operated (Table 1). Local marketing is a major function of most of these mills.

Circular saw headrigs were found in 64 percent of the mills. In general, equipment followed the common pattern: circular saws in small mills, band saws in large ones (Table 1). However, three of the 4 mills sawing 10 to 19 MBF were equipped with band saws.

Table 1. Number of sawmills by type of headsaw and size class in southern Idaho, 1962.

| Type of<br>headsaw | Mill size class (MBF) |       |       |       |       |      | Total |
|--------------------|-----------------------|-------|-------|-------|-------|------|-------|
|                    | 0-9                   | 10-19 | 20-39 | 40-59 | 60-99 | 100+ |       |
| Circular .....     | 28                    | 1     | 5     |       |       |      | 34    |
| Multi-Circ. ....   |                       |       |       |       | 1     |      | 1     |
| Band .....         |                       | 3     | 6     | 2     | 5     | 2    | 18    |
| Total .....        | 28                    | 4     | 11    | 2     | 6     | 2    | 53    |

## Location

Except for the new stud mill located at St. Anthony, all southern Idaho mills sawing over 60 MBF per day in 1962 were located within 50 miles of the state's western boundary (Fig. 1). On the opposite side, 16 of the 28 mills which produced less than 10 MBF per 8-hour shift were located within a 60-mile-wide strip adjacent to Wyoming. Again excepting the stud mill, only one mill sawing over 20 MBF was located within this 60-mile strip; all others were located west of a line drawn through Rupert and Salmon.

In 1962 the first specialty mill in southern Idaho designed to produce studs was built at St. Anthony. This mill was operating entirely on lodgepole pine, a species with good log characteristics for manufacturing in a stud mill.

## Forms of Business Organization

Single ownership is the most common type of business organization for the sawmills. Twenty-four, all of which saw less than 40 MBF per day, reported single owners. Twenty quite evenly spread through all size classes, indicated corporate organization and nine were partnerships (Table 2).

**Table 2. Business organization of southern Idaho sawmills, 1962.**

| Mill size class (MBF) | Single Ownership | Partnership | Corporation |
|-----------------------|------------------|-------------|-------------|
| 0-9 .....             | 20               | 6           | 2           |
| 10-19 .....           | 1                |             | 3           |
| 20-39 .....           | 3                | 3           | 5           |
| 40-59 .....           |                  |             | 2           |
| 60-99 .....           |                  |             | 6           |
| 100+ .....            |                  |             | 2           |
| Total .....           | 24               | 9           | 20          |

## Employment

There were 406 men working in the sawmill portion of the lumber industry of southern Idaho in 1962. They were spread quite equally through the various size classes of mills (Table 3).

Seasonality of employment, a common concern of the sawmilling industry, is important also in southern Idaho. This is largely an agricultural area and the period of peak employment for sawmill employees corresponds with the peak employment for agriculture. The period of heavy unemployment in these two major industries also coincides. It is interesting to note that 84 percent of the sawmill employees work in mills operating nine months or more each year and 63 percent in mills that operate year around. The large sawmills, particularly, have made adjustments to allow year-around operation and to stabilize their labor force.



Table 3. Sawmill employees by mill size class, 1962.

| Mill size class | No. mills | Total no. employed | Avg. no. employees per mill |
|-----------------|-----------|--------------------|-----------------------------|
| 0-9 .....       | 28        | 69                 | 2.46                        |
| 10-19 .....     | 4         | 30                 | 7.50                        |
| 20-39 .....     | 11        | 109                | 9.91                        |
| 40-59 .....     | 2         | 28                 | 14.00                       |
| 60-99 .....     | 6         | 116                | 19.33                       |
| 100+ .....      | 2         | 54                 | 27.00                       |
| Total .....     | 53        | 406                |                             |

## Output

Output per man per day was extremely variable in individual mills, ranging from 400 board feet to 8,500 board feet. It averages from a low of 1,320 board feet per day per employee in the smallest mill size class to 6,390 board feet per day in the largest mills (Table 4). (The 6.39 MBF figure for the largest mills is heavily influenced by one specially designed mill in this group of only two mills.) Output per man per day is based on those men working from the pond to the green chain inclusive, or comparable stages.

Southern Idaho sawmills produced 296,770 MBF in 1958. Production increased to 324,400 MBF in 1962 in spite of a period of declining general lumber market conditions (Table 5).

Although 55 per cent of the mills were in classes sawing less than 40 MBF per day in 1962, they contributed only four percent of the total volume sawn.

