

Welcome to Hancock Forest Views

Welcome to the 10th edition of Hancock Forest Views, a newsletter to help keep you informed of what is happening in Hancock Forest Management (HFM) forests. This edition includes a range of topical articles from each of our forest regions. We hope you find the newsletter interesting and welcome your feedback.

Waituhi Whio Project - Breeding Success

In an earlier issue of Hancock Forest Views, we included an article about commencement of a Whio (NZ Blue Duck) protection project in Waituhi Forest east of Taumarunui. Waituhi Forest bounds onto Pureora Forest Park to the north and for a number of years staff had been aware of blue duck in the area, with sightings on the Pungapunga Stream that runs through the block. A 2009 survey confirmed at least 4 pairs of whio using that stretch of the river, and in 2010 HFM commenced a predator control programme in association with Horizons Regional Council and the Department of Conservation.

Whio, like many of New Zealand's indigenous bird species, have been affected by habitat loss and predation by introduced predators. Pungapunga Stream in a near natural state provides perfect habitat, but predators are an ongoing issue. The Waituhi project has focused on intensive predator control over the stretch of Pungapuna Stream within Waituhi Forest, particularly focused on the breeding season to help to ensure chick survival.

The project initially covered a 2km stretch of the river with the installation of 50 traps. This has since been extended with now 90 traps and 5km of the river under protection.

The success of the project to date has been in a large part due to the commitment and passion of HFM Environmental Planner Robin Black who oversees the project, and local farmer Geoff Marshall who undertakes the day to day operations. Geoff's son, Will, also works in HFM operations, initially as a company forester and now as a harvesting contractor. Geoff's interest in the project has led to a very successful partnership, with Geoff undertaking the critical role of servicing the trap network fortnightly through the breeding season (September through to February), and working with Robin to continually improve the trap layout.

Since commencement, literally hundreds of predators have been caught including rats, stoats, ferrets, wild cats and hedgehogs. Such is Geoff's enthusiasm for the project, that he has now trained his pointer, Britta, to become a certified "whio dog" to undertake the annual population survey.

HFM also owes many thanks to Department of Conservation and Horizons Regional Council who's advice and funding support has greatly assisted in setting up and maintaining the trapping network. Recently we have confirmed a 5 year partnership with Genesis Energy through the Central North Island Blue Duck Charitable Trust, to further expand and maintain the trapping network.

Whilst the annual survey has shown breeding success varies



Geoff Marshall's pointer Britta, locating a pair of whio with 4 chicks during the 2012 population survey (above) and chicks sheltering under a bank (below)



from season to season, in the most recent survey in December 2012, we were thrilled to confirm a pair successfully raising a clutch of four chicks.

The territorial behavior of whio, with each pair occupying a home range of approximately 1km, means that an increase of the current population of five pairs within the project area is considered unlikely. However it is hoped that improving breeding success on our stretch of the river will lead to repopulation of available upstream habitat, and link in with a number of other projects in the region, to assist in the long term survival of this unique species.



Woodhill Forest - Balancing Recreation and Production

Due to its location close to Auckland City, Woodhill Forest attracts the highest number of recreation users of any plantation forest in the country. Virtually every part of Woodhill forest is used for some form of recreation making it a truly multiple use forest. This situation creates the challenge of how to manage the forest for its primary purpose of wood production, while also allowing compatible recreation to co-exist. Key challenges arise around forest protection (in particular the risk of fire), thinning and pruning operations, and obviously when a stand reaches maturity and is ready for harvest.

Woodhill is home to a number of permanent recreation providers, and one of the most intensively used is the Woodhill Mountain Bike Park with 6,000 riders a week using the park.

In 2012 the first of the stands within the Mountain Bike Park came due for harvest. Closing down the Bike Park during harvesting would have caused enormous disruption to the business, however management of hazards to both mountain bikers and harvesters was critical. HFM staff worked closely with the Mountain Bike Park's management to develop a plan that would enable mountain bike operations to continue in the unaffected parts of the park while harvesting took place.

Key components of the plan were ensuring mountain bikers were kept a safe distance away from harvesting operations, and managing shared use of the road into the area by harvesting contractors, logging traffic and bike park users.

The Mountain Bike Park took an active role in communicating updates and information to the park users. Prior to the start of harvesting, riders were informed of what was proposed to happen through newsletters and the Bike Park's website, and a map of the block was placed on notice boards around the park. Affected tracks were closed down and diverted around the harvest area using barriers and clear signage.

Andrea Thomas, HFM Alternate Land Use Forester based at Woodhill, said 'the harvesting crew worked closely with Bike Parks staff and good communication on what was happening out there was clearly the key to the success of the operation'.



The Woodhill Mountain Bike track in the new cutover

Mark Harrowfield, Manager of the Bike Park concurs with Andrea, commenting that the commitment and communication with HFM staff to make the operation work were outstanding.

