MARLBOROUGH FOREST INDUSTRY ASSOCIATION

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August 2009 Newsletter

Treetop Views

Hi all,

It is good to get a run of frosts followed by such lovely sunny days, may it continue well into the winter keeping our roads and skid sites mud levels to a minimum for those who are logging. The winter rains will come, we have had some rainy weather bring more mud.

Congratulations to Lou Jowers and family for being the winners of the Forestry Award at the

Marlborough Environment Awards, presented on Friday 8th May 2009. Lou bought this steep 48.5ha block in 2003 which had been logged. The lower 30ha was replanted in 1998 and 1999 and Lou replanted the balance in 2004.

The lower slopes and gully areas have been interplanted with native and exotic species to enhance/create the habitat for birds. Native species are left in places, especially in creeks and include whiteywood, coprosma species, karamu, tree ferns and kanuka. Wetlands are valued and left intact, with some enrichment plantings.

In the photo top left is Lou Jowers on the far left then his father Lloyd and Herbie Assink. Well done to Lou and his family for their efforts in enhancing their environment and being more environmental aware.

Forestry is one of New Zealand most environmental friendly industries, as individual growers we need to be more environmentally aware.

Our April field trip which was well attended started at the Nelson Forests Kaituna Mill office. Time was spent discussing several topics.

One was market outlook for timber and log sales, local and export markets. Another was on forestry insurance presented by Tony Gouldson of FMR Risk Solutions. The insurance that he is offering also covers wind fallen trees which may need to be considered with our changing environment affecting the weather patterns.

We then headed up the North Bank to Pine Valley and into a block of Nelson Forest Ltd which had been replanted over a number of years. Looked at some pruned and unpruned stands.

We then had a discussion on the pros and cons of whether to prune or not to prune.

To me it boils down to how much return you require on the money that you spend on your forest.

If you require a return of more than 9% on monies spent then you will not prune.

If you are happy with a return of 9% or less then you will prune to lift the tree quality.

Over the years the return for pruned logs has been steadily reducing and yet unpruned logs have remained the same when you level out the highs and lows. Marlborough and Nelson trees have the highest stiffness in this country, ideally suited for framing grades and LVL. For framing grades and LVL unpruned stands with small branching and older than 27 years are proving ideal.
27 - 30 year old trees from replanted blocks and scrubby land with final stockings of about 400 to 500 stems per ha (site dependent) give best results.
Thanks to Nelson Forest Ltd and Brendon Whitley for hosting our field trip.

Picton fumigation issues/concerns and public scare mongering with the use of methyl bromide- John MacKenzie, Murray Turbitt and I had a meeting with Ian Macnab General Manager of Port Marlborough to check out the facts, that protocols were being met and that the people of Picton were not being put at any risk. We also had a meeting with Rick Osborne of Zindia on this matter.
These meetings revealed a totally different scenario to what has been reported.
Below is the letter to the Editor that we put together to counter the misrepresentation of the facts stated in the media.

"The benefits of log exports
Marlborough's forest owners are delighted that the latest shipment of logs from Shakespeare Bay has gone ahead successfully. Hopefully the success of this shipment will encourage the log exporting company Zindia to stay in Marlborough and Port Marlborough will continue to enjoy the business generated from the log export trade.
Forest owners want the industry to be profitable but not at the expense of the health and safety of the Marlborough community. Port Marlborough's strict requirements to keep the level of gas emissions to one fifth of the level set by ERMA is welcome and has been met. Port Marlborough also use independent monitors, which also showed levels well below the tough standards, set by Port Marlborough. This industry nationwide is reliant on ERMA to have suitable fumigation products and to set suitable safety stands.
The forest industry in Marlborough generates $172 million dollars per year in regional GDP and employs over 1200 people based on a 2008 study of the sector by BERL. This is clearly an important contribution to the regional economy.
Well done Zindia and Port Marlborough for achieving another successful shipment and for adding to the regions prosperity in these difficult economic times."

