

3 Proven Ways you can get the BEST VALUE from Forestry Management

What extra value does a Forestry Manager add to my investment and how?

1. A Forestry Manager ensures you can make your decisions based on FACT and proven results, rather than hopeful predictions

Making the right decisions in the first place is vital and to do this you need all the correct factual information. You need professional advice about the best planting stock to meet your needs, site location and condition analysis, tending and end product market requirements.

One of the major costs of replanting is purchasing treestocks so these decisions should be given time, information and thought. As the founding members of the Radiata Pine Breeding Company, PF Olsen has access to the latest breeding value information and the best germplasm.

2. Reducing Risks has a direct impact on your Costs

For land owners the exposure to financial, environmental, health & safety and statutory risks are rife. With a forest manager you hand all that over to be professionally taken care of by systems backed with years of development and experience. PF Olsen has proven quality and environmental management systems that are reflected in their ISO 9001 and ISO 14001 certifications. This means PF Olsen is the low risk option because they are doing the job with staff, systems and relationships in place. Because PF Olsen is a large company, the cost of developing comprehensive systems is spread across a wider number of clients, and this means lower cost to individual land owners.

3. SELECTING THE RIGHT REGIME and getting the timing right has a Huge Impact on Financial Returns

It is disheartening to see so many poorly managed forests around New Zealand. They come in various forms - 1) Totally incorrect regime choice for the site. For example, it can be a waste of money pruning trees in poor quality, drought prone, exposed sites as the incidence of resin pocket defects can completely negate the benefits of pruning. 2) Correct regime but poor execution of treatments. This is often the result of work undertaken by dodgy contractors and poor quality control. 3) The "Window-Dressing" stand is one that looks good on the outside but doesn't deliver on the inside. A typical situation here is late pruning where the operation adds no value to the crop in terms of clearwood and has simply cost the woodlot owner money with no benefit.

PF Olsen can assist forest owners make the right regime choice. Our membership of the Wood Quality Initiative (WQI) gives us access to leading-edge research that directs decision-making to the best planting stock and regime choice. Once the regime has been chosen, PF Olsen will ensure that all operations are carried out to a high standard and on time. With PF Olsen there will be no wasted expenditure on operations that do not add value.

How to make even MORE MONEY from trees THE SECOND TIME AROUND

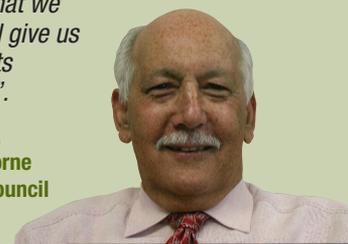
You've harvested your woodlot, made a tidy profit and are now thinking, "So, what's next?" If you're considering replanting then you could be making a financially wise decision.

Considering replanting your forest can actually be a straight forward decision. This is because the first rotation will have provided the forest owner with knowledge of the site's physical quality and ability to grow [SEE PAGE 2](#)



"PF Olsen take care of all our forestry management and the advice they have given us has been proven with very fruitful results. The Council own a large number of forests, all under different regimes with different species and expected outcomes - PF Olsen is right up with the play in terms of a complete service that we know will give us the results we need".

Bob Elliot,
CEO Gisborne
District Council



>> How to learn from your last crop, so your second rotation gives a BETTER RETURN
[SEE PAGE 2](#)

>> How you can still move forward, even if you've missed replanting season.

With "containerised" treestock, moisture is plugged in around the roots, allowing successful re-establishment right up to the end of November... sometimes even up to Christmas. [SEE PAGE 3](#)

>> Calculate your REAL investment from the beginning with accurate mapping.

How mapping a forest can help you forecast. [SEE PAGE 3](#)



How to make even **MORE MONEY** from trees **THE SECOND TIME AROUND**

You've harvested your woodlot, made a tidy profit and are now thinking, "So, what's next?" If you're considering replanting then you could be making a financially wise decision.

Considering replanting your forest can actually be a very straightforward decision. This is because the first rotation will have provided you with knowledge of the site's physical quality and ability to grow a high quality forest – one that can be harvested and marketed for a healthy profit. And, the good news is, the opportunity exists to do significantly better from the second rotation.

This is due to the following factors:

- Access to the site will be greatly improved following the harvesting. This will lead to cost savings in forest operations such as planting, releasing, pruning and thinning and the next harvest.
- The costs of re-establishing and managing the second rotation relative to the first rotation will be reduced. This is due to improvements in land preparation techniques (better and cheaper weed control chemicals) and better establishment and survival rates with lower initial planting stockings.
- Planting genetically improved tree-stocks will give more log volume from the site. Genetically improved tree-stocks will also provide trees with improved form, lighter branching and better wood properties. This all translates to better quality wood and more of it.
- Research and experience has improved regime design.
- Evaluation of the prior crop's performance enables regimes to be tailor-made for specific sites and end-use markets.