The ultimate measure of the success of the process was that the whole operation was completed incident free. HFM NZ was also pleased to receive positive feedback from recreational users who understand the challenges of operating a working plantation forest, whilst catering for the high demand for recreational activities. The Mountain Bike Park staff are now undergoing the hard work of establishing new tracks in the cutover area. This has proved very challenging as Woodhill Forest was planted on sand, which, without the protective cover of trees, becomes very loose and difficult to bike on. However the Mountain Bike Park team are a dedicated group of enthusiastic mountain bikers, and are already trialing different materials including quarried sandstone, to create a suitable track surface. Andrea comments that 'if anyone can come up with options and solutions it's these guys!'.

FSC Chain of Custody—ensuring certification claims are legitimate

HFM has been certified to Forest Stewardship Council (FSC) since 2004. To be certified to FSC, the company undergoes an annual audit by an FSC accredited Certification Body to ensure that we are in compliance with the FSC Principles and Criteria.

Part of the certification process is an audit of our Chain of Custody processes, a strict set of rules to ensure the clear tracking of our certified logs from forest gate through to our customers.

For a product to be labeled with the FSC logo in the market, this same Chain of Custody auditing process must be carried out through each step of the processing and supply chain through to the customer. Wood Processors who use the FSC logo have an annual Chain of Custody audit, to confirm their processes for managing logs coming into the operations and product going out—a system that becomes more complex if they are processing both certified and uncertified logs as is often the case. It is through this Chain of Custody process, that a customer in any part of the world can be sure that a product that they buy with the FSC logo, has come from a certified responsibly managed forest.





Launch of the NZFOA Forest Road Engineering Manual and Operators Guide

With the size and scale of forestry operations being carried out in New Zealand, there is a real potential for Regional Councils and forestry companies 'reinventing the wheel' when producing training and guidance material for work in the field. As an industry we therefore aim to coordinate as much as possible, generally via the NZ Forest Owners Association (NZFOA), to produce industry guidance material.

In 2007 the NZFOA produced the Environmental Code of Practice for Plantation Forestry Operations. The next step in the process was to update guidance material for engineering operations (road and landing construction). Whilst there was an industry guide in place produced by Logging Industry Research Organisation, this was in much need of a refresh and update. The result is the new FOA Forest Road Engineering Manual, a comprehensive guidance document for all operators undertaking

engineering work in plantation forests published in early 2012. At the time, it was noted that this was a document more aimed at engineers and managers than machine operators, and the intent was to produce a user friendly guidance manual for machine operators.

Many many more hours of hard work by a core group from the Forest Owners' Association Environment Committee, led by Brett Gilmore of Panpac, saw this finally come into fruition in December 2012. The resulting guide is rich in photographs of what to do and what not to do, and has been very well received by machine operators, company staff and Regional Council compliance staff alike. HFM staff are now using the guide as a key reference tool and training resource for machine operators in the field.

Plantation Forests - doing their bit to combat Climate Change

As most people are aware, human activity has led to increases of some gases in the earth's atmosphere, that act to trap the sun's energy and increase the earth's temperatures. Key greenhouse gases of concern are Carbon Dioxide (CO₂), Methane and Nitrous Oxide, all of which have increased significantly due to human activity. Activities such as burning of fossil fuels, take Carbon that has been locked up in a solid form under the ground and release it as CO₂ gas, leading to an increase in the overall concentration of CO₂ in the atmosphere.

In May of this year monitoring stations confirmed that CO₂ in the earth's atmosphere reached 400 parts per million for the first time since recording began—a 36% increase from levels prior to the Industrial Revolution.

Most people will be aware that growing trees play an important role in combatting climate change. Through the process of photosynthesis, green plants absorb Carbon Dioxide from the

atmosphere and use this to create energy to grow, in the process locking up the Carbon component in the wood and releasing Oxygen back into the atmosphere.

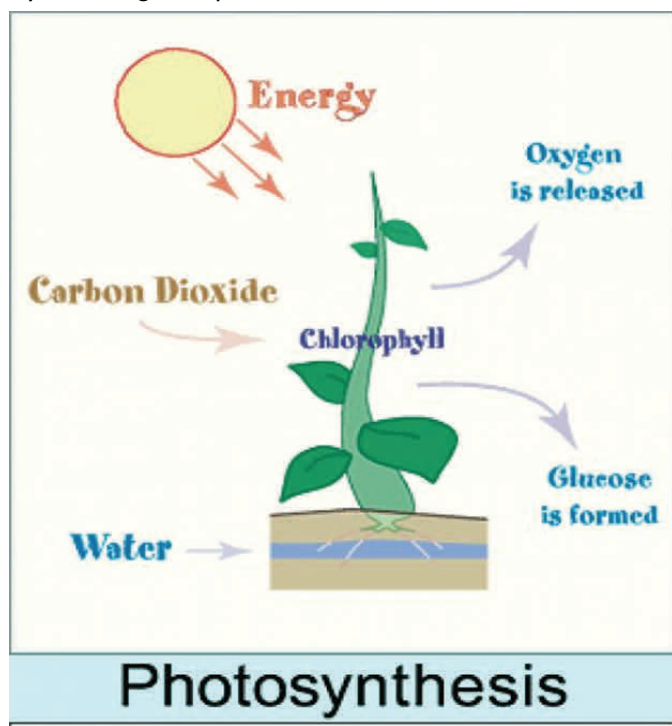
Wood is approximately 20% carbon by weight, making it a very effective storer of Carbon while it is either in a growing tree or in use—whether that be in a wooden house or fence, or the paper in a book or a newspaper. Obviously the end use of that wood determines how long it is available as a Carbon store. Rotting or burning of the wood fibre will eventually return the Carbon to the atmosphere as CO₂ to start the cycle again.