Southern Idaho's larger mills, those cutting over 20 MBF per day, compare favorably in rate of production with like-size mills in adjacent areas (3). However, the mills sawing less than 20 MBF per day were averaging only about 70 percent of the production of similar mills in northern Idaho three years earlier.

Table 4. Southern Idaho sawmill employees and output in MBF by size class, 1962.

| Employees            | Mill size class |       |       |       |       |      | Total |
|----------------------|-----------------|-------|-------|-------|-------|------|-------|
|                      | 0-9             | 10-19 | 20-39 | 40-59 | 60-99 | 100+ |       |
| Total .....          | 69              | 30    | 109   | 28    | 116   | 54   | 406   |
| Avg. mill .....      | 2.5             | 7.5   | 10    | 14    | 19.3  | 27   |       |
| Output man day ..... | 1.32            | 1.87  | 2.95  | 3.64  | 3.05  | 6.36 |       |

Table 5. Monthly production of southern Idaho sawmills by mill size class, 1958-1962.

| Mill size class | Year  | No. mills | Total production per month (MBF) |       |       |       |       |       |       |       |       |       |       |       | Total   |
|-----------------|-------|-----------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
|                 |       |           | Jan.                             | Feb.  | Mar.  | Apr.  | May   | June  | July  | Aug.  | Sept. | Oct.  | Nov.  | Dec.  |         |
| 0-9             | ..... | 58 23     | 200                              | 210   | 277   | 356   | 377   | 375   | 386   | 386   | 345   | 450   | 335   | 212   | 3,960   |
|                 | ..... | 59 23     | 195                              | 215   | 272   | 352   | 372   | 370   | 382   | 382   | 340   | 446   | 331   | 212   | 3,930   |
|                 | ..... | 60 24     | 200                              | 210   | 289   | 397   | 412   | 405   | 416   | 416   | 374   | 475   | 440   | 219   | 4,253   |
|                 | ..... | 61 24     | 185                              | 260   | 334   | 386   | 405   | 410   | 521   | 520   | 493   | 584   | 541   | 188   | 4,835   |
|                 | ..... | 62 28     | 182                              | 206   | 402   | 442   | 490   | 494   | 507   | 486   | 444   | 548   | 527   | 293   | 5,023   |
| 10-19           | ..... | 58 3      | 200                              | 0     | 200   | 649   | 674   | 674   | 699   | 609   | 674   | 674   | 355   | 355   | 5,310   |
|                 | ..... | 59 3      | 200                              | 0     | 200   | 655   | 680   | 680   | 705   | 705   | 630   | 677   | 355   | 355   | 5,347   |
|                 | ..... | 60 3      | 200                              | 0     | 200   | 582   | 607   | 607   | 632   | 632   | 607   | 607   | 357   | 357   | 4,827   |
|                 | ..... | 61 4      | 400                              | 200   | 400   | 792   | 817   | 842   | 867   | 867   | 842   | 817   | 555   | 555   | 7,410   |
|                 | ..... | 62 4      | 475                              | 275   | 475   | 842   | 917   | 917   | 942   | 942   | 917   | 917   | 629   | 629   | 7,741   |
| 20-39           | ..... | 58 9      | 1417                             | 1415  | 2545  | 2545  | 2972  | 2972  | 2977  | 2977  | 2972  | 2972  | 2172  | 1577  | 31,500  |
|                 | ..... | 59 10     | 1692                             | 1740  | 2870  | 3085  | 3552  | 3552  | 3552  | 3552  | 3552  | 3552  | 2717  | 1952  | 37,250  |
