

Log Market Analysis

July 2023



Photo 1: Building a bridge, and getting over it, Ngahape Forest (Wairarapa).

The content of this Log Market Analysis is produced quarterly as part of 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, Gisborne and Hawke's Bay forest owners, plus a further 400,000 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 able to be foreseen.

Overview

If it wasn't for difficult market conditions I would be complaining about the weather, which has been pretty bad with endless rain. I think moving Christmas to July would be a good move because we would get more work done in the summer, rather than just going fishing.

Current economic conditions have made hard work of just getting by recently, with inflation, falling log prices and a general malaise of low optimism. Housing starts in New Zealand have slowed, and local sawmills are reducing stock levels, which flows directly to log demand and price. Our export log markets, led by China, are all battling similar trends with low demand, low activity and low price. You will see this play out in the price graphs of 36-month price average, and the price index representing a decline in mean price level in our "normal" forest. The index price tracked downwards for 5 months and saw a slight recovery in June.

Low price and low returns have led to us cutting log production levels (and employment) in forests, to preserve asset values and to reduce cost. This has been a very difficult operating period with disappointing results for investors.

I believe the worst is behind us, and we hope the small optimism in China this month continues to grow. Log markets are volatile and the best response we have is to operate efficiently and at scale because we have no real influence on commodity price.



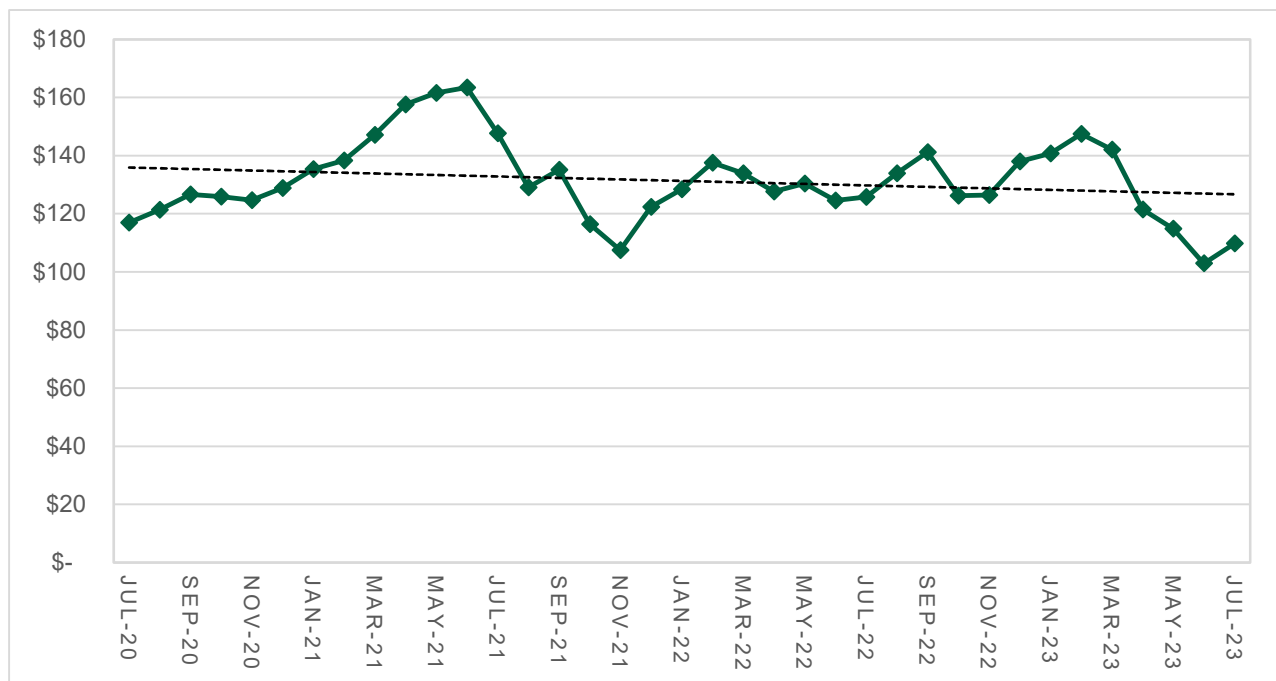
Photo 2: Pine trees that have been machine felled and bunched, Te Puhi Forest (Wairarapa).