Many products are now advertised to be Carbon neutral—generally by either purchasing credits or planting trees to counter emissions in their production. Wood is the only product that can claim one step better, with studies confirming that the CO₂ released in harvesting and processing lumber and even transporting it to an overseas market is still less than the CO₂ locked up in the growth of that wood. By comparison, all other building products including glass, concrete and steel, use a large amount of energy in their production and thereby emit significant volumes of CO₂ to the atmosphere.

HFM monitors Carbon levels in our forests over time, taking into account both the removal of CO₂ through growth of trees, and CO₂ released during harvesting and transport operations.

In 2012 HFM planted 5 million seedlings in Taumata and Tasman Bay Forests plantations. By the time these trees are ready for harvest at 27 years old they will have captured over 4 million tonnes of CO₂ from the atmosphere. In 2012 alone, these two companies forests increased the total CO₂ stored in live trees, roots and debris by almost 340,000 tonnes after accounting for emissions in harvesting and forest management operations, increasing the total CO₂ stored in these two forest estates to 98 million tonnes.

All up, the total CO₂ stored in all HFM managed forests in NZ has been calculated at 138 million tonnes—just one of the many important environmental services provided by plantation forests as they are growing wood.





Fraser Logging—a long family connection with Tasman Bay Forests

HFM engages professional contractors to conduct all aspects of the work associated with the day to day running of the forests under our management. Land preparation, silviculture, engineering, harvesting, log cartage, security and fire management are all carried out by locally based contracting companies who provide services in HFM-managed forests, collectively employing in excess of 1200 people.

Nelson based Fraser Logging which operates in HFM's Tasman Bay Forests estate has a strong local connection, as is typical of many of our contractors, but Fraser Logging has a much longer history than most. The Fraser family have been involved in the logging industry in Nelson for over 60 years, with Don Fraser starting work in the crew that was to become Fraser Logging in 1957. Don purchased the business in 1972.



Don Fraser (on right) on cross cut saw at Rabbit Island, Nelson 1953

Don remembers when logs were cut with a cross cut saw in the bush, hauled by a friction winch, then hoisted, rolled and loaded by hand. The main rope was then pulled out by horse for the next drag. His 1953 diary entry comments, 'We were using cross cut saws and axes and we reckoned those chainsaws would never be any good'. Competitive wood chopping was a sport enjoyed by many of the workers and key to their close knit community. Don was a National jigger board champion and chopped in front of the Queen in 1963.

Don's son Mike Fraser took over the business in 1990 and speaks with great fondness and passion about his life and that of his father as harvesting contractors. He comments 'We have a special family connection with the forest. It is personal and we have an obligation to continually do a good job'. Mike notes that Don, at age 83 years, is still a valued source of local knowledge, particularly for those sites that he harvested in the previous rotation. Recently Fraser Logging harvested a block in Tasman Bay's forests that was being harvested by the Fraser family operation for the third consecutive time.

Mike is recognized as an innovative leader and a passionate advocate for health and safety in his business. He has achieved

many national business, training and health and safety awards and is very clear that people are the most important part of his business. He is proud that 15 of the Fraser Logging's 24 employees each has more than ten years' service with the company.



Fraser Logging employee Tim Davidson was named Forestry Trainee of the Year and Mike Fraser the Health and Safety Initiative winner at the 2012 FITEC National Awards dinner in Rotorua.

Continuing the strong family connection, Mike's brother, Tony, also works in the business, and another member of the team, Scott Friedrich, is following on from his father Bill, who worked in the crew with Don from the late 1960's.

Mike's strong focus on people coupled with his uptake of new technology has created a strong foundation for his business. He sees a bright future for forestry in New Zealand and predicts that advancement in technology will continue to bring new changes, even predicting a day when harvesting machines will be operated remotely by operators viewing video monitors located a safe distance away.



Second generation loggers; Left to right— Mike Fraser, Scott Friedrich, Tony Fraser and Don Fraser