|                 | ..... | 60 10     | 1642                             | 1640  | 2821  | 3036  | 3353  | 3353  | 3353  | 3353  | 3353  | 3353  | 2668  | 1802  | 35,764  |
|                 | ..... | 61 10     | 1792                             | 1990  | 3122  | 3372  | 3720  | 3721  | 3821  | 3821  | 3821  | 2620  | 1935  | 1052  | 36,770  |
|                 | ..... | 62 11     | 492                              | 490   | 1820  | 2720  | 2918  | 3018  | 3318  | 3318  | 3318  | 3218  | 2783  | 1752  | 40,147  |
| 40-59           | ..... | 58 2      | 1633                             | 1633  | 1633  | 1633  | 1633  | 1633  | 1733  | 1733  | 1733  | 1733  | 1653  | 1553  | 20,000  |
|                 | ..... | 59 2      | 1675                             | 1775  | 1775  | 1775  | 1825  | 1825  | 1825  | 1825  | 1825  | 1825  | 1825  | 1725  | 21,500  |
|                 | ..... | 60 2      | 1567                             | 1567  | 1567  | 1567  | 1597  | 1597  | 1667  | 1667  | 1667  | 1667  | 1587  | 1487  | 19,200  |
|                 | ..... | 61 2      | 1633                             | 1733  | 1733  | 1733  | 1783  | 1783  | 1783  | 1783  | 1783  | 1783  | 1783  | 1683  | 21,000  |
|                 | ..... | 62 2      | 1842                             | 1942  | 1942  | 1942  | 1992  | 1992  | 1992  | 1992  | 1992  | 1992  | 1992  | 1892  | 23,500  |
| 60-99           | ..... | 58 5      | 8073                             | 8133  | 8903  | 9883  | 9983  | 8533  | 8533  | 8533  | 8533  | 8433  | 8163  | 7293  | 103,000 |
|                 | ..... | 59 5      | 8173                             | 8233  | 9233  | 10933 | 11033 | 9533  | 9533  | 9533  | 9533  | 9433  | 9213  | 7613  | 112,000 |
|                 | ..... | 60 5      | 7840                             | 8000  | 8770  | 9850  | 9950  | 8500  | 8500  | 8500  | 8500  | 8400  | 8130  | 7060  | 102,000 |
|                 | ..... | 61 5      | 8274                             | 8434  | 9204  | 10284 | 10284 | 8934  | 8934  | 8934  | 8934  | 8734  | 8564  | 7494  | 107,000 |
|                 | ..... | 62 6      | 9236                             | 9236  | 10106 | 11186 | 11186 | 9878  | 9878  | 10878 | 10878 | 10678 | 10408 | 9436  | 123,000 |
| 100+            | ..... | 58 2      | 9333                             | 10333 | 10333 | 10333 | 10333 | 11333 | 12333 | 12333 | 12333 | 11333 | 11333 | 10333 | 133,000 |
|                 | ..... | 59 2      | 9333                             | 10383 | 10333 | 10333 | 10333 | 11333 | 11333 | 9000  | 13000 | 13000 | 13000 | 12000 | 133,300 |
|                 | ..... | 60 2      | 8000                             | 8000  | 8000  | 13000 | 13000 | 13000 | 13000 | 10600 | 10600 | 10600 | 9600  | 8600  | 125,000 |
|                 | ..... | 61 2      | 8000                             | 8000  | 8000  | 10000 | 10000 | 11200 | 11200 | 11200 | 11200 | 11200 | 10200 | 9200  | 119,000 |
|                 | ..... | 62 2      | 8333                             | 8333  | 8333  | 11333 | 11333 | 11333 | 11333 | 11333 | 11333 | 11333 | 11333 | 9333  | 125,000 |
| Total 1958      |       |           | 20856                            | 21724 | 23891 | 25399 | 25972 | 25520 | 26661 | 26661 | 26590 | 25595 | 24061 | 21323 | 296,770 |
| Total 1962      |       |           | 20560                            | 20482 | 23078 | 28465 | 28836 | 27632 | 27970 | 28949 | 28882 | 28686 | 27672 | 23340 | 324,414 |