Kevin Parkes

MARKET OPINION – JULY 2009
"Green shoots" are the current financial buzz words to use to impress your friends. "Green shoots" are what all the worlds central bankers are eagerly watching for in the doom and gloom of the "Credit crunch". Many of these shoots may have germinated prematurely and are going a bit brown but I am pleased to report that there are some green shoots in the forestry industry which seem to be staying green and perhaps even growing a bit, despite the economic cold.
The most exciting places for wood are China and India, both with huge populations and large domestic economies, but without the massive borrowings and debt bubbles of other countries.
Thanks to the "credit crunch", shipping costs for logs are significantly lower than they were nine months ago, and look to stay around current levels for a while. Our radiata pine is now fitting in to more competitive price brackets where volume demand is higher. Log exports from NZ are running at twice the volume that they were a year ago.
The NZ dollar appears to be rising steadily to frustrate NZ exporters but the real truth is that the Kiwi is not rising, it is the $US that is falling. It is falling against most other currencies making it easier to increase $US prices in our markets outside of the USA. The trick now is for NZ exporters to keep the pitchfork behind their salespeople.
There are not so many "green shoots" for saw millers but markets such as Australia are holding up well thanks to economic stimulus packages keeping the money flowing in to building and infrastructure. The NZ Wood campaign will also help to push the benefits of wood over steel, concrete, and other wood substitutes.
Looking forward, the energy value of sawmill and logging wastes is rapidly increasing and will play an increasingly important part in forest economics.
We must be optimistic that we have reached the bottom of the "credit crunch", destocking cycle, and that forestry returns can go on quietly improving here on in. In the meantime I must get on with applying for those carbon credits!

Cheers
Rick Osborne

FORESTRY ENVIRONMENTAL AWARD

Winner of the Forestry Marlborough Environmental Award, Lou Jowers, Paula (his wife), Lloyd (his father), Herbie (his friend) all made us welcome as did several birds in full song at Kenningtons Road

near Okaramio. About thirty people attended a field day at the Jowers' forest in recognition of winning the award.

Scientist, Don Bell's informative talk was about encouraging native birds which included the modus operandi of tui (alpha males reconnoitre feed sources by perching in emergent, often sparsely leafed, trees nearby before returning later with their "family" to feed). This was followed by a stroll through the lower part of the block which I think of as a park with a blend of mixed plantings comprising:-

- on the one side, a well laid out wetland,
- and on the other side an efficient and tidy base camp.

Time on the day did not permit examination of the remainder of the block. This is a well tended, easily accessible commercial radiata forest which reflects the considerable money and time expended By Lou and his team.

All in all, an interesting morning out which showcased a well earned award.

Graham Sharland.

THE ASSOCIATION'S ROLE IN THE ENVIRONMENTAL AWARDS

I believe I speak for the entire executive, when I make the claim that the awards process is good publicity for the standing of forestry in Marlborough. To that end both the sponsorship of the forestry prize plus the provision of two of the three forestry judges by our association is necessary and desirable.

Graham Sharland.

Market Outlook for Pruned Logs

Notes for a talk given by Aaron Robinson at Kaituna Mill in early April-2009, on the field day to discuss NFL's decision to stop Pruning

Unfortunately due to a miss match of dates on my behalf neither the Kaituna Marketing Manager (Mike McManaway) or Site Manager (Matt Bond) is unable to talk to us. Therefore Matt and Mike have given me a briefing so I will endeavour to pass onto you on how they see the value of pruned logs to the Kaituna business.

