

Welcome to Hancock Forest Views

Welcome to the 11th 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 various forest regions. We hope you find the newsletter interesting and welcome your feedback.



Whatoro Forest North Island Brown Kiwi Project

Hancock Forest Management (HFM) has recently joined forces with Northland Regional Council and neighbouring landowners surrounding our Whatoro Forest to set up a Community Pest Control

Area (CPCA). The key objective of the CPCA is to enhance kiwi survival within the project area through predator control.

Whatoro Forest is located in Western Northland, approximately 40km north of Dargaville and is a little over 2,500ha of plantation forest and native reserve. Whatoro is located in the Tutamoe Ecological District, an area that contains the largest tracts of contiguous forest cover in Northland, and has some of the highest densities of North Island Brown Kiwi in New Zealand. Whatoro is located between two areas of Dept of Conservation (DOC) forest; Trounson and Kaihu Forest Parks. Trounson Forest Park in particular, has been under intensive predator control for many years as a kiwi reserve.

Through discussion with DOC and Northland Regional Council staff, Whatoro was identified as a high priority for a kiwi recovery project. HFM arranges annual monitoring of kiwi in a selection of our forests in Northland, to monitor population levels and identify areas to prioritise kiwi protection work. This monitoring had shown that Whatoro Forest contained a moderate population of kiwi.

Kiwi are territorial and therefore as the population in DOC protected areas increases, young kiwi need to move out of the DOC estate to neighbouring areas. Establishing predator



Female adult North Island Brown Kiwi undertaking transmitter change

control on neighbouring land increases the area of protected habitat, enabling the overflow of kiwi from the DOC kiwi reserve to survive and transition to other forested areas.

The Whatoro project was nearly 3 years in the planning, with ongoing discussions with neighbouring landowners and the Regional Council to finalise the project. The CPCA was finalized and signed off in mid-2013, with predator trapping commencing in September 2013. Since start-up, large numbers of stoats, weasels, rats and the occasional feral cat have been caught. Control is carried out using trapping, with salted rabbit currently the favoured bait.

Whatoro is a working plantation forest with harvesting currently taking place. All HFM staff and contractors are provided training on procedures to follow when encountering kiwi. Any encounters are recorded and used to further build up a picture of kiwi distribution.

Ongoing kiwi listening is planned to take place biannually to monitor the success of the project. Trap catch records are also maintained to help prioritise trapping within the forest.

Through the CPCA, HFM and the adjacent landowners have made a long term commitment to predator control in the area. It is hoped that this and other projects will help to create a network of protected habitat to help halt the decline of kiwi in the wild in Northland.



DOC 200 Mustelid double kill traps are located on game trails



ECHO Walking Festival

In 2014, HFM had the pleasure of hosting two walking parties in Kinleith Forest as part of the Waikato ECHO (Enjoy Connecting Hills & Oceans) Walking Festival.

Now in its 11th year, the ECHO Walking Festival is a Waikato initiative to enable local residents to take part in a range of walks in the parks and reserves in their region. The festival is organized by District Councils and Sport Waikato Coordinators and started in the Hauraki area.

This year was the first in which South Waikato has participated in the festival, and Sport Waikato invited HFM to take part by hosting walks in Kinleith Forest. HFM agreed to partner with Raukawa Charitable Trust to host two walks in Kinleith — one in the forest east of Putaruru, taking in historic tramline tunnels and the springs and wetlands of the upper Te Waihou catchment; the other, a visit to a significant pa site.

The walkers were guided by HFM Environmental Planner, Robin Black along with Nigel Te Hiko and Leleina Tolovae from Raukawa Charitable Trust. Comments from walkers indicated they greatly enjoyed the opportunity to visit parts of the forests we are lucky enough to work in.



ECHO Walking Fest walkers at one of the historic tramline tunnels in Kinleith forest.

Mountain biking in Hira Forest

The Nelson region is known as the 'Heart of Mountain Biking' in New Zealand. With over 50 formed tracks, ranging from the gentle beginners grade, right through to the extreme adrenalin junkie downhill runs that would make your hair turn grey.

Many of these mountain bike tracks have been formed within HFM managed Tasman Bay Forests, with Hira Forest, being close to Nelson city, a favourite destination.

The Nelson Mountain Bike Club has close to 600 members, with each member receiving an access permit allowing access to the trails and tracks within the Tasman Bay Forests estate as part of their membership package. The club holds a license to operate that covers general access, track construction and maintenance, local and national downhill and cross-country mountain bike events. The club system enables quick and effective communication of any issues affecting mountain biking, such as high fire dangers in the forest.

Mountain biking is a very benign activity within the forest, with track construction having minimal effect on the landscape, whilst providing enjoyment for many people right on Nelson's back doorstep.

