

INTERIOR DOUGLAS-FIR LUMBER MARKETS

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ABSTRACT

Douglas-fir/Larch is the second most important species group in the U.S. Inland West on a volume and value basis. Interior Douglas-fir is commonly produced and sold under the Douglas-fir/Larch grade stamp. Within the Inland West, Douglas-fir/Larch production is concentrated within California/Nevada, Idaho, Montana, Eastern Washington, Eastern Oregon and New Mexico in order of importance on a volume basis. Douglas-fir/Larch is primarily used in the manufacture of sawn wood products and plywood destined for use in construction markets and other structural applications such as trusses and laminated beams. Major markets for interior Douglas-fir/Larch lumber products in order of importance are: the western, north central, northeastern and southern United States.

INTRODUCTION

Interior Douglas-fir (*Pseudotsuga menziesii* var. *glauca* (Bessin) Franco) is marketed in conjunction with western larch (*Larix occidentalis* Nutt.) due to their similar physical properties under the "Douglas-fir/Larch" grade stamp. The exact mix of interior Douglas-fir and western larch is unknown; however, it is generally assumed that western larch makes up a relatively modest proportion of the total region-wide production, rarely exceeding 25%. The mix of interior Douglas-fir and western larch also varies from state to state depending on the underlying resource base and market trends. This is in contrast to coastal Douglas-fir (*Pseudotsuga menziesii* (Mirb) Franco var. *Menziesii*) which is marketed as a single species under the "Douglas-fir" grade stamp. Throughout the remainder of the paper we will always refer to Douglas-fir/Larch since little or no data exists solely for interior Douglas-fir.

Douglas-fir/Larch is the second most important species group in the Inland West with production totaling 2.7 billion board feet (BBF), compared with 3.8BBF for ponderosa pine (*Pinus ponderosa*) and 2.3 BBF for Hem-Fir¹ during 1988 (Figure 1). Douglas-fir/Larch lumber production for 1988 was four times greater than the amount lumber produced from either lodgepole pine (*Pinus contorta* Dougl.) or engelmann spruce (*Picea engelmannii* Parry). Douglas-fir/Larch ranked second only to ponderosa pine on a value basis during 1988.

Douglas-fir/Larch consumption is primarily limited to the United States, with only very limited exports to Japan and other

¹Hem-Fir is a trade name which refers to a mix species, including western hemlock (*Tsuga heterophylla*) and a variety of true firs marketed as a single product.

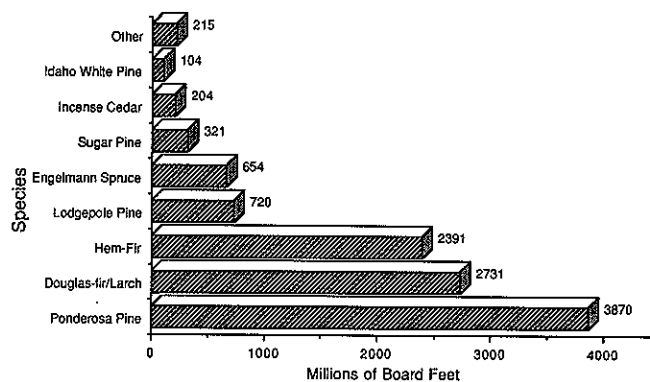


Figure 1.—Volume of production by species in the Inland West.

oversea's markets. Douglas-fir/Larch is used primarily in construction applications, with limited quantities of lumber going into higher value applications such as moulding and other applications where appearance is also important.

This paper will address the relative importance of Douglas-fir/Larch production in the western United States and its major markets on a volume basis. The paper will also highlight the major lumber products included in this commodity group and will identify sources of market information useful to readers wishing to develop a more detailed understanding of the market for various Douglas-fir/Larch sawn products. Data for this paper were drawn primarily from the Western Wood Products Association (WWPA), "1988 Statistical Yearbook of the Western Lumber Industry" and other published WWPA data.

PRODUCTION

Douglas-fir/Larch accounted for 12.74% of the total volume of lumber produced in the Inland West during 1988. Douglas-fir/Larch lumber production also played an important market role in the following states and intrastate/interstate areas: California/Nevada, Idaho, Montana, Eastern Washington, Eastern Oregon and New Mexico. Production in these states and intrastate/interstate areas ranged from 3.4 BBF for California/Nevada to 43 million board feet (MMBF) for New Mexico (Figure 2). Its relative importance within these key states or intrastate/interstate areas varied from a high of 38.2% of total production for Eastern Washington to a low of 16.5% of total production for Eastern Oregon.

