Log Market Analysis

January 2023



Photo 1: Parehaka Group Forest (Collective Harvest) Gisborne, after Cyclone Hale, January 2023; some slips but minimal harm.

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

I had a good holiday, which is nice, but I'm firmly back to reality now: storms, inflation and decreasing global confidence in property markets.

The East Coast regions of Gisborne, Hawke's Bay and Wairarapa have endured some extreme weather recently. We have inspected all of our sites closely.

Forest Enterprises' forests have all come through the storms largely intact. Importantly, we have not contributed slash or sedimentation onto our neighbour's properties except at the normal levels always seen. This outcome is largely due to forest locations, geology of the sites and the significant investment into best practise that investors have contributed to.

It's wise to be humble in these situations as geology and rainfall are only manageable at the margins. What we can manage is the standard of planning and works under our control. We often find ourselves defending what seem to be high costs, however in these storms we have only incurred normal damage, and with that, normal cost to make good. Some properties in Gisborne and Auckland have been very hard hit; sometimes this is pure chance and sometimes, in hindsight, improvements need to be made to standards and practises.

An enquiry into land use in Te Tairāwhiti is certain to go ahead and we hope it will be scientific and rigorous. It's likely that certain geologies are not suitable for any productive land use, be it farming, forestry or horticulture, and certain locations are not safe to construct homes, roads or rail networks. A large proportion of our Gisborne forests are on Red Zone land, but we are not seeing the mass slope failures, and associated slash migration reported north of Tolaga Bay, where soil types are more fragile.

We are holding our revenue levels well, despite decreasing global timber supply, the decline in demand from housing in most markets, and poor weather curtailing construction in North Asia. The news at a macro level might seem bad but we are still running at good price and demand levels currently.



Photo 2: Broadlands Group Forest (Collective Harvest) Gisborne, after Cyclone Hale, January 2023.



Wairarapa Log Prices Per Tonne

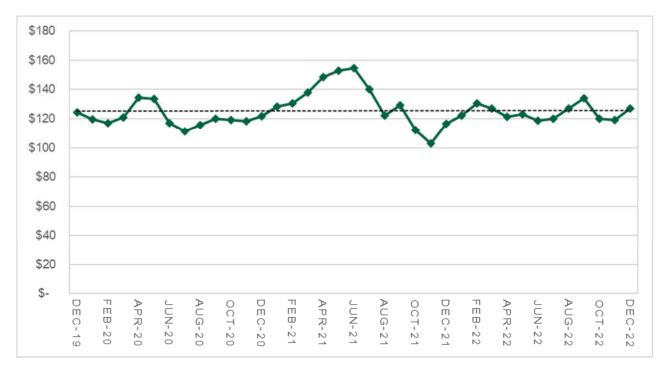
Grade	Forest Enterprises	Forest Enterprises	Current vs	Percentage of the
	Dec-22	36 Month Average	36 Month Average	36 Month Average
Export P40	\$187.15	\$177.05	\$10.10	106%
Export P30	\$154.25	\$152.50	\$1.75	101%
Export A	\$122.75	\$127.10	(\$4.35)	97%
Export K	\$108.60	\$112.60	(\$4.00)	96%
Export KI	\$102.30	\$103.60	(\$1.30)	99%
Export Pulp	\$88.45	\$89.50	(\$1.05)	99%
Domestic P35	\$185.00	\$180.95	\$4.05	102%
Domestic S30	\$127.00	\$124.50	\$2.50	102%
Domestic S20	\$112.00	\$109.50	\$2.50	102%
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 \$127.16 \$125.45 \$1.71
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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 Dec-22	Forest Enterprises 36 Month Average	Current vs 36 Month Average	Percentage of the 36 Month Average
Export P40	\$194.85	\$179.40	\$15.45	109%
Export P30	\$146.85	\$141.30	\$5.55	104%
Export A	\$127.35	\$127.90	(\$0.55)	100%
Export K	\$111.95	\$113.65	(\$1.70)	99%
Export KI	\$103.20	\$105.70	(\$2.50)	98%
Export Pulp	\$94.10	\$94.40	(\$0.30)	100%
Domestic P35	\$180.50	\$181.05	(\$0.55)	100%
Domestic S30	\$133.00	\$137.05	(\$4.05)	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	Index Log Price	\$135.36	\$132.65	\$2.71	102%
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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



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. 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 64.8c is a decline in trade terms for us compared with the last quarter's US 56c. This decreases our export log price in NZD terms.

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



Shipping

The bulk vessels used for log business are currently in higher demand for commodity crops like wheat from Australia and South America to China. Rates are currently described as soft, meaning lower than recent levels, but forecast to rise a little as demand for bulk handysize and supramax vessels in other commodity trades rises. Commodity demand forecasting is used for bulk vessel price negotiation and its often a dark art. The message is basically that shipping cost is lower than it has been but likely to rise somewhat. Large volumes of export logs are railed from Kawarau to Mt Maunganui, and the recent flooding has broken the rail link. This will impact shipping from Tauranga, and in turn other ships which call at Tauranga, especially from Gisborne where often deck cargos are required from deeper ports on top of Gisborne loads.