Firstly a bit of back ground on the Kaituna mill:

- Kaituna is one of a few mills who only cut pruned logs
- Kaituna is a pruned saw log mill as opposed to a pruned peeler mill (plywood)
- 45 000 m3 of product out annually (medium sized mill for NZ)
- Markets - domestic, Australia, Spain, US and low grade to Asia

From the pruned log the following products are cut at Kaituna in order of value:

- Long clears (US/Spain)
- 100/100 (outside veranda poles for Australia)
- Clear mix (Domestic and Spain)
- F7 (outdoor structural fencing/decking type use, Domestic/Australia)
- Industrial (Domestic and also Vietnam for furniture) – Vietnam has low wage rates and they can afford to pay people to work with low grade timber to make furniture, a lot of this furniture comes back to NZ (Harvey Norman).
- Flitch (Asia)

What does the Kaituna business think about Pruned Logs?

Mike and Matt said pruned is a winning strategy for the Kaituna business, they see it as their competitive advantage to be starting with a good resource.

It doesn't matter what grade is cut from a pruned saw log the quality is always better than grades cut from framing type logs. Even when you get down to the lower grade i.e. industrial or flitch from the centre of the pruned log the quality is better. Why - less knots and live knots as compared to dead knots. So how does this help this business?

- Customers want your wood over other suppliers with lumber from framing logs
- Able to get good prices comparatively
- Future market security
- If you are just in the framing market you are reliant on the building industry (which as we know is very up and down)

A recent example - Kaituna send flitch to Korea (flitch is the product which is left from the centre of the saw log). Korean demand has recently been slow, One of their customers who did buy flitch from 6 suppliers recently cut this back to one supplier, Kaituna because their product is superior.

The Kaituna F7 which competes with F7 from framing saw logs consistently sells. Kaituna are selling considerable volume month after month at a good price.

If price is equal Kaituna lumber will always sell, but they do try to be $10-$15 ahead of the market.

Kaituna have found that specialising in cutting pruned saw logs is great insurance in a market downturn.

In the US people have moved towards radiata clears rather than more expensive species. Radiata is at the bottom of the clears markets, it is good quality but at a lower price. Move away from the more expensive Oak (US$2000m3) and Poplar (US$1500m3) Radiata (US$1000m3)(12x1)(4x1 dressing grade US$350). It appears that radiata pine is recession proof!!

Substitution is happening people are turning to radiata.

Kaituna is currently sending 8-10 containers to the US a month of clears, they have more demand than supply. Mike and Matt are confident they could sell 15 containers a month if they had the product.

Kaituna has the potential to increase pruned markets but they can't keep up with demand.

High Grade verse Low Grade

One of the economic measurements Kaituna use is the percentage of high grade verse low grade they cut from the logs.

- High grade is defined as making $100 gross profit plus is made per m3.
- Low grade is less than $100 per m3 for that particular grade.

From PSL Kaituna – 65-70% high grade where as sawmills cutting framing logs only achieve approximately 35% high grade.

Demand for Pruned Log

For the next 20 years in Nelson/Marlborough there is approximately 180 000m3 of pruned wood available.

Currently used
70 000m3 NF
30 000m3 Westco
20 000m3 Flight Timbers
10 000m3 IPL
130 000m3 TOTAL

Low quality pruned will not be taken at pruned log price.

- US House starts graph (interesting graph used to help measure the demand for NZ pruned)

Future Prices for Pruned Log

Current pruned prices are based on the average log in the gate and allow for some defects. I was told that if pruned logs have a smaller DOS (15-18cm), and larger SED (45cm) and are longs Kaituna could afford to pay more for the logs, around $150-160m3 which is $20-30 above the current price.

Just because the log is pruned doesn't mean it is high quality, often issues with:

- Internal defects
  - Resign pockets
  - Large defect core

I asked Matt what his prediction on pruned price, he said that depends on product demand and what people are prepared to pay. He suggested I ask the group today:

- Do you have a wooden or plastic toilet seat
- Do you have wooden or aluminium window frames

Message from Kaituna on Pruned Logs

Cutting pruned logs allows Kaituna:

- Mill to make extra margin that others don't.
- Market diversification (Mouldings, furniture, clear retail for home handy Depo i.e. people building bookcases etc.
- Return is 4 times greater to them for clear products than non-clear products.
- Pruned has given Kaituna a significant competitive advantage.
- If you are a small to medium sized mill and you don't have high value products you are not going to make it.

