

Log Market Analysis

September 2022



Photo 1: Recent harvest area in Ruakiwi Forest (Wairarapa). Keeping the ponds clear.

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 550,000 tonnes of logs per annum for Wairarapa, Gisborne and Hawke's Bay forest owners, plus a further 450,000 tonnes for a private impact investment fund manager 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

It's said that if you don't like the weather here you just need to wait an hour or two and it will be different. Weather has been pretty topical lately, and most of the news being bad. The good news is that our Forest Enterprises team are managing the climate and environmental performance risks well and we have no damage within our forests.

Economic risks and conditions are also hard to predict, and to manage recently. The world seems to become increasingly complex and risky, and I for one look back at the benefits of our historic free trading history with nostalgia.

In any case, the last quarter has seen some dramatic improvements in export log price and settled domestic prices, leading to strong revenues from harvesting forests. This is part of a trend of increasing volatility in returns which is good currently but may well be less good through to Christmas.

In the meantime, we need to be happy about quarter three; "the best of times..", to partially quote Charles Dickens.



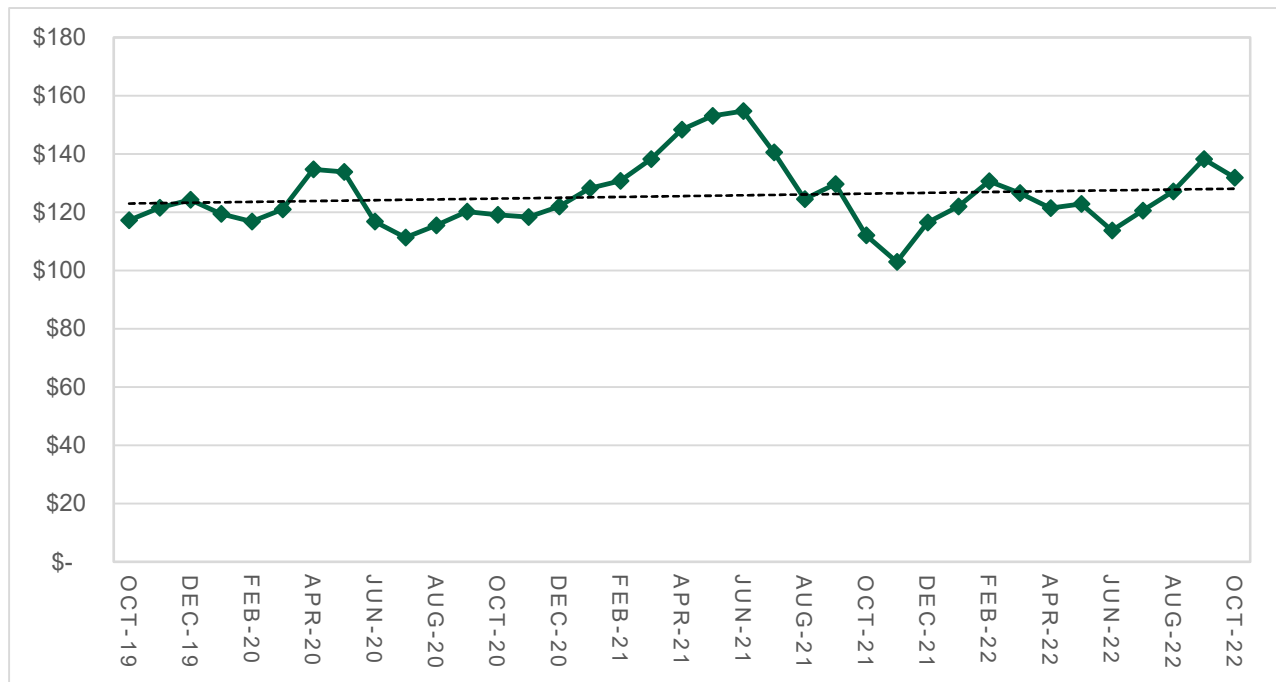
Photo 2: New log grapples making ship loading safer and faster at Napier Port.