## Mill Equipment

Southern Idaho mills commonly have machinery different from mills in adjacent areas of Idaho, Montana and Oregon (Table 6). A large part of the lumber manufactured by the smaller mills is sold locally. For this reason over 70 percent of the mills have their own planer. Even 72 percent of the smallest class of mills have planers.

While in most lumber producing areas it is unusual to find a commercial sawmill without an edger, 25 percent of the southern Idaho mills did not have this equipment item. Further, only one vertical edger was in operation although vertical edgers are commonly used in areas similar to southern Idaho which have smaller timber and lower quality logs.

There was also an absence of chippers in the mills. Twenty MBF per day production justifies a chipper in many areas. There were 21 mills sawing 20 MBF or more per day, but only 4 had chippers.

The one mill with a vertical edger also has a unique green chain. The boards and edgings drop from the carriage and are carried on edge

Table 6. Equipment in southern Idaho mills by size class, 1962.

| Mill<br>equipment | Mill size class |       |       |       |       |      | Total |
|-------------------|-----------------|-------|-------|-------|-------|------|-------|
|                   | 0-9             | 10-19 | 20-39 | 40-59 | 60-99 | 100+ |       |
| (No. mills)       | (28)            | (4)   | (11)  | (2)   | (6)   | (2)  | (53)  |
| Resaw .....       |                 | 3     | 6     | 2     | 5     | 1    | 17    |
| Edger .....       | 15              | 4     | 11    | 2     | 6     | 2    | 40    |
| Trimmer .....     | 7               | 4     | 10    | 2     | 5     | 2    | 30    |
| Planer .....      | 20              | 4     | 7     | 2     | 5     | 1    | 39    |
| Kiln .....        |                 |       |       | 2     | 5     | 1    | 8     |
| Chipper .....     |                 |       | 1     |       | 1     | 2    | 4     |

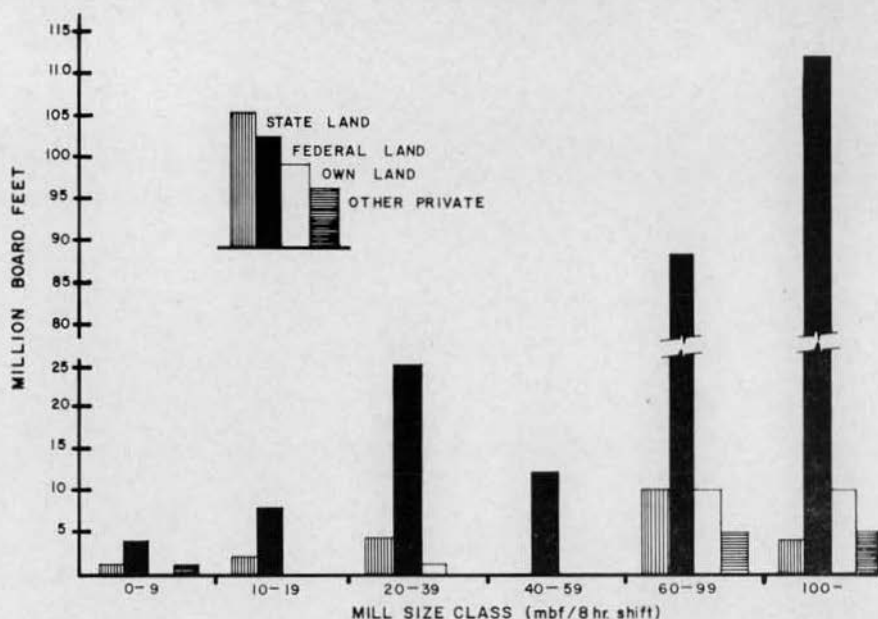


Fig. 2. Log source by mill size class.

against the previously sawn board till the slow-moving green chain belt is full. They have already been through the vertical edger so the operator shuts down the head rig, removes the lumber and piles it and pulls the edgings. This mill can produce 3 MBF in an 8-hour shift with one man providing all the labor. This operation is the result of unusual ability of the owner.

## Log Supply

During the five-year study period an average of 263,316 MBF per year of logs were sawn. Federal lands, under management of the Bureau of Land Management and the U. S. Forest Service, provided 84.5 percent of these logs. These two agencies manage 90 percent of the commercial forest land of southern Idaho. Other sources of logs were sawmill company's own land, 6.7 percent; state land, 5.7 percent, and other small private ownerships, 3.1 percent (Fig. 2).

Only eight of the mills expected to change their source of stumpage, indicating there is a relatively stable log supply. Six of these eight intending to change log source were in the smallest size class of mills, probably indicating some privately owned land has been cut and stumpage must now come from other sources.

Although federal lands supplied 84.5 per cent of the stumpage, only 11 mills stated they thought federal stumpage was "necessary" to their existence. Small private ownerships provided only 3.1 percent of the

stumpage, yet seven mills indicated they thought small private ownerships were "necessary" for their existence. There was no pattern for size of mills relying on small private log sources.

Some mills are quite isolated due to the scattered pattern of commercial forest land, but only three mills indicated they had no other mills buying logs in their log supply area. One mill indicated 15 other mills purchasing logs in its log supply area and two indicated 10 other mills, but the average was four mills purchasing logs in an area.

Five mills stated that they go over 100 miles for some of their logs. Due to the location of the larger mills near population centers and much of the commercial forest land intermixed with noncommercial forest land, hauling logs over 100 miles is not uncommon in the study area.

Thirteen mills, one-fourth of those in the study area, reported they owned some forest land. The total forest land ownership by sawmill companies was 199,200 acres. Sawmills producing over 60 MBF owned 197,500 acres of this.

Asked about their major problems regarding log procurement, 21, or 40 percent of the mills, mentioned government agency relationships. 6 said competition, and 3 said the high cost of logs. The other 23 did not answer this question.

