

Log Market Analysis

January 2021



Photo 1: Overlooking Landing 7 in the Emerald Hills Forest (Longwood), December 2020.

The content of this Log Market Analysis is produced quarterly as part of a suite of documents that comprise the regular reporting to forest owners during harvest. This standalone document is made available to other forest owners approaching harvest to keep them informed on market conditions.

We have included log price series separately for Wairarapa and Gisborne forests, as the price series differ for reasons including different customers, log specifications and locations.

Forest Enterprises (FE) is currently harvesting approximately 600,000 tonnes of logs per annum for Wairarapa and Gisborne forest owners, plus a further 400,000 tonnes for a private fund manager client in the same regions.

IMPORTANT

Every effort has been made to provide current accurate information in this document, which is for information purposes only. Any opinions and views expressed are those currently held by Forest Enterprises; however, the reader accepts that where they are opinions and views in respect of future prices, they may subsequently be proven incorrect. The nature of the international log market is that of price fluctuations, and these fluctuations can be material, and material changes can arise due to factors not previously able to be foreseen.

Overview

In January, we have returned from our Christmas break - with its closure of logging operations, the sawmills and log delivery - and are through the restart period.

It's winter in the Northern Hemisphere and this has a major impact on our trade partners in China, Korea and Japan, with reports of frozen conditions in northern ports. We are also now close to the Lunar New Year celebrations that are the traditional holiday season in North Asia. This generally interrupts demand for imported products like logs and lumber.

The dry season in New Zealand and Australia sees us moving into the annual fire season which impacts productivity in forests. But the dry weather makes harvesting operations easier, so in general forest production increases after the holiday period.

Log production is in full swing. China is moving into their holiday period, but this year log inventories are well-balanced, and we expect to see a manageable slowdown in demand that should not dampen our log price expectations too much. Current log price and demand are strong, so we are optimistic for a good start to 2021, pandemics permitting!



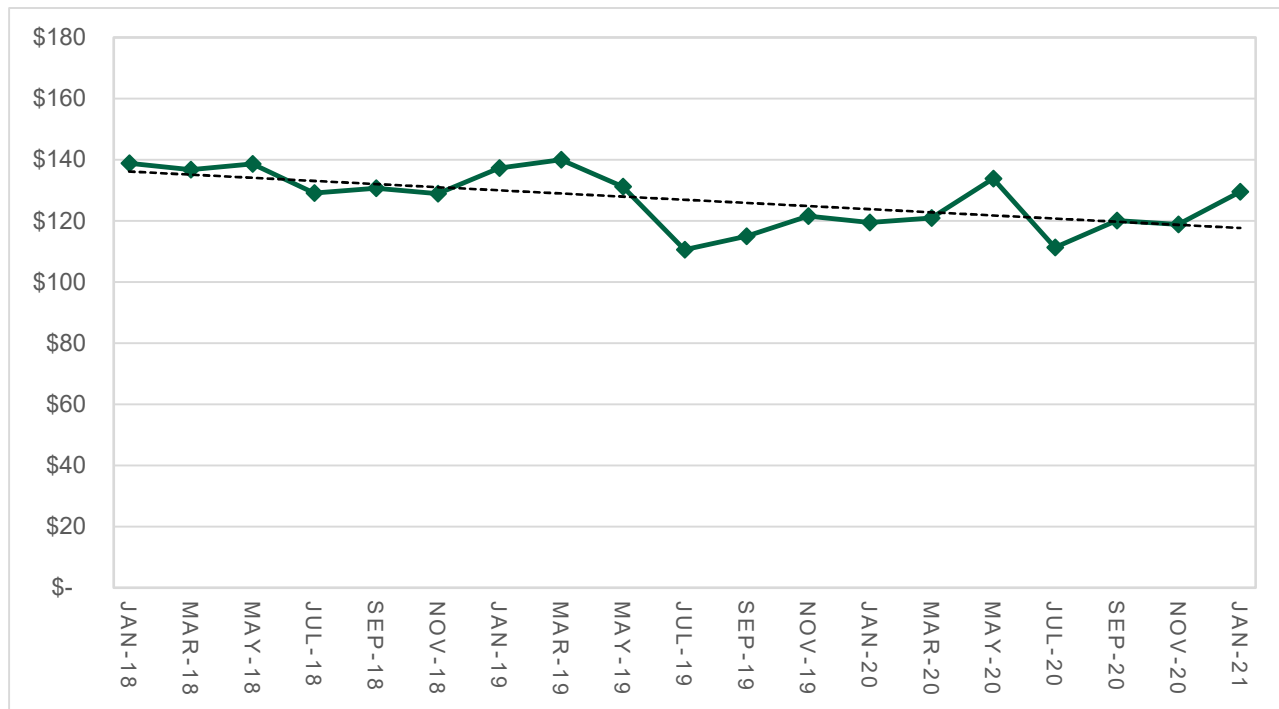
Photo 2: Log Value Recovery audit. On site with our work experience student meeting the team.