Wairarapa Log Prices Per Tonne

Grade	Forest Enterprises Sep-22	Forest Enterprises 36 Month Average	Current vs 36 Month Average	Percentage of the 36mth Average
Export P40	\$207.80	\$177.25	\$30.55	117%
Export P30	\$175.85	\$152.95	\$22.90	115%
Export A	\$142.95	\$127.60	\$15.35	112%
Export K	\$125.90	\$113.35	\$12.55	111%
Export KI	\$116.80	\$104.15	\$12.65	112%
Export Pulp	\$103.40	\$89.95	\$13.45	115%
Domestic P35	\$180.00	\$179.70	\$0.30	100%
Domestic S30	\$127.00	\$123.65	\$3.35	103%
Domestic S20	\$112.00	\$108.65	\$3.35	103%
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 \$/tonne. Refer to page 5 for more detail on the JAS to Tonne Conversion.				
Index Log Price	\$138.15	\$125.35	\$12.80	110%
Index Log Price is calculated using benchmarks from our Wairarapa forest crops to estimate an average log grade recovery for a 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

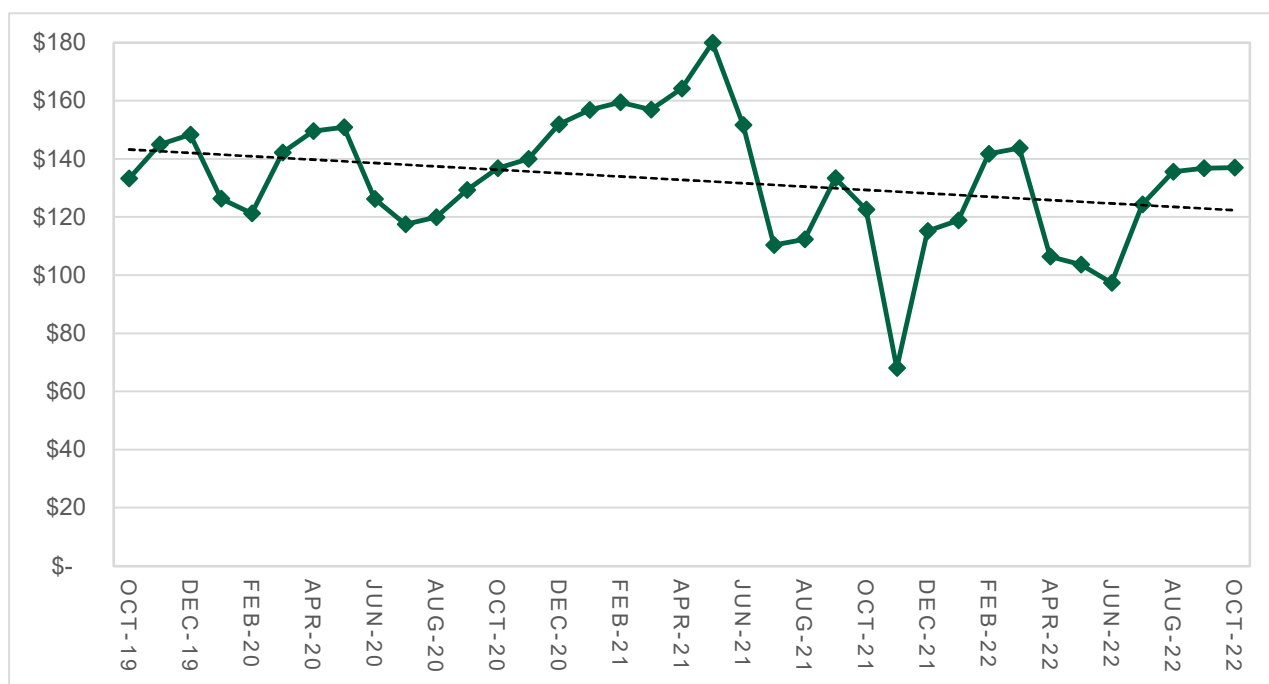
Grade	Forest Enterprises Sep-22	Forest Enterprises 36 Month Average	Current vs 36 Month Average	Percentage of the 36m Average
Export P40	\$196.40	\$177.70	\$18.70	111%
Export P30	\$148.25	\$140.75	\$7.50	105%
Export A	\$127.90	\$128.45	(\$0.55)	100%
Export K	\$114.70	\$114.30	\$0.40	100%
Export KI	\$107.15	\$106.40	\$0.75	101%
Export Pulp	\$92.50	\$95.10	(\$2.60)	97%
Domestic P35	\$176.00	\$182.90	(\$6.90)	96%
Domestic S30	\$133.00	\$137.40	(\$4.40)	97%

