

Western White Pine The Commercial Climate Past, Present, and Future Perspectives



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WESTERN WHITE PINE - Sterling - 1"x 8"



Our Company



*"Take Care Of The Land,
And The Land Will Take Care Of You."*

Kalesnikoff Lumber strives to be an innovative manufacturer of high value, specialty forest products. The company consumes 250,000 m³ annually (2 shift production) and has over 250 different product lines. The company's main product groupings are:

-  Timbers and Beams (10-15%)
-  Boards (10-15%)
-  Furniture Stock (2-5%)
-  Window and Door Stock (8-12%)
- Laminating Stock (10-15%)
- Export Products (Japanese squares) (10-15%)
- Commodity Lumber (35%), and
- Chips, Shavings, Hog Fuel

Timber Profile

Products manufactured from Douglas fir and Western Larch are the mainstay of company sales. **White Pine**, Lodgepole Pine, Ponderosa Pine, Spruce, Balsam, and Hemlock continue to be significant contributors to our product mix.



Why do We Cut White Pine?

Our survival in the wood manufacturing sector demands value driven as opposed to volume driven production.

We are not a commodity producer and cannot compete with the dimension lumber producers.

Our production facilities and product lines are intended to be flexible.

Why do We Cut White Pine?

White pine is part of the fringe species basket of BC (red alder, birch, ponderosa pine, big-leaf maple, etc.)

These species tend to be overlooked because of their perceived problems (i.e. lack of access, limited inventories, difficulty to work, niche markets, etc.)

These species offer opportunities to those who operate outside the box.

Western White Pine Availability

Company capacity: 250,000 m³/annum

White pine offers 5-10% of the company cut. Recent White Pine acquisitions:

- 2005 - 14,000 m³
- 2006 - 21,300 m³
- 2007 - 16,250 m³
- 2008 - 12,000 m³ (estimate).
- We would cut more white pine, but the supply is limited.
- Provincial AAC is 75,000,000 m³.

Western White Pine Availability

Company mills small runs (roughly 2500 m³ every two months) to cycle the inventory and keep the wood from degrading due to stain and checking.

Small runs require mid-week changeovers, inventory separation, and holding partial lifts of finished product which increase costs.

White pine considered to be a specialty species but still follows the broad market cycle of supply/demand.

Western White Pine Availability

The species tends to be a nuisance for larger firms - Very limited supply in mature stands (usually <5% of stand composition). Green components often negligible. Dead stems deteriorate quickly and are really only good for pulp. Takes a very long time to build enough log inventory for efficient runs.

Larger firms often blend the white pine into their white wood programs (hide it amongst the spruce).

Species must be watered to prevent it from turning blue - lake storage is a must.

Western White Pine Availability

Kalesnikoff Lumber is one of the only "large" producers of white pine products in BC (2 million board feet annually). "Backyard" manufacturers move in and out of the market.

Large firms sometimes cut their inventory, then dump product into the marketplace - throwing supply/demand out of balance.

Reality is that a company must offer a sawlog premium to encourage white pine sorts (roughly \$10/m³ above commodity pricing of FI, SP).

Western White Pine Availability

White pine is found throughout the range of the interior wet belt (ICH zone); however, the economic catchment area is much smaller and is highly influenced by market pricing and transportation costs.

- 2006/2007 - \$90/m³ - Catchment area of 300 km radius (Kamloops, Shuswap, Revelstoke, Golden)
- 2008 - \$65/m³ - Catchment area of 150 km radius (West Kootenays)

Species Economics - Problems

Commodity Marketing (Lumber)

- Lack of Supply - limited mature inventory to develop species specific marketing programs.
- Niche marketing - often out of the question for commodity producers used to moving huge inventories of commodity product.
- Handling Properties - Blue-stain develops within 2 weeks of harvest during warm season - must be watered concurrent with harvest (May to October)

Species Economics - Problems Commodity Marketing (Lumber)

- Quality of commodity products such as structural lumber questionable (strength and softness)
- Mixing the species into whitewood programs problematic as white pine dries at different rates from other whitewood species.
- Grading rules only allow for limited off-grade species.

Species Economics - Problems

Niche Markets (Specialty)

- Bluestain devalues product by up to 50%
- Lake watering the wood for longer than 3 months discolours the finished product after kiln drying (tan streaks)
- Sourcing the log is expensive, demands a high resale value on finished items.
- Production inefficient without consistent supply.

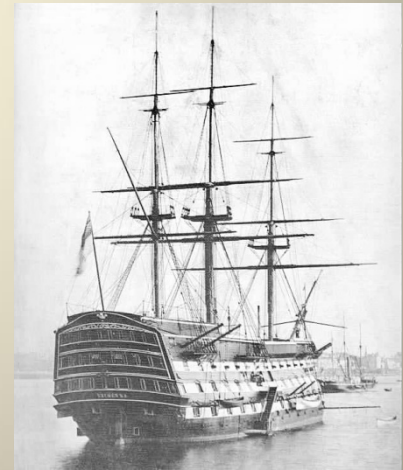
Why Does this Species Appeal to the Consumer?