Is replanting right for you?

Replanting a forest is a major investment decision but decisions such as your choice of planting stock should be given a high priority.

Most forest owners are now opting to replant with genetically improved trees – this option would not have been available when woodlots being harvested today were established.

It is PF Olsen's view that selecting genetically improved tree-stocks to match the characteristics of specific sites is a sound practice. This may incur some extra costs but these are justified.

A well-designed re-establishment programme, with genetically improved tree-stocks, can provide many advantages:

- Better survival and establishment
- Improved volume growth
- Improved form, leading to increased numbers of acceptable stems and lower tending costs
- Improved log and wood properties such as higher wood density, greater stiffness and lower incidence of spiral grain.

PF Olsen - as foundation members of the Radiata Pine Breeding Research Company - has access to the latest breeding value information and research, and to the current best germplasm.

PF Olsen is also the only forestry consultant and manager in a position to be able to offer up-to-the-minute advice on the best planting stock to meet client needs, site preparation, tending and end product or market requirements.

Why wouldn't you replant?

It is possible that during the first rotation an alternative higher value land use may have arisen. In this case the land owner would be likely to change the land's use to something more suitable.

What if I've harvested out of replanting season?

Traditionally, harvested cutover sites not ready for replanting by August each year would be left unplanted until the following winter.

PF Olsen's experience with "containerised" stock is that harvested cutover sites can be successfully re-established up to the end of November and even up to Christmas (more info on page 3).

How can you profit from replanting?

In order to do better from the second rotation it will be important to avoid any of the mistakes of the first rotation. The following checklist will help woodlot owners get the most out of their forest investment.

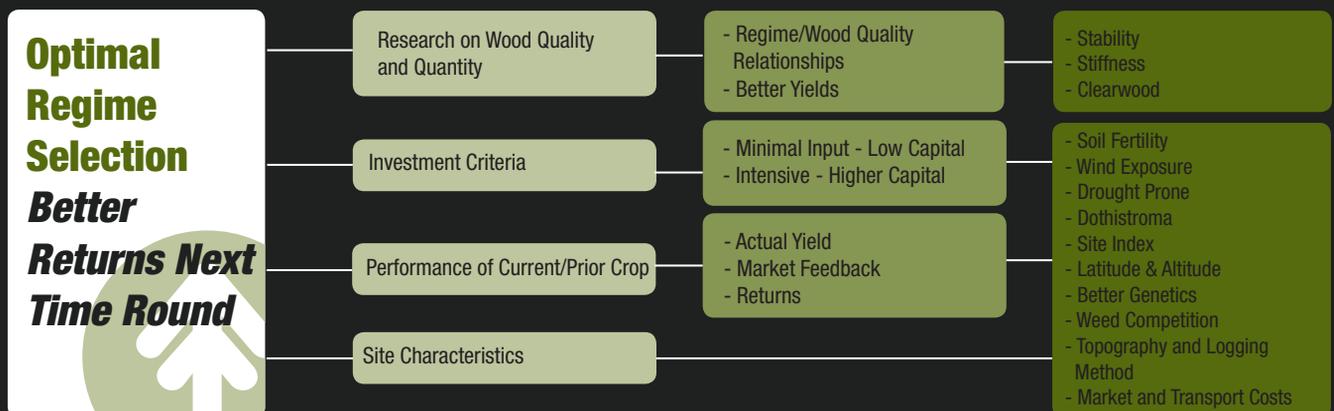
- Have a Management Plan to set out objectives and operations to re-establish and manage your forest.
- Select and purchase the tree-stocks best suited to your site and management objectives.
- Ensure trees get a good start through thorough site preparation. This includes controlling weeds and cultivating any land that may have been compacted during the harvesting operations.
- Good planting followed by good weed control. Young pines are vulnerable for the first year and can easily be smothered. Good initial weed control affects long-term performance.
- Control pests and keep stock out.
- Follow a tending regime best suited to your site and management objectives.

“ Understanding of prior crop's performance enables regimes to be tailor-made for specific sites and end use markets. ”

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How to learn from your last crop, so your second rotation gives a better return

By evaluating the performance of the last crop and its interaction with the site, much better species, seed stock and silviculture regimes can be selected for the next rotation. Knowledge of research into wood quality and future wood markets is also crucial to making the best decisions.