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	\$136.73	\$132.70	\$4.03	103%
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Index Log Price is calculated using benchmarks from our Gisborne forest crops to estimate an average log grade recovery for a 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

↑ Forex

Export logs are priced in USD. Exchange rates are often affected by merchandise exports as well as a general level of confidence in the New Zealand economy, and in comparison, with the USD and NZD. We have seen a continued strengthening in the USD against all currencies, with war, political uncertainty and high inflation in other economies. The current exchange rate position of about US 56.4c is an improvement in trade terms for us compared with the last quarter's US 62c. This increases our export log price in NZD terms.

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

↑ Shipping

Shipping terms have improved with the previous high levels of delay and disruption to load and unload times improving. In Wellington we have trialled using large "Supra" class bulk ships which hold considerably more cargo and do not load on deck. These vessels require some cooperation with other exporters to meet the large volume commitments, however, they have been more efficient as well as a cost saving. The overall improvement in freight terms is worth about NZ \$15.64 improvement over the previous quarter FOB (free-on-board basis).

↑ JAS to Tonne Conversion

JAS-to-tonne conversion decreased slightly from an unusually high seasonal average of 99.2% in June 2022 to 98.2% for September 2022.

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, log length and log quality. Accounting for conversion is necessary to report comparable values from different sales options. Our convention is to report all prices in the 'per tonne basis', which accounts for the weight to mass conversion. 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.

<u>China</u>	Continued large price reductions.
<u>South Korea</u>	Sawmilling industry performing poorly.
<u>India</u>	Now largely supplied from Australia and South America.
<u>Japan</u>	Low levels of activity.

Log Demand

↓ Export Log Inventory in Market

<u>China</u>	Inventory of logs in China is a leading supply/price indicator. Inventory levels in China fell to about 4 million JAS. Log supply reduced from about 81 days of supply to 51 days with current usage at about 79,000 JAS per day. The speed that logs turn to lumber and lumber turns to cash drives market sentiment. This trend is falling for log price despite inventory improvement due to uncertainty in housing construction and demand in China.
<u>South Korea</u>	South Korea remains a very challenging market with declines in lumber usage, and lack of competitiveness with Chinese products.
<u>India</u>	There is no real New Zealand activity in the India market with the majority of supply from Australia and South America. New Zealand supply on hold until fumigation restrictions change, which seems challenging.
<u>Japan</u>	Weakness in the Yen vs USD and reductions in price sought for parity with China price levels giving low optimism for Japan business.



↑ Pruned Log Grades

Pruned customers remain a steady and high value component of the forest products trade. Many sawmills pay substantial prices as they are often quite distant from our forest locations, in areas such as Taupo and Kawerau. We have reached a milestone this month having started pruning the second rotation crops in Gisborne.

↑ New Zealand Domestic

We have a large domestic sales programme in the Southern North Island region as the local mills are generally well located close to our forests and have steady demand and pricing. Demand for lumber in New Zealand remains strong but has cooled off from the crisis levels reported coming out of Covid restrictions on sawmill operation. There is some demand in the Bay of Plenty for Gisborne sawlogs but transport is very expensive.

↔ Housing and Business

House prices continue to suffer; times to sell increase, while buyers' price expectations are lower than that of sellers. House price decline is sticky, in that sellers try to avoid transactions while prices are low so the volume of sales declines until sellers accept the new price conditions. Meanwhile, debt servicing costs are rising dramatically.