On a value basis Douglas-fir larch ranks a distant second to ponderosa pine with the total value of lumber produced during 1988 estimated at 643.1 million dollars. Prices for Douglas-fir/Larch weighted by grade and product type averaged \$235.49

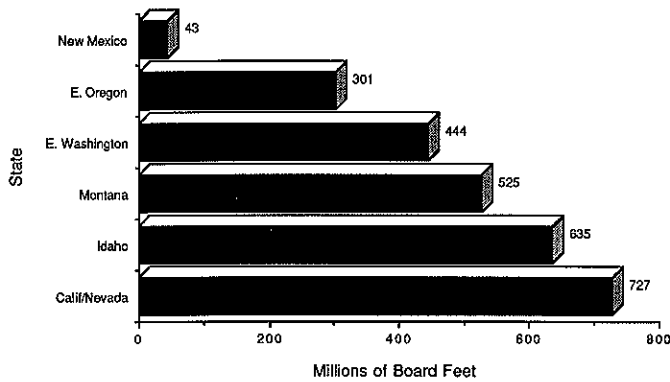


Figure 2. — Douglas-fir/Larch production in key Western states during 1988.

per MBF compared to \$435.54 MBF² for ponderosa pine during 1988. Prices for Douglas-fir/Larch exceed those of Hem-Fir by a small margin.

Regional and State Markets

Douglas-fir/Larch lumber is marketed throughout the United States. The western United States is largest market for Douglas-fir/Larch lumber, accounting for 72.2% of total production or 1.8 BBF during 1988 (Figure 3). California is the largest single market, both in the West and in the United States as a whole, with purchases of 1.15 BBF. Other important markets in the western United States include: Oregon (146 MMBF), Washington (134 MMBF), Idaho (101 MMBF), Montana (58 MMBF) and Arizona (58 MMBF) (Figure 4).

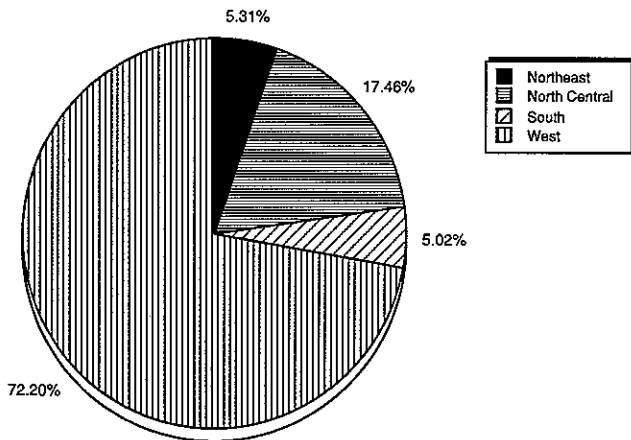


Figure 3. — Percentage of Douglas-fir/Larch shipments by destination.

The North Central region is the second largest market for Douglas-fir/Larch lumber with shipments totaling 433 MMBF

²The index price presented for ponderosa pine was for the WWP A Coast-Inland North region of the western United States, which overlays the most important Douglas-fir/Larch production areas. Index prices for ponderosa pine harvested in the WWP A Rocky Mountain region averaged \$308.54 during 1988. Coast-Inland North Region values provide a better point of comparison unless you are located on the fringes of Douglas-fir/Larch production.

or 17.5% of total production (Figure 3). Minnesota is the largest state level market within this region with purchases of 101 MMBF during 1988. Other important state level markets within the North Central region include: Iowa (68 MMBF), Illinois (64 MMBF), Wisconsin (59 MMBF), Missouri (43 MMBF) and Minnesota (30 MMBF) (Figure 4).

The Northeast and the South accounted for the remainder of domestic sales with 132 MMBF and 124 MMBF shipped to these regions during 1988, respectively. Key state level markets within these regions included: Texas (55 MMBF), Connecticut (41 MMBF), New York (35 MMBF), New Jersey (27 MMBF), and Pennsylvania (24 MMBF) (Figure 4).