Aaron Robinson

Site Selection for Pruning

Determining which regime is optimal for which site is usually made by assessing a variety of factors. Sometimes the decision is clear cut, more often however it isn't. The right decision can add value, the wrong decision can destroy value. The dilemma facing foresters is being able to make that decision given the long term nature of forestry and the shorter term ever changing nature of markets.

NFL uses a mix of objective and subjective rationale to ensure robust regime decisions. Criteria for clearwood are;

1. H&S Factors
Hazardous stands are not pruned, instead they're scheduled for framing or left untended (e.g. very steep, rock bluffs).

2. Access
Stands with very heavy hindrance and/or poor access are scheduled for framing as this can add too much expense to pruning.

3. Stand Health and Quality
Areas known for high resin pocket content are automatically scheduled for framing. Also ex-farm high fertility sites are often scheduled for framing. Sometimes areas noted for high dothistroma infection are pruned.

4. NPV Analysis
At a higher level NPV analysis is used to compare regimes at different productivity and clearfell ages. It's no real surprise that NPV results suggest pruning the best growth sites results in the best returns. All poor sites (low fertility, gappy, exposed, poor establishment) are scheduled for framing.

5. Pre-assessment
All remaining stands are pre-assessed at age 6 to provide growth and stocking data. This is plugged into a growth model to determine productivity and to schedule operation timing. Also;
- If there are less than 250 acceptable sph the stand is scheduled for framing. i.e. gappy and/or high malform.
- if a DOS of under 19cm in two lifts to 5.6m can't be achieved the stand is scheduled for framing.

6. Stratification
If there is high variation within a stand and boundaries are evident stratification is considered (e.g. prune only a faster growing northern aspect).

7. Surrounding Stands
If all surrounding stands are pruned and of similar age class a poorer site may be pruned to ensure uniform grade output during harvest. Likewise checking growth and form of older surrounding stands can be valuable in assisting the decision to prune or not.

8. Labour Availability
If constrained by labour availability stands are prioritized and some may move to framing.

9. Forester Experience and Intuition
Should not be underestimated. Pre-assessment and growth functions are only tools and can be biased, especially when collecting growth data at such a young age. Often it's difficult to beat the judgment of an experienced Forester.

For those who are interested an excellent source of information on pruning for forest owners is the 'Radiata Pine Growers Manual' by J P Maclaren. FRI Bulletin No 184. This is available from Scion (formally Forest Research Institute) at 'scionresearch.com'

Brendon Whitley

Why has Nelson Forests Ltd Stopped Pruning?

At the end of last year NFL ceased pruning in its estate. The rationale for this decision was complex and not straight forward, in the end NFL did what was considered best to meet the needs of our business owner. Some of the points that were considered include:

Pro-Pruning

- Pruning provides an "option" for products vs commodities and the ability to leverage the value of unpruned wood.
- Pruning spreads risk as it can be cut for any market. Framing on the other hand is only good for saw logs.
- The distance from markets and freight cost disadvantages lower value products.
- Opportunities exist in stile and rail doors, windows and clear pine board markets.
- Unpruned log margins are affected by substitution and growth in engineered wood products. However engineered products are expensive and in the longer term energy costs may have an impact on the economics.
- NZ radiata lumber is viewed as inferior as structural product in many markets (some potential through silviculture and genetics to improve MoE and price).
- There is a strong pruned log processing industry already in Marlborough (Kaituna, Flights).
- Pruning helps maintains a skilled labour force for planting and fire suppression.
- Private forest owners may be able to make use of cheaper labour or prune themselves at no or little cost.
- For financial NPV analysis, Private forest owners may have the freedom of selecting a lower discount rate than forestry companies, which could favour pruning.
- NPV analysis aside (i.e. cost of money over time), stumpage (value) from pruned stands is higher than from unpruned stands.