↑ Domestic Construction

Inflation and rising interest rates are reducing homeowners' ability to pay for mortgages. New housing continues but there may be a lag as current projects are completed and until confidence returns to house buyers. People need to live somewhere so new residential builds remain important for social reasons.

↑ Log Agency

Washups of log sales occur well after ships have sailed and as contract terms of freight, forex and sales are settled over time. Prices for export logs in NZD terms have risen due to reductions in shipping cost and improving forex terms despite some declines in USD price in market. This has led to washup payments from the export agents in favour of investors. As the markets settle or decline then washup payments also diminish or become negative as sales may be lower than forecasts. This is normal and recently has been a good additional revenue to investors.

Log Supply

New Zealand

Mud season has been particularly difficult this year, especially due to rising compliance costs from environmental regulation. This has seen big reductions in woodlot harvest recently, but Forest Enterprises' harvest operations have maintained productivity through winter.

Australia

Australia is developing internal markets and production facilities to offset lack of opportunity to export to China.

Europe and Russia

Very hard for us to comprehend Europe falling into such a chaotic situation with war, political instability and inflation. This reduces the output of forest products as much as human misery increases internally. Spanish and Portuguese Radiata pine forests have been largely destroyed by various pathogens.

Pacific Northwest (PNW)

Internal markets in North America are strong, and the energy wood fuel or wood pellet market is growing to replace falling energy supply in Europe. Southern (US) Pine is ground up and processed into pellets to replace coal in energy plants in Europe.

Other

Sadly, the Amazon rainforest continues to diminish.



Point of Interest

I attended the recent Forest Growers Levy Trust research meetings where the Nelson Airport was described as the 'showroom' for local LVL manufacturer, Nelson Pine. That terminal building represents the future of Radiata pine usage and is a great exemplar for timber design.

New timber buildings have high levels of support from our Minister of Forestry, Hon Stuart Nash. New Government buildings are being specified and constructed in timber as a result of Minister Nash's leadership. Timber construction has much lower levels of embodied carbon compared with concrete or steel, which improves New Zealand's carbon reduction goals.