Wairarapa Log Prices Per Tonne

Grade	Forest Enterprises Dec-20	Forest Enterprises 36 Month Average	Current vs 36 Month Average	Percentage of 36 Month Average
Export P40	\$173.15	\$180.05	(\$6.90)	96%
Export P30	\$157.45	\$147.10	\$10.35	107%
Export A	\$133.55	\$131.60	\$1.95	101%
Export K	\$116.35	\$116.00	\$0.35	100%
Export KI	\$113.90	\$108.40	\$5.50	105%
Export Pulp	\$95.15	\$93.40	\$1.75	102%
Domestic P35	\$178.00	\$175.85	\$2.15	101%
Domestic S30	\$117.00	\$120.50	(\$3.50)	97%
Domestic S20	\$102.00	\$105.50	(\$3.50)	97%
Domestic Pulp	\$31.00	\$31.00	\$0.00	100%
Export sales units are volumetric (JAS) while domestic sales units are paid per tonne. The Export JAS prices have been converted to tonnes. Refer to page 5 for more detail on the JAS to Tonne Conversion.				
Index Log Price	\$125.00	\$126.35	(\$1.35)	99%
Index Log Price is calculated using inventory measurements from our Wairarapa forest crops and establishing an average log grade recovery for our typical Wairarapa Forest. Applying these estimates to our long run prices per grade has derived an Index Log Price. This index price helps to estimate the average logs sales predicted for a typical forest.				

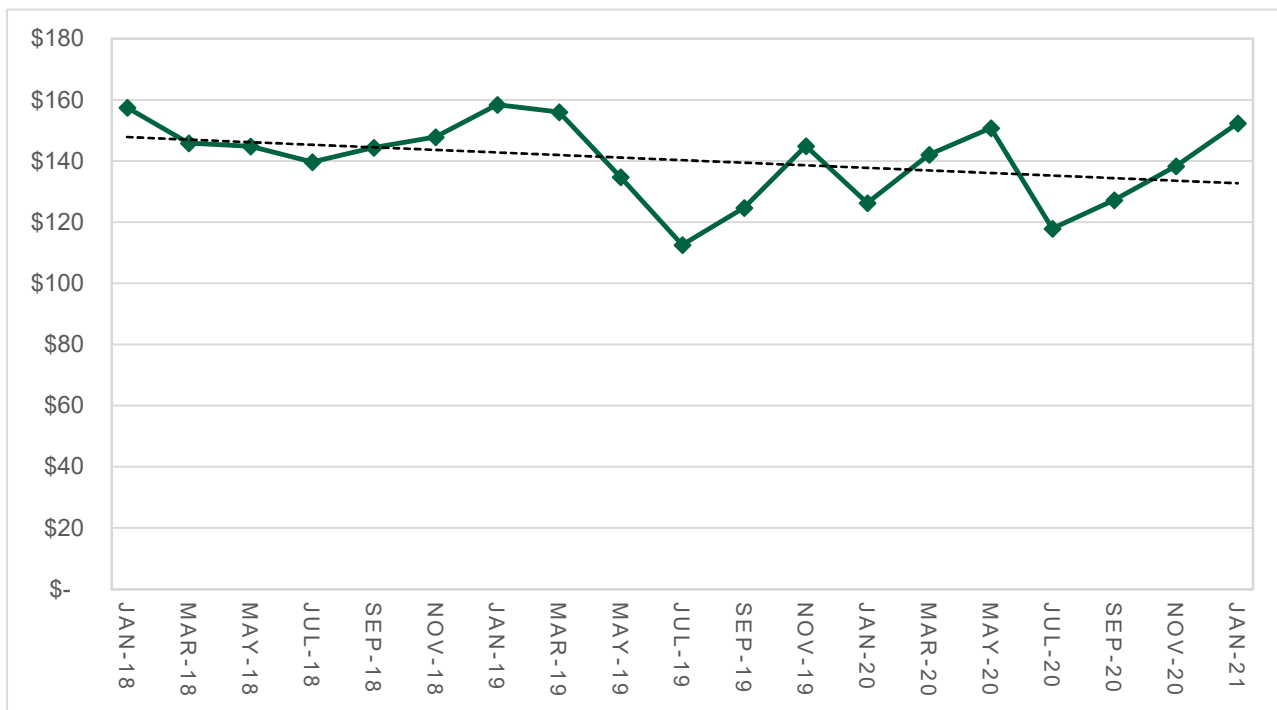
Index Log Price for our typical Wairarapa Forests