Wairarapa Log Prices Per Tonne

| Grade | Forest Enterprises Jun-23 | Forest Enterprises 36 Month Average | Current vs 36 Month Average | Percentage of the 36 Month Average |
|--|---------------------------|-------------------------------------|-----------------------------|------------------------------------|
| Export P40 | \$123.25 | \$176.40 | (\$53.15) | 70% |
| Export P30 | \$112.15 | \$152.15 | (\$40.00) | 74% |
| Export A | \$87.30 | \$125.35 | (\$38.05) | 70% |
| Export K | \$68.35 | \$110.05 | (\$41.70) | 62% |
| Export KI | \$63.65 | \$102.40 | (\$38.75) | 62% |
| Export Pulp | \$50.75 | \$88.85 | (\$38.10) | 57% |
| Domestic P35 | \$188.00 | \$183.25 | \$4.75 | 103% |
| Domestic S30 | \$122.00 | \$126.05 | (\$4.05) | 97% |
| Domestic S20 | \$107.00 | \$111.05 | (\$4.05) | 96% |
| 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 | \$102.91 | \$131.90 | (\$28.99) | 78% |
| 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

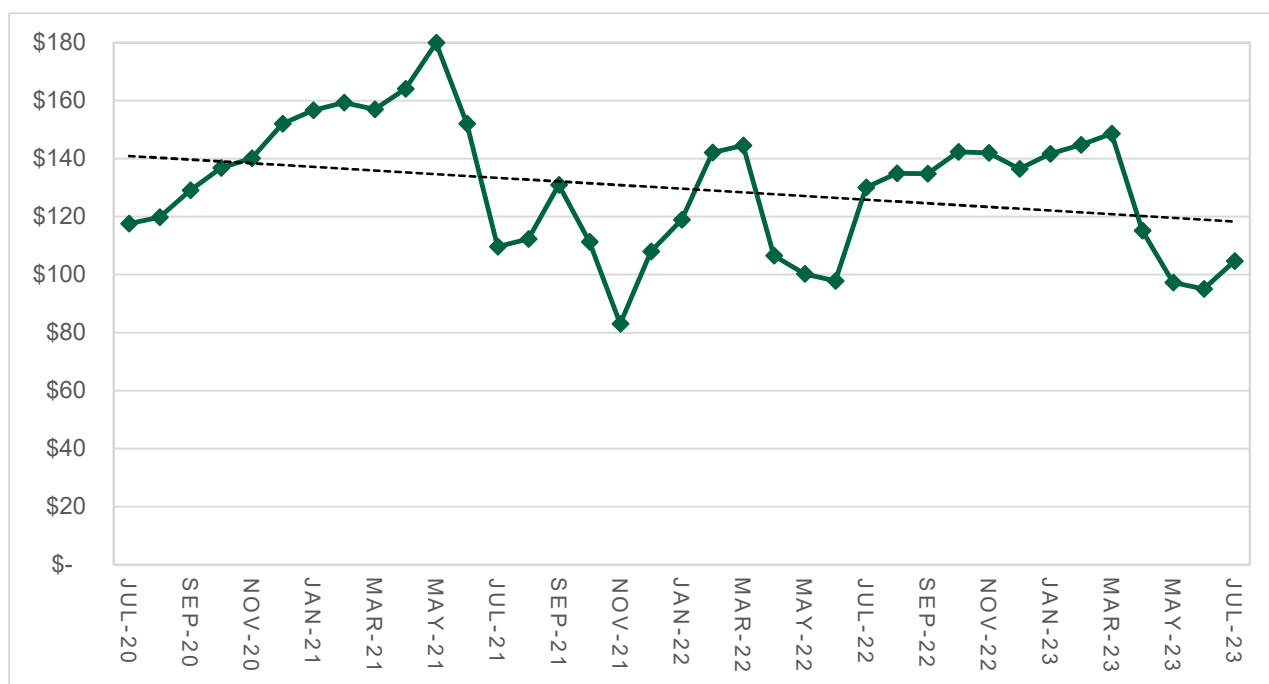
| Grade | Forest Enterprises Jun-23 | Forest Enterprises 36 Month Average | Current vs 36 Month Average | Percentage of the 36 Month Average |
|--------------|---------------------------|-------------------------------------|-----------------------------|------------------------------------|
| Export P40 | \$148.15 | \$179.65 | (\$31.50) | 82% |
| Export P30 | \$106.55 | \$140.90 | (\$34.35) | 76% |
| Export A | \$88.10 | \$125.15 | (\$37.05) | 70% |
| Export K | \$73.55 | \$109.55 | (\$36.00) | 67% |
| Export KI | \$65.30 | \$102.15 | (\$36.85) | 64% |
| Export Pulp | \$59.50 | \$91.70 | (\$32.20) | 65% |
| Domestic P35 | \$191.20 | \$180.30 | \$10.90 | 106% |
| 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 | \$95.10 | \$130.35 | (\$35.25) | 73% |
|-----------------|---------|----------|-----------|-----|