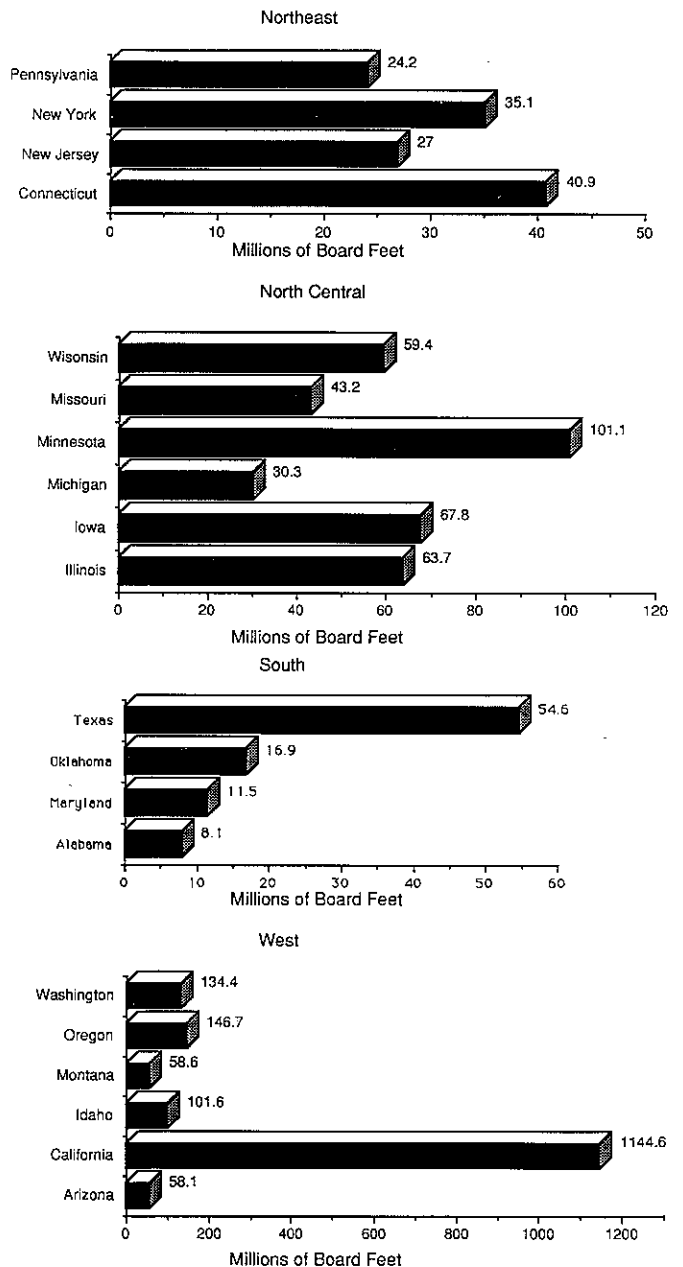


Figure 4. — Major state level markets by region.

Seventy four percent of all Douglas-fir/Larch shipments to the West during 1988 were transported by truck, with the remainder moving by rail (23%) and water (3%). Not surprisingly, over 90% of the shipments to the North Central and Northeast moved by rail. Sixty-eight percent of the shipments destined for the South were transported by rail, with the remainder moving by truck. Truck shipments to the South were primarily destined for the Texas market.

Products and Prices

Douglas-fir/Larch markets are heavily weighted towards construction applications, with 89.7% of all lumber produced in the form dimension products. Dimension lumber is used extensively in the construction industry for framing and related structural applications. The remaining 10.3% is composed of higher value products such as common boards, shop lumber and D & Btr selects. These higher value products are used in the manufacture of mouldings and other appearance applications. The mix of products derived from Douglas-fir/Larch is distinctly different from the mix products derived from ponderosa pine—the most important species in the inland West on both a volume and a value basis. Ponderosa pine yields a much larger proportion of high value products, which accounts for the sharp difference between the average price of Douglas-fir/Larch and ponderosa pine.

Price information for Douglas-fir/Larch lumber is available in several forms from various sources. Price information for Douglas-fir/Larch is often expressed in the form of price indices, which quote a single weighted average price for all grades on a monthly, quarterly, and annual basis. Such series are particularly useful in tracking general price trends. Users must recognize the index is simply a weighted average of the actual prices paid for different lumber products/grades f.o.b. the mill. The relative weight assigned to each individual lumber product/grade reflects the average yield of that product/grade during the milling process throughout the Inland West. Published weights are referred to as "Index Logs". Price indices are available from the WWPA for Douglas-fir/Larch.

More detailed information for individual products and grades are also published by the WWPA on monthly basis and by Random Lengths³ and Crows⁴ on a weekly basis. Random Lengths also publishes an annual "Yearbook" of various species and grades. These series are most useful to lumber manufacturers due to their highly detailed nature, however, they are also useful in developing a more detailed understanding of price index movements.

LITERATURE CITED

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³Random Length Publications, Inc., P.O. Box 867, Eugene, OR 97440-0867

⁴Crows Weekly Letter, C. C. Crow Publications Inc., P.O. Box 25749, Portland, OR 97225