Pro-Framing

- Significant clearwood supply regions in NZ, Chile, Brazil, Uruguay, S Africa, with US south (plantation) and Russia (red pine) potential suppliers. This may lead to a future over supply of clearwood.
- Distance from markets, freight cost, and high relative labour costs makes it difficult to compete with clearwood products from low cost producers like South America (though NZ well placed to Asia as a potential future clearwood market).
- Middle East, India, China and Korea are likely to continue to be good industrial markets.

- Markets becoming more discerning especially in "fit for purpose" qualities like resin blemishes, internal checking and stiffness, stability and performance in service.
- Nelson - Marlborough region grows good quality structural wood (density, stiffness, stability, small branching) compared with many other regions in NZ.
- New tools and knowledge has enhanced understanding of wood properties. Significant potential exists to improve MoE (Modulus of Elasticity = measure of wood quality) through site selection, regime choice, and genetics.
- Eliminates the risk of injuries to workers from pruning (e.g. ladder falls).
- Less risk tied up in a framing stand (e.g. windthrow).
- Clearwood stands need to be grown to a full rotation, framing stands have the flexibility of being able to be cut earlier if required.
- Future 'green crops' (carbon, bio-fuel…) will benefit high stocked, high yield framing regimes.
- Harvesting costs can be comparatively lower than in clearwood stands.

There are many factors that can be considered when making a regime decision. Often there is no wrong or right answer. It's important to understand that every forest owner has different objectives and resource characteristics that need to be weighed up to determine what's best for them.

Brendon Whitley

Framing regimes

Notes for a talk given by Aaron Robinson in early April-2009, on the field day to discuss NFL's decision to stop Pruning

What are some of the benefits of Framing over Clear-Wood regimes?

Lower cost per ha = better cash flow

- The cost of pruning has been steadily increasing over time.
- Clear wood regime - Typical two prunes and one thin regime costs around $1700 per hectare.
- Framing – One thin costs around $400 per hectare.
- Difference of $1300 per hectare.
- If the site is a medium to high BA index site (which may qualify for pruning) the cost per hectare for framing is much lower for a not much lower IRR. The cost of pruning as a marginal operation does not return as much as the cost of buying more land and establishing framing.

Heath and Safety

Less potential for injury or harm, as less man hours required for silviculture.

Volume

Higher total volume from framing stands as compared to pruned.

Carbon

- Higher volume per hectare with framing regimes therefore higher carbon sequestration rates so the grower earning more NZU's per hectare as compared to a clear wood regime.
- LEV (maximum that can be paid to achieve a given rate of return) table (University of Canterbury 2008) wood and carbon sale from forest – Discount rate 8%, $20 per NZU:
- Clearwood - $3378 (26yrs)
- Framing (500 sph) - $3866 (29yrs)
- Plant and leave (800 sph) -$5009 (35yrs)

Stiffness

- The higher stocking promotes stiffness for structural purposes (MSG) or for LVL.
- Nelson/Marlborough grows Radiata pine with a higher Modulas of Elasticity (MoE) as compared to many other regions of New Zealand so we have an advantage in the framing market. Pruned wood is not typically used for structural uses therefore why prune and waste the MoE competitive advantage we have in this region.

Risk

- Less risk of investing money into silviculture and having logs, stands or forests downgraded due to internal defects. Internal defects in logs are not a rare occurrence in pruned stands.
- Reduces investment amount on - 'at risk sites' i.e. if they are likely to be burnt or wind thrown before maturity.

Rotation Age

Pruned stands really need to be $2m^3$ piece size. This larger piece size is not required for Framing. Pruned stands typically have a rotation of 30 years plus as compared to framing stands with a rotation age of 26-27 years plus.

Rate of return

At current pruned prices a better rate of return from framing on low to medium growth sites.

Exposed sites

In exposed sites the inter-tree shelter is achieved quicker which promotes better tree growth.