Species Economics - Historic

White pine has a historic appeal - used extensively in the past, particularly in eastern North America.

- Ship masts for English Navy
- Paneling
- Flooring
- Furniture
- Timber frame buildings



Species Economics - Historic

- White pine accounted for more than half of the U.S. supply of lumber for over 200 years. It was a major species of the Civilian Conservation Corps (CCC) reforestation efforts during the Great Depression.
- White pine was extensively used in construction when old-growth pine forests were abundant.

Species Economics - Culinary

- White Pine needles contain five times the amount of Vitamin C (by weight) of lemons.
- **Adirondack:** An Iroquois word which means tree-eater and referred to their neighbours (more commonly known as the Algonquians) who collected the inner bark during times of winter starvation. The white soft inner bark (cambial layer) was carefully separated from the hard, dark brown bark and dried. When pounded this product was used as flour or mixed with other starchy products.

Species Economics - Culinary

- In the 1700's, cattle and pigs that were fed pine bark bread were noted to grow well.
- The young staminate cones were stewed by the Ojibwe Indians with meat and were said to be sweet and not pitchy. The seeds are sweet and nutritious but not as good as those of other western nut pines.

Species Economics - Historic

- Pine resin was used to waterproof baskets, pails, and boats and the sap was processed to make turpentine.
- The sap has a number of efficient antimicrobials. The Chippewa Indians used it successfully to treat gangrenous wounds. A wet pulp from the inner bark is applied to the wound or pine resin was mixed with beeswax or butter and used as a salve to prevent infection.

Species Economics - Historic

Another Reason to Drink Beer!

- Pine resin mixed with beer was used to remove tapeworms (flat worms) or nematodes (round worms)



- Pine resin mixed with sulfur is useful to treat dandruff.

Species Economics - Current Opportunities

- Good woodworking properties - easy to work with, easy to sand, easy to repair, limited resin, takes a nice finish.
- Species of choice for woodworkers who understand wood (selected over eastern white pine, lodgepole pine, spruce, and ponderosa pine)



Species Economics - Current Opportunities

Supply and Demand: Limited supply creates a perception of scarcity which fuels the appeal to those with discerning tastes.



Species Economics - Current Opportunities

Furniture Stock: 1 $\frac{1}{4}$ " to 1 $\frac{1}{2}$ " stock. Furniture makers value the species, particularly those who manufacture "rustic", "country", "cape cod" or "chalet" styles.

- Wood doesn't twist or cup as much as LO or YE
- Most attractive knot structure of pine species - numerous small, pink/red knots



Species Economics - Current Opportunities

- Knots tend to be tight, unlike lodgepole knots which tend to be black and loose
- Fine grained, clean, and very white compared to other pine species (ponderosa or lodgepole pine)



Species Economics - Current Opportunities

Boards: Primarily 1"x4" to 1"x12" (2" multiples).

High Grade uses include:

- House fascia
- Moulding and Trim
- Flooring
- Paneling

Lower Grade uses include:

- Crates and pallets
- Building stock, framing
- fencing



Species Economics - Current Opportunities

Timbers: Primarily used in timber frame homes, particularly in eastern North America.

White pine timbers are highly valued for timber frame construction as the timbers do not move much when drying (limited twisting and checking) compared to other timber framing species.



Species Economics - Current Opportunities

Slicing and Veneers:
Popular with
Panelboard
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Strong market
campaign created
recognizable trade
name - Idaho White
Pine



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Species Economics - Current Opportunities

Prime log: 60-100 years old,
small branches, self-
pruned - knotty pine
consumer preferences.

Traditional old growth: >100
years old, not highly
valued in specialty
markets due to
discolouration of
heartwood (red wood),
and black knots, but clear
component is still desired.



Species Economics - Future Opportunities

Specialty Markets - Market would easily absorb a doubling or tripling of available inventory without an offsetting reduction in market values for finished products.

Significant increases in inventory (>5%) would begin to see producers commoditizing and mass producing the species to compete with whitewoods and subsequent reductions in market prices.

Species Economics - Future Opportunities

Building logs: Nowhere near enough supply to satisfy log home builders, but characteristics of the species would make it ideal for the manufacture of log homes - (i.e. straight, tall, and cylindrical form, limited twisting and shrinkage)



Future Opportunities

"Grow it and They Will Come"

Moving our landbase inventory of white pine closer to pre-blister rust inventory levels is biologically and ecologically correct.

Forecasting consumer habits 60-100 years in the future is purely speculative.



Future Opportunities

"Grow it and They Will Come"

White pine is highly productive and has wide-ranging physical, chemical, and aesthetic uses that make it foreseeable that it will maintain its consumer appeal.



Future Opportunities

"Grow it and They Will Come"

Marketplace is continually evolving and will find an appropriate use for a growing white pine inventory. Scarcity and growing forest product demand will ensure its continued utilization.



Conclusion

The greatest gift to future generations would be a landbase with resilient and diverse ecosystems modeled on historic compositions. White pine must remain a part of this objective.