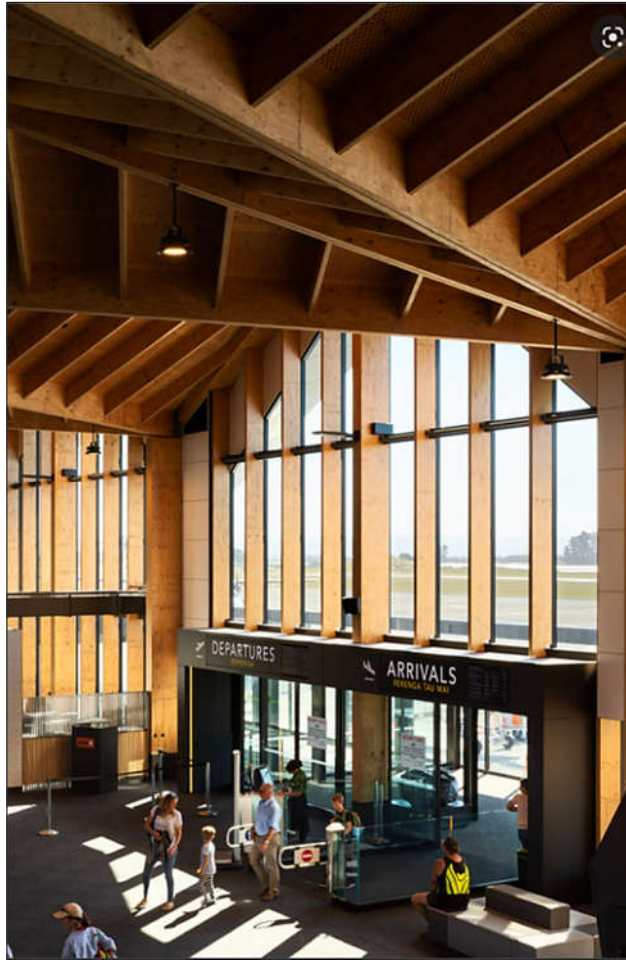
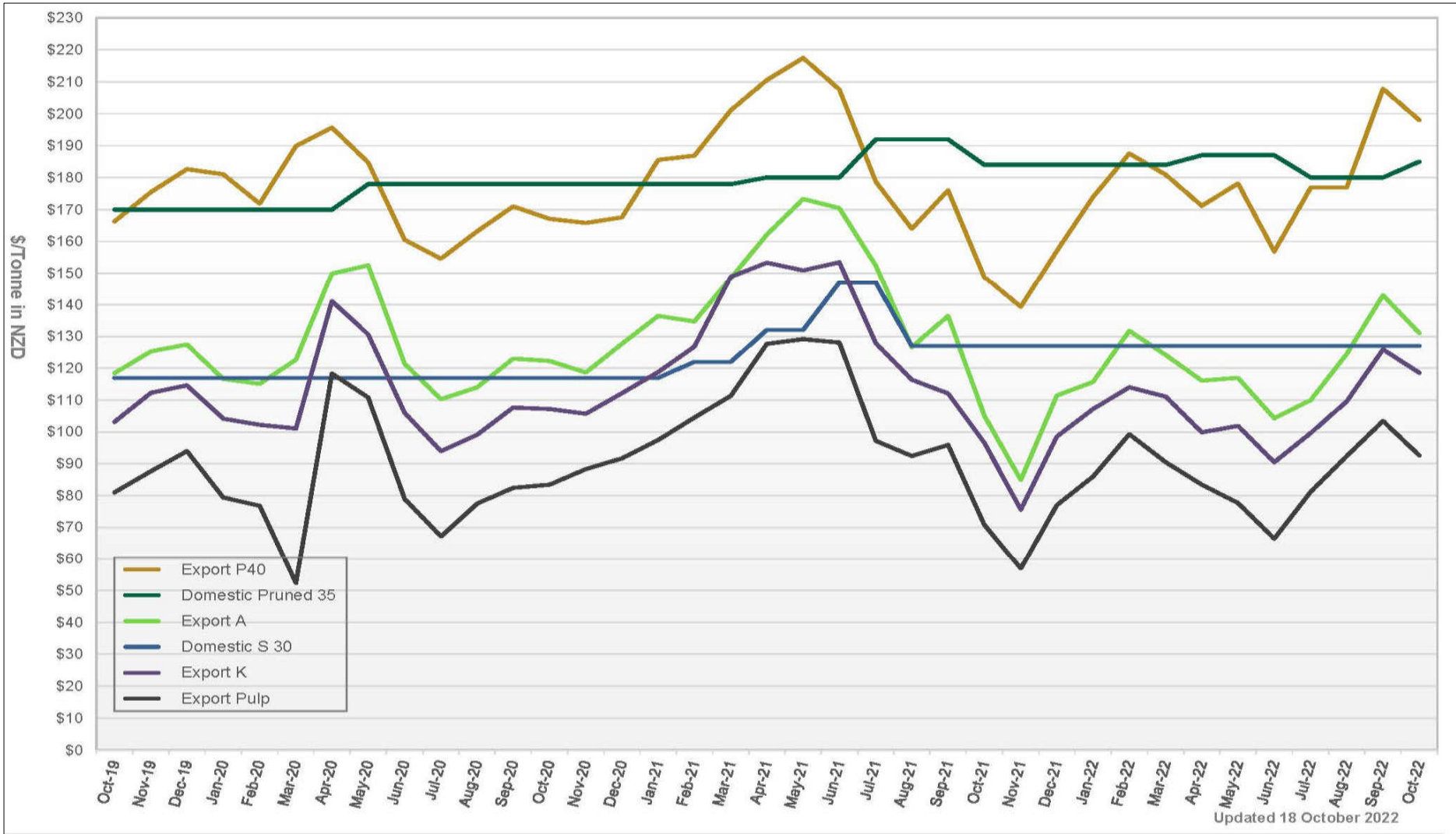


Photo 3: Nelson Airport



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.