What are the sensible replanting options?

Regime selection needs to consider wood quality research, evaluation of the last crop and site characteristics, plus looking at future wood markets.

The three distinctly different regime options are described below.

The first one is INTENSIVE and it is the dominant regime used by smaller forest owners...

It includes planting at a stocking rate of 800 to 1000 stems per hectare, three pruning lifts and two thinnings to waste. This leaves a final crop stocking of around 300 to 350 stems per hectare, which are pruned to 5.5 to 6.5 metres in height. There are some variations to this regime like only completing two lifts to achieve an average pruned height of 5.5 metres and only carrying out one waste thinning.

Visiting the same forest five times to complete five separate operations also means the Intensive regime is an expensive one. For these reasons this regime is usually used in high fertility land (ex farmland) sites with good access and well located in relation to processing plants and export ports.

Unpruned regimes aren't as expensive as Intensive ones but do provide a competitive return...

Only one waste thinning is undertaken at around age nine, reducing the initial planting stocking to a final crop stocking of 400 to 500 stems per hectare. At much lower cost, this regime is currently used on lower fertility sites (steep and weed infested), or those adversely affected by defects such as resin pockets. Areas that produce high-stiffness timber may produce better returns from unpruned regimes.

The Millenium regime is for the land owner that wants forestry with minimal capital investment...

A regime, sometimes called the Millenium Regime, has been tested by (the former) Carter Holt Harvey Forests. Basically it is a plant and leave regime, where no thinning or pruning is carried out at all. Whilst low cost, this regime wont produce as high a quality timber as either of the above regimes.

Every situation calls for different outcomes and therefore different methods. The most important thing is that you know what outcome you are looking for. Professional forest managers can then tell you how to gain that return and what is going to be best suited to your situation.

You can still move forward, even if you've missed replanting season...

With "containerised" treestock, moisture is plugged in around the roots, and there is significantly less root damage, allowing successful re-establishment right up to the end of November... sometimes even up to Christmas.

Containerised treestocks are the only answer if you have missed the boat on the planting season, however there are other things you can do to achieve a greater success rate if re-planting late. First of all the site needs to be tidy.

Make sure that the weeds are under control. Not only does this make the planting operation easier but it means that there is less competition for the trees and they have the optimum space and soil nutrients to grow. Weed regrowth after harvesting will occur. Depending on the amount of time following harvesting this will dictate the timing of desiccation. The weeds need to be well established so that the desiccation operation controls the majority of the weeds on site or in the soil. There are many combinations of herbicides but your choice should depend on your site and weed species – one treatment does not fit all. The most commonly used herbicides are Glyphosate and Metsulfuron. For the best effect, desiccation should happen when the weeds are well established and the weather conditions are right.

If mechanical land preparation is required, planning is important. Limiting factors like being able to get contractors and machinery can hold you up and once you have them they can only complete around three hectares per day. Mechanical land preparation includes spot cultivation in frost prone and boggy areas, line raking where harvesting slash is excessive and roller crushing where slash and scrub on steep slopes are going to hinder planting operations.

Tree-stock selection for the site and desired outcomes (products) can be selected and booked for the following season. Being able to select your choice of seedlot is becoming increasingly difficult with tree-stocks purchased at the nursery. The better option is to have the desired tree-stocks grown for you at the nursery.

If you have missed the planting season and you want to replant you will need a structured and robust plan. For more information contact PF Olsen for advice. This way you'll ensure that all your bases are covered and you have a plan to suit your specific situation.



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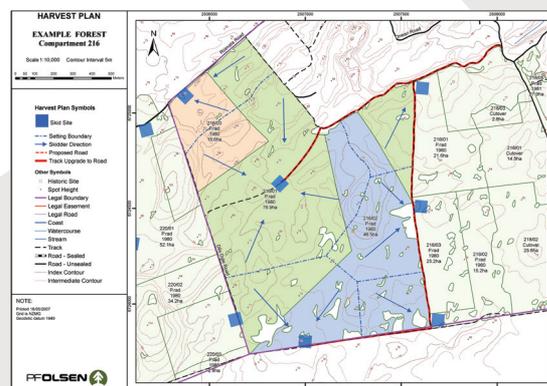
Calculate your REAL INVESTMENT from the beginning with accurate mapping

How mapping a forest can save you money:

- 📍 Maps provide an accurate definition of the planted/stocked area.
- 📍 Budgets, forest valuations and yield and volume predictions all rely on stocked areas.
- 📍 An inaccurate stocked area statement will impact on all of these.
- 📍 PF Olsen's experience indicates that many forest owners think they own more forest than they actually do. It is best to know what you own early, in order to achieve a realistic expectation of returns.
- 📍 Most forest operations are paid on a per-stocked-hectare basis. Accurate stocked areas ensure contractors are not overpaid.