## LUMBER PRODUCTION

Total lumber production in 1962, the final year of the study period, was 324,414 MBF (Table 5). Between 1958 and 1962, every size class of mill increased output by over 15 percent except the largest size class, which reduced output by 6 percent. One size class, mills cutting between 10 and 20 MBF, increased lumber output by 45 percent.

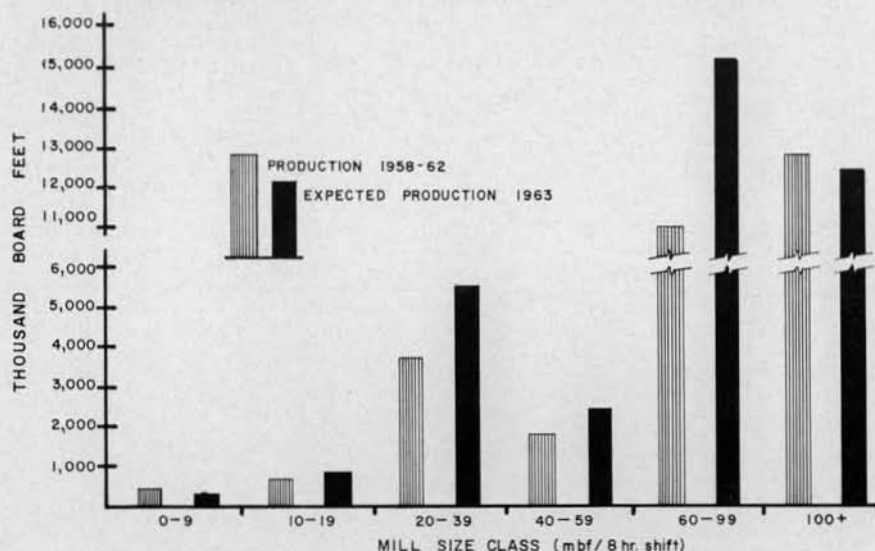


Fig. 3. Expected production in 1963 by mill size class.



The study period was one of declining price and demand for softwood lumber. From January 1958 to January 1962, the wholesale index price for Ponderosa pine dropped from \$85.12 to \$79.62 and for Douglas-fir from \$66.06 to \$62.19. This price change occurred during a time when general wholesale price indices were moving upward (2). These factors would suggest the larger mills adjusted better to market conditions, since they were the only mills to produce less lumber.

The mills were asked about anticipated production in 1963. In spite of unfavorable market conditions at the time of survey, in early 1963, the mills generally reported plans for a sizeable increased production (Fig. 3). Bureau of Census data on actual production in all Idaho in 1963 shows less than 2 1/2 percent increase in production so the plans of the southern Idaho mills probably did not materialize.

## DEGREE OF MANUFACTURE

Although 32 of the 53 operating mills sold the majority of their production as rough green lumber in 1962, only 25 million board feet or 7.7 percent of the total production was sold as rough green. Only 2 of the 10 largest mills sold rough green lumber and in both cases it was only five percent of their production. Nearly all the remaining production was sold as "surfaced dry" in 1962.

The products manufactured in the sawmills were:

|                 | Percent |
|-----------------|---------|
| Boards -----    | 43.3    |
| Studs -----     | 1.5     |
| Dimension ----- | 55.0    |
| Timbers -----   | .2      |
|                 | 100.0   |

**Table 7. Southern Idaho mills in operation and MBF production by month for 1962.**

| Month      | Mills operating |    | Production<br>per month (MBF) | % of<br>highest month |
|------------|-----------------|----|-------------------------------|-----------------------|
|            | No.             | %  |                               |                       |
| Jan. ....  | 26              | 49 | 20,856                        | 78                    |
| Feb. ....  | 25              | 47 | 21,724                        | 81                    |
| March .... | 35              | 66 | 23,891                        | 90                    |
| April .... | 43              | 81 | 25,399                        | 95                    |
| May ....   | 47              | 89 | 25,972                        | 97                    |
| June ....  | 48              | 91 | 25,520                        | 96                    |
| July ....  | 48              | 91 | 26,661                        | 100                   |
| Aug. ....  | 47              | 89 | 26,661                        | 100                   |
| Sept. .... | 47              | 89 | 26,590                        | 100                   |
| Oct. ....  | 48              | 91 | 25,595                        | 100                   |
| Nov. ....  | 44              | 83 | 24,061                        | 90                    |
| Dec. ....  | 34              | 64 | 21,323                        | 80                    |