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



Hawke's Bay Log Prices Per Tonne

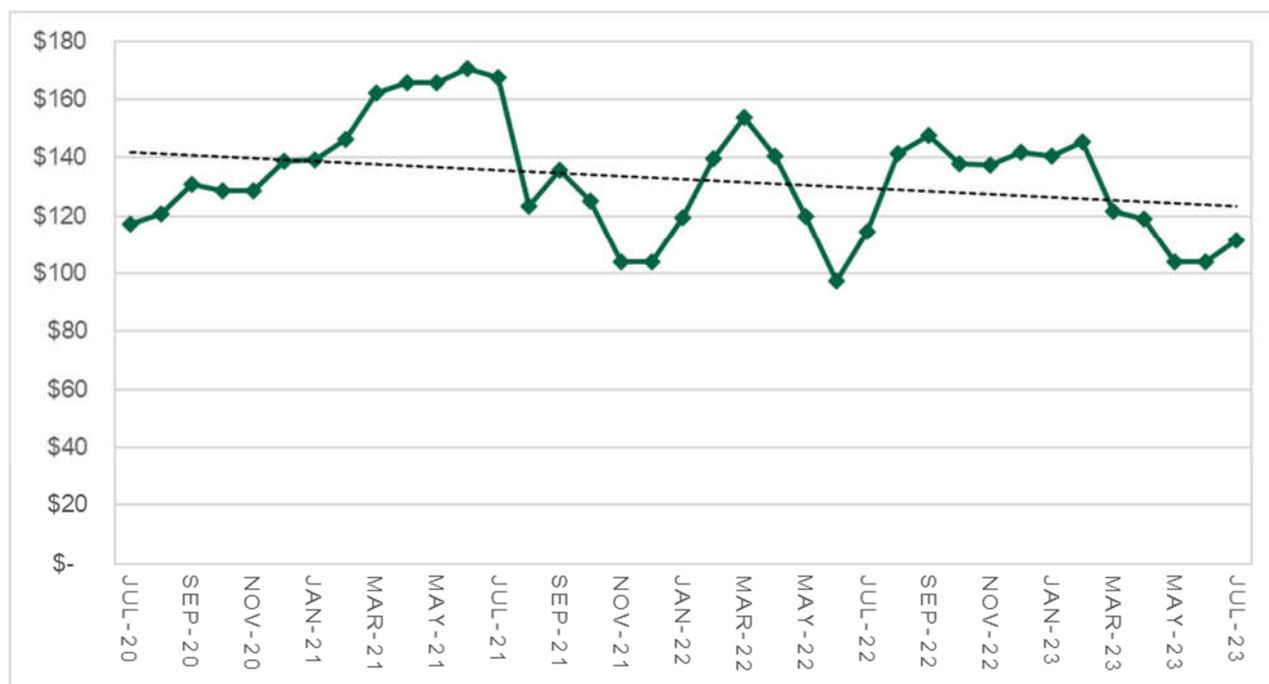
| Grade | Forest Enterprises Jun-23 | Forest Enterprises 36 Month Average | Current vs 36 Month Average | Percentage of the 36 Month Average |
|---------------|---------------------------|-------------------------------------|-----------------------------|------------------------------------|
| Export P40 | \$163.75 | \$184.75 | (\$21.00) | 89% |
| Export P30 | \$114.55 | \$148.10 | (\$33.55) | 77% |
| Export A | \$94.90 | \$126.75 | (\$31.85) | 75% |
| Export K | \$82.65 | \$114.30 | (\$31.65) | 72% |
| Export KI | \$77.85 | \$104.20 | (\$26.35) | 75% |
| Export Pulp | \$59.65 | \$89.10 | (\$29.45) | 67% |
| Domestic P35 | \$217.00 | \$178.45 | \$38.55 | 122% |
| Domestic Pulp | \$57.30 | \$49.45 | \$7.85 | 116% |