Quality

- Earlier canopy closure due to higher stocking results in a lower taper and smaller branch size – both of which improve value.
- Quality of top logs is better i.e. 2 or 3 domestic saw logs rather than a pruned log then an export which often occurs in pruned stands.
- On fertile sites the unpruned logs are of higher value as you don't get as much KI or export grades due to a higher stocking.

Harvesting cost

- With more and more mechanical harvesting/process these day the smaller piece size framing stands can be cheaper to harvest.
- Greater volume to share fixed costs over i.e. harvest planning, crew shifting, roading.
- The lower taper from the higher stocking gives a better volume to weight conversion. Therefore logs which are sold in volume (export) are cheaper to harvest as logging and trucking costs are normally in weight or tonnes.

Aaron Robinson

A NEW FORESTRY TRADE FOR MARLBOROUGH

In mid June the ship "POS Auckland" was loaded with the first ever consignment of sawn lumber from Picton, bound for the Indian market. Up until now logs only have been sent to the Indian market but Zindia Ltd has seen an opportunity to supply sawn "Industrial" grade lumber there.

1600 cubic metres of sawn lumber from Flight Timbers Ltd. were loaded on deck at Shakespeare Bay, Picton. These were added to at Nelson and Tauranga making up over 8500 cubic meters. The ship also carried 20,000 cubic meters of logs under deck.

This is a "first" for Zindia Ltd. and initial market acceptance for the product has been promising enough to encourage the company to plan for ongoing shipments.

Industrial grades of lumber arise from the lower density centre core of radiata logs and are a high volume, lower value part of sawmilling output. The ability to shift volumes of this product to market at lower freight costs is helpful for both sawmillers and their grower suppliers.

Kevin Parkes

MAF have produced a paper called

"Situation and Outlook for New Zealand Agriculture and Forestry (July 2009)" The plantation forest section can be found at:

http://www.maf.govt.nz/mafnet/rural-nz/statistics-and-forecasts/sonzaf/2009/09-forestry.pdf

Sustainable Forestry bulletin

Issue 7 July 2009

Emissions Trading Scheme (ETS) Forestry update

- Forestry remains actively in the ETS.
- The obligation to surrender emissions units to meet deforestation liabilities from 1 January 2008 remains unchanged. However, there is a delay in the date by which emissions units have to be surrendered in order to meet deforestation obligations – along with changes to certain notification requirements.
- **FOR PRE-1990 FOREST LAND,** on 30 June 2009 the Government amended the Climate Change Response Act 2002 (CCRA) as follows:
  - the notification deadline for deforestation of pre-1990 forest land that occurred during 2008 and 2009 has been deferred from 31 January 2009 to 31 January 2010;
  - participants will not be penalised for failing to notify deforestation of pre-1990 forests by the old deadline (31 January, 2009), provided the participant notifies by 31 January 2010;
  - participants who deforested pre-1990 forest land during 2008 or 2009 are still obliged to file an emissions return quantifying their deforestation liability, between 1 January and 31 March 2010 (there has been no change to these dates);
  - the deadline for surrendering emissions units to meet deforestation liabilities reported in an emissions return has been deferred from 30 April 2010 to 30 April 2011. Participants may chose to surrender emissions units to meet their deforestation liabilities anytime between 1 January 2011 and 30 April 2011;
  - the 30 June 2009 deadline for applications for a less than 50 hectare exemption has been revoked. A new deadline, no later than 1 July 2010, will be prescribed by regulation or public notice;
- **FOR POST-1989 FOREST LAND** the Government made no changes to the CCRA. Applications may still be made at any time to voluntarily register post-1989 forest land in the ETS. Registered ETS participants remain entitled to receive New Zealand Units (NZUs) for increases in net carbon stocks from 1 January 2008.

- For more information call **0800 CLIMATE** or visit **WWW.MAF.GOVT.NZ/SUSTAINABLE-FORESTRY**

New Zealand Government