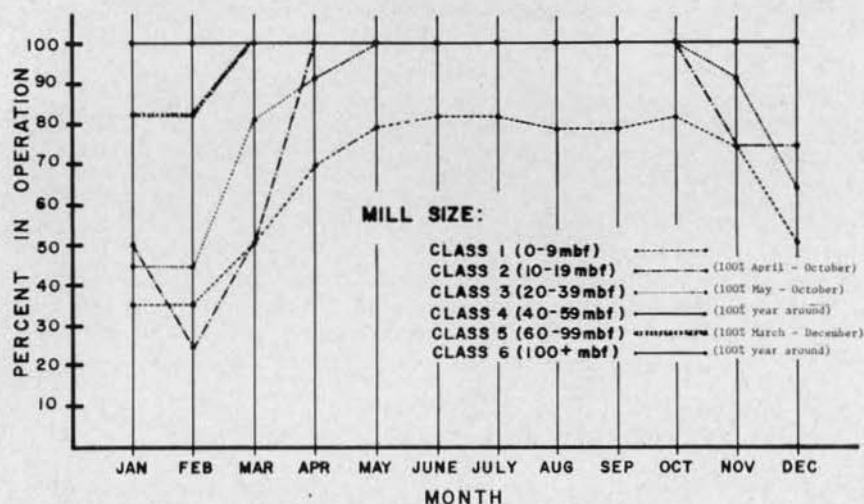


Fig. 4. Percent of mills in operation per month by mill size class.

## SEASONALITY OF PRODUCTION

Seasonal fluctuation in lumber production was pronounced in mills sawing less than 40 MBF per day. Those sawing over 40 MBF per day showed less than a 20 percent decline from period of maximum cut in summer to minimum cut in January (Fig. 4). This indicates a small seasonality impact as compared with northern Idaho (3).

The month of lowest production of all mills was January; highest months were July and August (Table 7). However, the low in January was only 22 percent below the highest month, indicating a relatively low seasonal fluctuation in output even when 45 percent of the mills were idle.

## MARKETING

The small mills market much of their production as "rough green." A large part of this is sold to farm operations near the sawmills. These and other local consumers are the largest single market. In all, 42 percent of the southern Idaho sawmill output goes to Idaho or other Mountain states. As is true also in other Northwest lumber producing regions, the Midwestern states receive a large share of the output, 26.5 percent. There is a distinct pattern for smaller mills to sell to nearer markets (Fig. 5, Table 8).

Brokers are the most important contact between the mills and the first purchaser of lumber. Mills sold 45.3 percent of their production through brokers. Next in importance was the mill's own sales organization, with 39.6 percent of the sales volume moved in this manner. An-

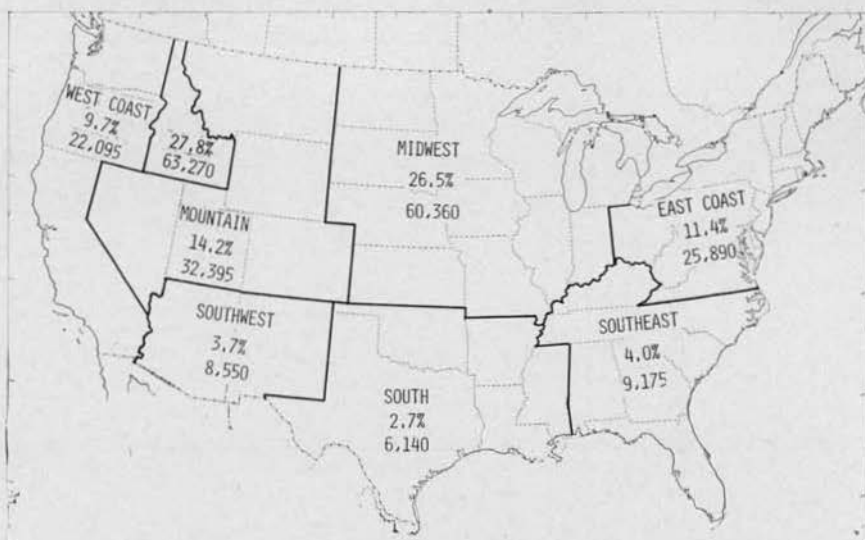


Fig. 5. First destination of lumber from study mills by percent and volume.

other 7.2 percent was marketed directly to retailers. No other sales outlet handled over two percent of the production (Table 9).

Southern Idaho sawmills market directly to a large number of local retailers and private builders. The 28 mills in the smallest size class reported dealing with 1,007 private builders in 1962. The 43 mills in the three smallest size classes dealt with 1,350 private builders. Direct sales were made to 136 retail yard customers. Being located in an area which has population centers only a short distance from forest land makes direct sales from mills to individuals and local retail yards more feasible than in many other areas.