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 | \$104.24 | \$133.40 | (\$29.16) | 78% |
|-----------------|----------|----------|-----------|-----|

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 Hawke's Bay 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 imports and exports as well as a general level of confidence in the New Zealand economy in comparison with the USD. Inflation is a common topic which is often attributed to central banks boosting money supply. The current exchange rate position of about US62.1c is a decline in trade terms for New Zealand compared with last quarter's US61.4c. 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

Shipping costs have decreased since the last quarter. Often shipping cost for logs declines in step with global trade in the bulk commodities which use these ships. Fewer logs are being exported currently so demand for bulk ships has reduced. There is some sense that export log volume may start to recover as there is a little optimism around price, which gives ship owners hope for a further rise in shipping cost. It's complicated.

NZ Vessel Departure Report



↓ JAS to Tonne Conversion

JAS-to-tonne conversion has decreased over the last quarter to 96.2% vs. 98% at 31 March 2023. This is normal during the winter months with the higher water content in the logs, making them heavier and conversions lower.

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 correlated with 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.

↑ Log Price, Export CFR

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

China Rising from a low base.

South Korea Low; likely to follow China prices

India No change; waiting for fumigation rules to be resolved.

Japan Low.



Log Demand

↔ Export Log Inventory in Market in Market

| | |
|--------------------|--|
| <u>China</u> | Inventory of logs in China is a leading supply/price indicator. Inventory levels in China are fluctuating but recently declining to about 4.28 million JAS. Log supply declined from 71 days of supply to 65 days with current usage at about 66,000 JAS per day. The speed that logs turn to lumber and lumber turns to cash drives market sentiment. Chinese sawmills buy in USD per JAS and sell lumber in local currency and using a local Chinese log scale method. The difference in the log scale and currency terms is often out of balance but is now moving back in favour of Chinese sawmills giving some small level of optimism amongst current log buyers and sawmillers. See chart next page. |
| <u>South Korea</u> | Forest Enterprises has supplied some Wellington cargo into Korea above the current China price levels, however it's at low levels of production. Heavy rain and flooding has dampened demand for building products, and sawmills running on reduced capacity. Imported lumber is cheap compared with local sawmill output from imported logs. |
| <u>India</u> | Predictions of future benefits continue to come from India, but no business. |
| <u>Japan</u> | Slow production and low-price levels in lumber markets but hot and dry conditions aiding the construction business, the market remains weak. |

↔ Pruned Log Grades

Pruned log sales prices are at a good premium to unpruned logs and are not as volatile in price movement as industrial grades. Local sawmill demand remains steady for pruned grades, but the very large Pan Pac mill in Napier is undergoing considerable rebuilding after the flood events on the Esk River.

↔ New Zealand Domestic

Local business remains steady, and sawmills indicate a willingness to buy quality logs, but lower quality logs are being heavily discounted. We have significantly reduced our total log cut volume but retained our full quota of sales into our local customers through focus on service and quality.

↓ Housing and Business

House price has been ground down by high interest costs, high land cost, and high costs to build. There have been a few mortgagee sales at the distressed end of the market although those are kept fairly low key by lenders. The house market has stopped getting worse, which is near to being good news. New Zealand still needs a lot of low-cost housing for social reasons, and some building remains in evidence.