Gisborne Log Prices Per Tonne

Grade	Forest Enterprises Dec-20	Forest Enterprises 36 Month Average	Current vs 36 Month Average	Percentage of 36 Month Average
Export P40	\$186.55	\$178.50	\$8.05	105%
Export P30	\$154.40	\$145.50	\$8.90	106%
Export A	\$143.70	\$136.95	\$6.75	105%
Export K	\$127.80	\$122.25	\$5.55	105%
Export KI	\$111.00	\$112.00	(\$1.00)	99%
Export Pulp	\$104.40	\$100.90	\$3.50	103%
Domestic P35	\$175.00	\$178.05	(\$3.05)	98%
Export sales units are volumetric (JAS) while domestic sales units are paid per tonne. The Export JAS prices have been converted to tonnes. Refer to page 5 for more detail on the JAS to Tonne Conversion.				
Index Log Price	\$145.02	\$138.90	\$6.12	104%
Index Log Price is calculated using inventory measurements from our Gisborne forest crops and establishing an average log grade recovery for our typical Gisborne Forest. Applying these estimates to our long run prices per grade has derived an Index Log Price. This index price helps to estimate the average logs sales predicted for a typical forest.				

Index Log Price for our typical Gisborne Forests



Factors Influencing Current Log Price

Key:

↑ More Benefit to the Investor

↓ Less Benefit to the Investor

↔ Neutral

Price, Costs and Logistics

↓ Foreign Exchange (Forex)

Export logs are priced in USD. Exchange rates have steadily moved against us over the last quarter and this has continued to be detrimental to NZD payment terms with a movement of \$0.03 cents from \$0.69 to \$0.72. This exchange rate level is not abnormal, and we have seen some price improvement due to the change in USD terms.

FE takes no forward position or hedge in currency trading. Hedging imposes transaction costs without giving certainty of improved outcomes.

↓ Shipping

Log ship chartering costs have risen in the last quarter for a number of reasons, against prior expectations. Northern China Ports are icy and there is some congestion in the large timber ports of Lanshan/Lanqiao. There are reported to be 2 Australian log ships at anchor, with one at over 70 days waiting due to the dispute between Australia and China. Daily hire rates are rising as competing coal bulk shipping increases, and bunker fuel costs rise with the rise in Brent crude costs. In the previous quarter, shipping costs were quite favourable but we expect to lose a few dollars to the various market impacts seen.

↑ JAS to Tonne Conversion

JAS-to-tonne conversion rates were relatively steady from a very favourable 102.7% in October 2020 to 101% in January 2021. This is a good result for revenues from JAS sales units vs. fixed cost incurred by weight in tonnes. Gisborne conversion is higher than Wellington, however, a large proportion of the better Wellington logs are sold to sawmills in tonne units, so are not in the JAS measures.