Table 8. Sales areas for southern Idaho sawmills by mill size class, 1962.

| Mill size class | Sales in MBF and Percent |                 |                 |                 |                 |               |               |               |
|-----------------|--------------------------|-----------------|-----------------|-----------------|-----------------|---------------|---------------|---------------|
|                 | Local                    | Mountain        | Midwest         | East Coast      | West Coast      | South South   | South West    | East          |
| 0-9             | 4,345<br>99.3%           | 30<br>0.7%      |                 |                 |                 |               |               |               |
| 10-19           | 8,025<br>89.2%           | 540<br>6%       | 85<br>0.9%      | 90<br>1%        | 170<br>1.9%     | 90<br>1%      |               |               |
| 20-39           | 24,200<br>62%            | 9,350<br>24%    | 4,000<br>10.3%  | 1,450<br>3.7%   |                 |               |               |               |
| 40-100+         | 26,700<br>16.3%          | 22,475<br>12.1% | 56,275<br>32.1% | 24,350<br>13.8% | 21,925<br>12.4% | 6,050<br>3.3% | 8,550<br>4.8% | 9,175<br>5.2% |
| Total           | 63,270<br>27.8%          | 32,395<br>14.2% | 60,360<br>26.5% | 25,890<br>11.4% | 22,095<br>9.7%  | 6,140<br>2.7% | 8,550<br>3.7% | 9,175<br>4.0% |

Table 9. Average volume of lumber marketed through different sales outlets by southern Idaho mills, 1958-62.

| Mill size class         | Type (and number) of outlets (sales volume in MBF) |               |                 |                  |                    |                            |              |              |
|-------------------------|----------------------------------------------------|---------------|-----------------|------------------|--------------------|----------------------------|--------------|--------------|
|                         | Broker                                             | Retailer      | Private builder | Contract builder | Concentration yard | Company sales organization | Larger mill  | Other        |
| 0-9                     | 190<br>(1)                                         | 955<br>(7)    | 3,775<br>(1007) | 15<br>(4)        | 50<br>(1)          |                            |              | 41<br>(1)    |
| 10-19                   | 2,750<br>(6)                                       | 4,770<br>(35) | 680<br>(55)     | 1,200<br>(6)     |                    |                            |              |              |
| 20-39                   | 24,450<br>(19)                                     | 9,100<br>(68) | 2,450<br>(288)  |                  | 3,700<br>(2)       |                            | 1,800<br>(3) |              |
| 40-59                   | 23,874<br>(52)                                     | 600<br>(10)   |                 | 656<br>(4)       |                    |                            |              |              |
| 60-99                   | 62,100<br>(57)                                     | 2,650<br>(16) |                 |                  |                    | 58,000<br>(5)              |              | 5,250<br>(1) |
| 100+                    |                                                    |               |                 |                  |                    | 41,000<br>(4)              |              |              |
| Total MBF               | 113,364                                            | 18,075        | 6,095           | 1,871            | 3,750              | 99,000                     | 1,800        | 5,291        |
| Percent of total market | 45.3                                               | 7.2           | 2.8             | .8               | 1.5                | 39.6                       | .7           | 2.1          |

## TRANSPORTATION

Transportation method also reflects the influence of local markets. A large part of the production of mills sawing over 40 MBF per day leaves the mill by rail almost entirely for out-of-state destinations. On the other hand, the smaller mills ship very little by rail except for about one-sixth of the production of mills sawing 20 to 39 MBF per day. This is also exported (Fig. 6).