How mapping a forest can help you plan:

- 📍 Maps play a vital role in planning, tracking, recording and reporting operations that are performed on a forest.
- 📍 Maps are an important tool for harvest planning. If there is no map then there is no efficient way of planning and optimising road and skid location as well as hauler locations and settings. They also highlight areas of environmental and historical value so that these areas are not damaged, saving forest owners money in the long run.



UNEXPECTED BENEFITS

The Environmental Benefits of Replanting and how they can directly affect you.

Forests have a very significant non-wood value to the wider community through their positive Environmental Benefits

These intrinsic values have long been recognised but seldom economically valued. Now in New Zealand some of those values are beginning to be recognised (such as Carbon and Nitrogen), but many other outcomes remain undervalued, under recognised and provided free from the forestry industry.

Our Land Is Protected

Dear to New Zealand land owners is the protection of their soils. As a country NZ has very high soil loss and erosion rates. The volatility of our climate and conversion of some hill country forests back to farmland will cause more soil loss. Scientific evidence shows that in the long run with appropriate harvesting techniques forests will provide better land stability and erosion reduction.

Water Quality is Improved

Past monitoring has proven that forest streams are of higher water quality than agricultural streams and often similar to native forest streams. Farmers with forests and streams running through their properties will have improved water quality. This feature is also not often recognised in regional and district planning so hopefully as awareness grows, the positive impacts foresters are having on the environment will be rewarded.



The Environment is very important to most forest owners and the positive impacts will be more recognised as time goes on.



Plantations assist in providing ecological corridors or linkages between native fragments. As isolated fragments a large proportion would be of low ecological value and vulnerable to further loss. Studies are confirming that forests are hosting large and important reservoirs of indigenous biodiversity from invertebrates to birds – none of which will survive in pastoral environments. NZ forest owners protect large areas of lowland forest remnants that are important to a range of threatened and declining native animals.

You are Protecting Rare Species

Many forest owners and managers are involved in active programs to protect rare species including Kiwi and NZ Falcon. There are many components to doing this such as pest control, covenanting and restoration projects.

Forestry Is Actively Protecting NZ Heritage

Forest owners also have on their land hundreds of NZ's archaeological sites. While forestry is maintained in these areas the sites are protected and preserved. Free public recreational access is provided for hundreds of thousands of people per year.

Alternative Species Replanting Success Story

"We wanted professionals to take over establishment and maintenance of the new forests on our farm so that we could be sure a valuable product would be produced, rather than doing it ourselves and compromising the quality, value and returns by not doing things at the optimum times". Bill Garland

Bill Garland and his family are well known farmers in the Waikato area and Bill is more nationally known for his involvement with the QEII Trust, focussing on native protection and preservation. The Garlands own a large farm which borders the Mangatautari, a large native reserve near Cambridge. They are passionate about the environment and are actively improving their property and it's surrounding bush including the creation a vermin-proof sanctuary for native flora and fauna on Mangatautari.

Through their older plantings of Blackwoods and Black Walnut they have learnt that without timely tending of their crops, returns can be disappointing due to poor quality and low yield. This past experience has proven valuable though, because the Garlands have learnt that although farmers have the best intentions when establishing woodlots, they don't always have the experience and expertise to maximise the value of the crop. Interestingly the Garlands do not have any Radiata Pine plantings but have chosen to go the alternative way with more Blackwoods, Lusitanica, Ovensii, Fastigata, Black Walnuts, Rimu, Totara, Kauri and mixed native shelters planted across 18 hectares. The Rimu and Kauri won't need pruning due to their long rotation length but the other species will require specialist tending regimes. Mixed native shelterbelts are being used to visually break up the plantings and will provide important screening at harvesting.

Although the Garlands investment story is different from most, it is a leading step towards the future of sustainable forestry in New Zealand.

“ Although farmers have the best intentions when establishing woodlots, they don't always have the experience and expertise to maximise the value of the crop. ”

Bill Garland



The Garland family, from left: Paul, Sue and Bill Garland.

For a better idea on what planting options are going to give you the BEST RETURN in your circumstances please contact PF Olsen on 0508 PF OLSEN (0508 736 5736) for a FREE SITE VISIT AND CONSULTATION