↓ Log Agency

Washups in log price follow a falling market down, as contracts and costs reflect short-term market conditions and recent sharp and sudden price falls resulted in price or term adjustments on planned shipments. These recent washup adjustments have been some of the worst in my experience, with substantial loss of expected revenues on cargoes. In our case, risk of price is taken by the forest in return for low trading margin or fee by the agent, reflecting their low exposure to price risk.

Exporters are advising that current cargoes are selling for more than previous expectation and predicting positive margins on this period's logs shipped.

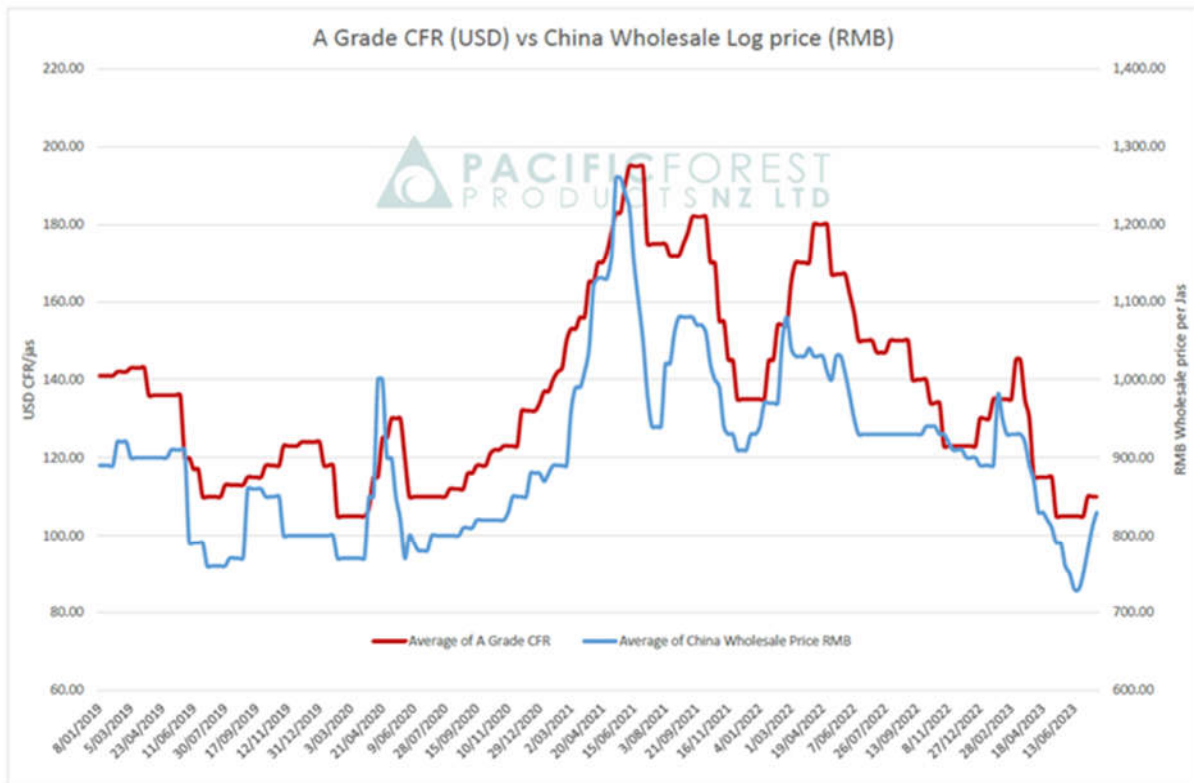
Log Supply

| | |
|--------------------------|--|
| <u>New Zealand</u> | Log supply has been cut dramatically, except where wind-affected forests are being salvaged. The very wet weather has hindered road construction into new sites and low log price has discouraged high-cost forests from harvesting. |
| <u>Australia</u> | Slow, and reasonably pessimistic. Australia was shut out of export to China because of reported insect infestation in logs. But the local industry has rebalanced into supplying local users and low volume export to Korea and India, and they are not yet returning to the China market. |
| <u>Europe and Russia</u> | Production is slow as the climate change forest mortality, from drought and insect infestation is largely cut out. European soft wood production now is lower but fresh timber is of better quality. |