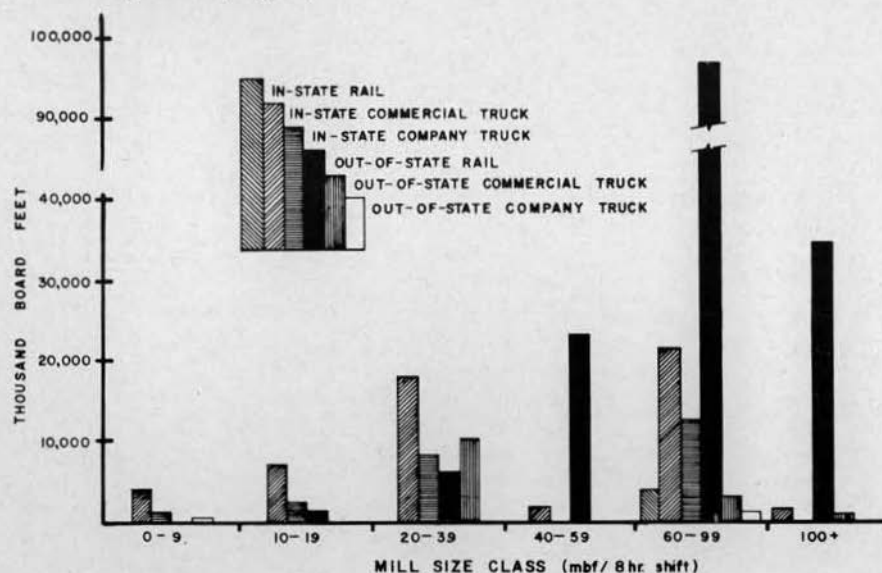


Fig. 6. Method of transportation by mill size class.

## RESIDUE

A large amount of residue in southern Idaho mills which could be used in paper or other advanced utilization is presently going to the burner, slab wood, other minor uses and fuel to operate the mill. Mills sawing over 20 MBF per day presently utilize the residue from 168 million board feet each year for uses other than chips (Table 10). In nearby areas it is considered advisable to investigate chipping possibilities if 20 MBF per day of lumber is being produced. In 1962, 17 of the 21 mills sawing 20 MBF per day did not have chippers.

Table 10. Utilization of residue by southern Idaho mills, 1962.

| Mill<br>size<br>class           | Method of utilization in MBF of log source and percent |                 |                |                  |                 | Total   |
|---------------------------------|--------------------------------------------------------|-----------------|----------------|------------------|-----------------|---------|
|                                 | Burner                                                 | Chips           | Wood<br>slab   | Fuel for<br>mill | Other           |         |
| 0-9 .....<br>(28 mills) .....   | 1,904<br>37.7%                                         | 30<br>0.6%      | 1,788<br>35.5% | 240<br>5%        | 1,064<br>21.2%  | 5,026   |
| 10-19 .....<br>(4 mills) .....  | 4,900<br>52.1%                                         |                 | 3,300<br>35.1% | 1,050<br>11.2%   | 150<br>1.6%     | 9,400   |
| 20-39 .....<br>(11 mills) ..... | 22,350<br>53.9%                                        | 1,900<br>4.6%   | 9,800<br>23.6% | 1,050<br>2.5%    | 6,400<br>15.4%  | 41,500  |
| 40-59 .....<br>(2 mills) .....  | 20,545<br>81.7%                                        | 4,595<br>18.3%  |                |                  |                 | 25,130  |
| 60-99 .....<br>(6 mills) .....  | 32,400<br>25.3%                                        | 7,600<br>5.9%   | 5,400<br>4.2%  | 54,100<br>42.2%  | 28,500<br>22.4% | 128,000 |
| 100+ .....<br>(2 mills) .....   | 6,000<br>14.6%                                         | 35,000<br>85.4% |                |                  |                 | 41,000  |

## TRADE ASSOCIATIONS

Traditionally the sawmilling industry has been characterized as very independent—resembling farming in its nearness to pure competition. The most commonly mentioned affiliation was with the Western Pine Association and several mentioned that this was primarily as a lumber grading agency (Table 11). Only 36 percent maintained a relationship with this organization. Others mentioned in descending order were South Idaho Forestry Association, National Lumber Manufacturers Association, Timber Product Manufacturers Association and Western Forestry and Conservation Association. No affiliations were shown by 60 percent of the mills.



Table 11. Major trade associations with which southern Idaho mills were associated, 1962.

| Mill<br>size<br>class | Associations    |                                    |                            |                                     |                                       |
|-----------------------|-----------------|------------------------------------|----------------------------|-------------------------------------|---------------------------------------|
|                       | Western<br>Pine | Timber<br>Product<br>Manufacturers | South<br>Idaho<br>Forestry | National<br>Lumber<br>Manufacturers | Western<br>Forestry &<br>Conservation |
| 0-9 .....             |                 |                                    |                            |                                     |                                       |
| 10-19 .....           | 4               | 1                                  |                            |                                     |                                       |
| 20-39 .....           | 6               | 2                                  | 4                          | 1                                   |                                       |
| 40-59 .....           | 2               | 1                                  | 2                          | 1                                   |                                       |
| 60-99 .....           | 5               | 1                                  | 5                          | 4                                   | 3                                     |
| 100+ .....            | 2               | 1                                  | 2                          | 2                                   | 2                                     |
| Total .....           | 19              | 6                                  | 13                         | 8                                   | 5                                     |

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