Export logs are sold in Japanese Agricultural Standard cubic metres (JAS). JAS is a measure of useable log volume rather than weight. Payments to most contractors are made based on weight, which is appropriate for handling heavy material. This means the return to the forest owner is affected strongly by the conversion of weight to volume in the logs.

Conversion has seasonal trends and varies between log grades, length and log quality. Accounting for conversion is necessary to report comparable values from different sales options. Our convention is to report all prices converted to the 'per tonne basis', which would appear different if compared with a per cubic metre (JAS) series. Hence why our harvest reports show monthly JAS/tonne conversion per forest.

↑ Log Price, Export CFR

CFR (Cost and Freight) is the price in USD paid by the end user/buyer.

China Wholesale log price within China is strong.

South Korea Price remains low but strengthening.

India Price falling.

Japan Rising price.

↔ Log Demand

Export Log Inventory in Market

China Inventory of logs in China is a leading supply/price indicator. Inventory levels in China have shrunk dramatically over the last 3 months and are now at about 2.75 million. Inventory levels are now lower than 2020 and at about 50 days of supply with current usage at about 55,000 JAS per day. The speed that logs turn to lumber and lumber turns to cash drives market sentiment. European spruce log imports remain high but may have peaked. Australian log supply has stopped into China due to trade disputes. The Pacific Northwest trade out of Canada and the US is also very low.



<u>South Korea</u>	The economy has been improving as export activity rises from a low base, and this helps the packaging lumber demand. Australian log supply into China has been redirected into Korea, but the quality of the logs is not the same as the usual Korean mix so price is falling significantly to adjust for increased supply and lower quality.
<u>India</u>	India is also receiving more log supply from Australia as well as Europe, so New Zealand supply is currently low and declining.
<u>Japan</u>	Price has risen in response to China price rises but demand is sluggish.

Pruned Log Grades

Pruned price and demand is strong and we are having to balance supply to various mills as we are limited in production capacity. Price is good but not volatile like export pruned, and we have seen rises for q1 2021.

New Zealand Domestic

Demand is strong and price is holding steady. The Kiwi Masterton sawmill is closer than the Wellington port which reduces truck usage. We continue to supply small volumes to CHH in the Bay of Plenty, from Gisborne, but it is less favourable with export price rises. Davis sawmill in Featherstone has raised price and has relatively high levels of demand.

Housing and Business

By now with Covid into its anniversary we are seeing that recovery for industries reliant on visitors is difficult and, in some cases, unlikely. Construction and housing is strong, log harvesting and transport is healthy, farming and primary industries continue to grow. Forestry as an investment is producing very good returns.

Domestic Construction

Building is on a tear, but mainly large companies developing and selling land and building packages, less scope for owner operator builders with land in short supply.

Log Agency

Log agent's performance for our log sales has been very good over the last 3 months, with strong returns to our investors from both high price and washup payments in our favour from market conditions improving over the period.

Log Supply

<u>NZ</u>	We are very busy, as are most forestry companies and the industry is very close to its limits of production arising from constraints to log distribution and storage.
<u>Australia</u>	Clearing burnt logs continues, but Australia no longer has a China log sales option which is a major impediment.
<u>Europe and Russia</u>	Europe production has flatlined, albeit at high levels.
<u>Pacific Northwest (PNW)</u>	Slow in the export markets. Strong domestic demand as housing starts are strong.
<u>Other</u>	South American log and lumber trade increasing as price rises.



Point of Interest

With thanks to TPT for the pictures.

Extreme cold weather in North China is driving demand for coal as well slow discharge, all contributing to the perfect storm for NZ freight rates.