JAS to Tonne Conversion

JAS-to-tonne conversion increased to 100.1% as at 31 December 2022, up from 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.

China Rising.

South Korea Low demand, low price but trends with China price.

<u>India</u> Potential resumption of New Zealand supply.

<u>Japan</u> Low levels of activity.

Log Demand



Export Log Inventory in Market in Market

China Inventory of logs in China is a leading supply/price indicator. Inventory levels in China rose

to about 4.5 million JAS. Log supply rose from about 51 days of supply to 64 days with current usage at about 70,000 JAS per day. The speed that logs turn to lumber and lumber turns to cash drives market sentiment. China GDP is forecast to rise after a long period declining, so there is some optimism, despite severe cold weather slowing construction.

Things are delicately balanced and pundits aren't giving much to go on.

South Korea Cold weather and low construction numbers means sawmills are building stock and selling

below cost; demand is low.

India There has been commentary about possible changes in cargo fumigation conditions which

could open options to resume log supply to India.

Japan Not much activity in timber markets.



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Pruned Log Grades

Demand and price are holding. Some mills are short of logs for reasons like weather and low levels of woodlot harvest.

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New Zealand Domestic

Our customers remain consistent, and we have good demand and price conditions. Across the sawmilling industry there is currently a high level of pessimism regarding lumber demand as the property and construction sector is declining. Some sawmills have taken long shutdowns over the Christmas break to reduce lumber inventories.

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Housing and Business

Expectations of falling property price and increasing interest costs are reducing confidence among borrowers as well as banks. Domestic construction is slow, so lumber usage is declining.



Log Agency

Washups are generally in favour of investors as recent price rises flow through to increased revenues from sales settled after monthly prices were estimated. Forex declines reduce the value of washups as forex is set at date of sailing rather than monthly, however this is equally likely to work in our favour as not, so there is no likelihood of successfully predicting forex to fall or rise in the short term.

Log Supply

New Zealand Savage storms have curtailed production in rural forest areas with

challenging geography or underinvestment in infrastructure. Forest Enterprises' forests are all currently working to plan, with fully operational roads and transport networks, albeit with high levels of management input. New Zealand harvest production level is lower than the 5-year trend.

<u>Australia</u> There are opportunities for Australia to resume the mothballed log trade

into China, however implementation will take time and may not find favour

with investors.

<u>Europe and Russia</u> Coming out of winter, and seemingly through the worst of the beetle

damage forest salvage. But no respite from conflict in Ukraine which has

curtailed Russian log production and sales.

Pacific Northwest (PNW) The US has similar issues with housing affordability as New Zealand and

higher inflation rates slow down construction numbers. Log exports remain

at low levels.

Other The recent election in Brazil saw a return to the previous President who

promises to reduce logging in the Amazon. Politics is a tricky business in South America where election results are sometimes not well respected. Low-cost shipping, which is recently under trend cost, means that South

American log exports have become more viable.

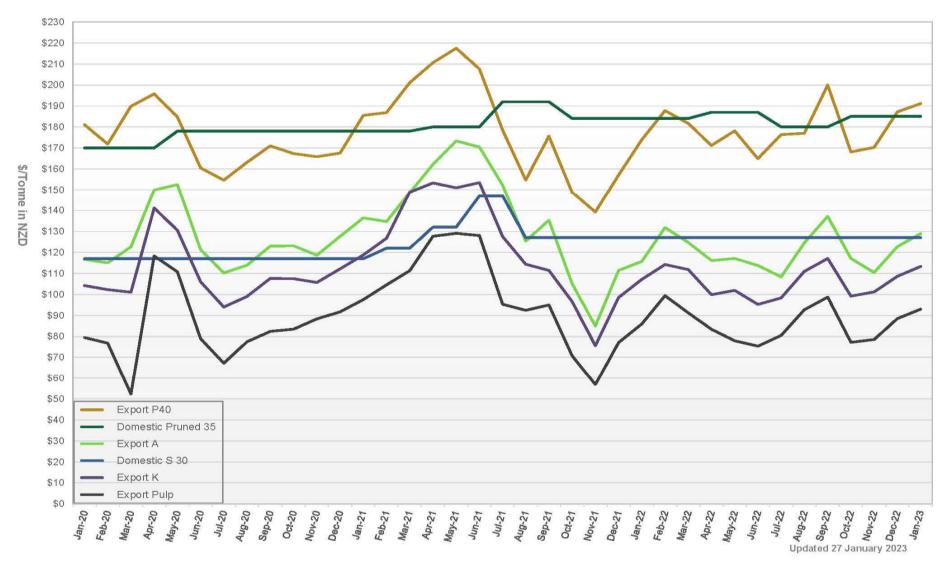


Point of Interest



Photo 3: A log train derailed enroute from Kawarau to Mt Maunganui (Photo: Tyson Smith/SunLive).

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.