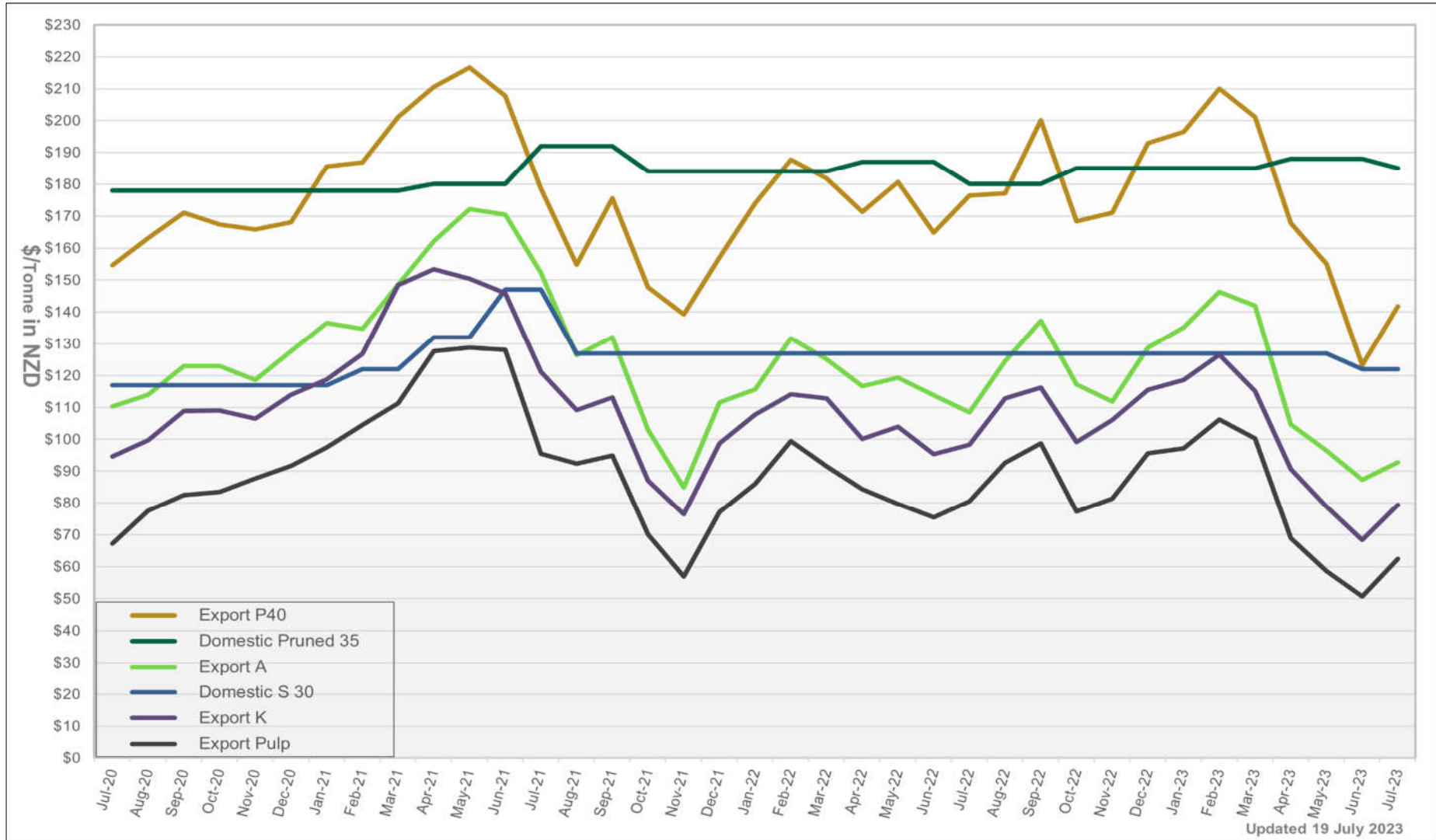


Point of Interest

The log price graph courtesy of PFP from their latest market report.



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.