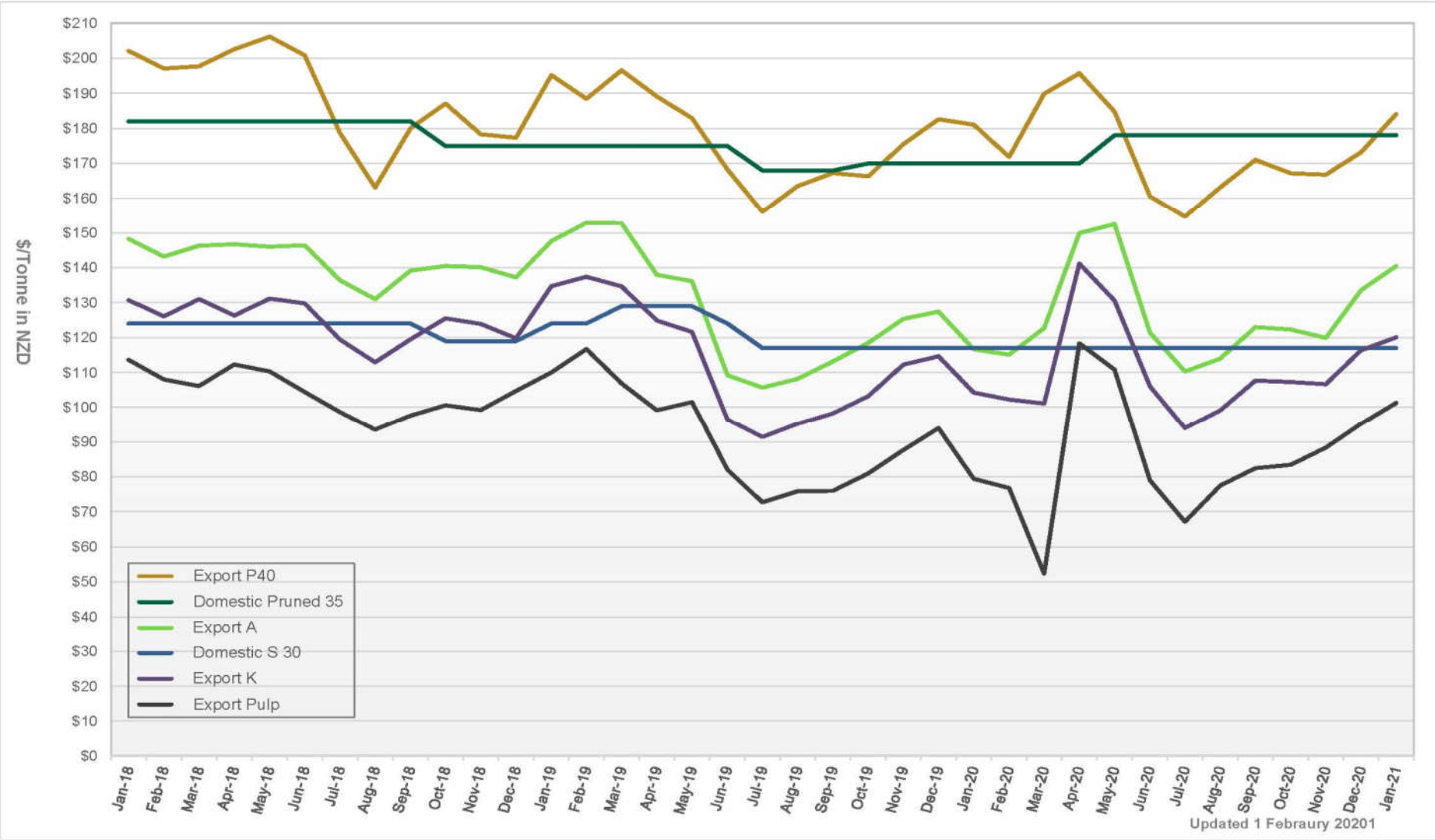
Frozen ports in North China.



Photo 3: Skidder in Blairlogie Forest.



Lower North Island Log Price Graph per Tonne



Log Price Graph: Tracks the key log prices for a 37-month period. The first 36 months are the months which comprise the average referred to under Log Prices per Tonne above. The 37th month shows the indicative prices scheduled for the current month. Export sales units are volumetric (JAS) while domestic sales units are paid per tonne. The Export JAS prices have been converted to tonnes. These log price averages do not reflect any price adjustments that may occur following washups with our log export partners.