Of course, once every 28 years, the unavoidable harvesting of trees must occur, meaning some tracks are closed for a period and may require rebuilding on completion of harvesting. But on the whole, for another almost three decades of uninterrupted downhill fun and gravel rashes, this would be a small sacrifice for the enjoyment of those in this recreational pursuit.



Mountain bikers enjoying mountain bike tracks in Hira Forest amongst young radiata trees



Forest Stewardship Council 5 yearly Audit

HFM has been certified by the Forest Stewardship Council (FSC®) since 2004. FSC is a means of verification for our customers that the logs they are purchasing come from responsibly managed forests. To be certified to FSC, HFM undergoes an independent annual audit to ensure that we are in compliance with the FSC international Principles and Criteria. Every five years, a comprehensive recertification audit is conducted against the whole standard.

This year, being the ten year anniversary of certification, meant a full five year audit was due. This audit was HFM's first under the newly approved NZ National Standard under FSC - a document developed by NZ stakeholder representatives to provide further clarity as to how the FSC international Principles and Criteria should be interpreted in NZ.

We have recently received the audit report confirming that the auditors have recommended HFM's certification be extended



for another five years. The full audit report can be found on the FSC website at <http://info.fsc.org/certificate.php> (enter Name: Hancock Forest Management, Country: New Zealand).

Search for a Pampas Biocontrol

Pampas is the common name ascribed to two species of grass, (*Cortaderia jubata* and *Cortaderia selloana*), that are similar to our native Toetoe. Pampas was introduced into New Zealand from South America in the 1890's for shelter and stock fodder purposes. In a farm situation, pampas is controlled by stock grazing, but in a plantation forest it readily infests disturbed ground, a particular problem after harvest. It can be a considerable impediment to successful tree establishment and creates a physical barrier to access. Local authorities are also concerned about pampas spreading across property boundaries.

Whilst seed germination and survival can be reduced through oversowing with grasses prior to planting, in the majority of forestry situations, the most practical control option is through herbicide applications. This is not only expensive, but is at odds with our FSC certification which requires chemical use to be minimized.

A review of biological control options for pampas by Landcare, around 2000, concluded that the prospects for developing a successful biological control programme would be poor. However, some subsequent successful work on control of another South American grass species forced a re-think. In NZ, pampas has been found to be impacted by few natural controls. The first step in a search for a bio-control is to identify natural enemies, and to do this it was necessary to identify the genetic match to the varieties of Pampas introduced to NZ.



Black smut fungus infecting pampas grass flower heads in Ecuador – photo courtesy of Landcare

The forest industry joined Landcare Research and a group of other organisations to provide financial assistance to a project to search for a suitable control. Collectively, the group was also successful in obtaining funding from the Sustainable Farming Fund, for a three year programme of research commencing in 2011.

Pampas grows in various parts of South America, and the project ran into some initial difficulties identifying just where exactly the genotypes of the two species present in New Zealand originated from. DNA analysis was required, which eventually confirmed our *C. jubata* came from southern Ecuador and our *C. selloana* from Chile.

An initial review of potential agents in South America has identified a 'Black Smut' fungus in Ecuador that damages flower heads and could have potential as a biological control agent in New Zealand.

The programme has also been evaluating if the effectiveness of herbicides can be increased through the addition of an identified plant pathogen that has been recovered from pampas plants. If successful, this approach could potentially allow the rates of herbicides applied to control pampas to be reduced.

The present programme finishes in the middle of this year. If additional funding can be secured, it is likely to be used to continue development of the bio-herbicide approach and also study the potential of the Ecuadorian black smut, and two leaf spot fungi found in Argentina, as possible biological control agents.

Any potential control will take many years of rigorous trials to confirm beyond doubt that newly introduced bio-controls will not cause a problem to any native or desired plant species in NZ, before it can be released. As a result, this will be a very long term project, but one with significant benefits to the industry and other parties controlling this invasive weed.



NZ Bush Falcon Thriving in Plantation Forest Cutover

NZ Bush Falcon is one of a number of threatened species that are found to be thriving in the plantation forest environment. Falcon are a small native raptor that has become quite common in plantation forest in the recent decades—thought to coincide with ceasing of the practice of burning cutovers. Their size and aggressive behaviour during the nesting period makes them hard to miss—many HFM staff and contractors have experienced close encounters with falcon!

What is particularly interesting about falcon is that they are making use of a niche habitat created by harvesting, nesting and rearing young in the cutover. The multiple sightings within limited areas, year on year, confirm that falcon have a territorial area and are thought to use at least 9km² as their home range.

They typically make use of a new cutover in the one location until vegetation regrowth (crop trees and understorey) restricts their vision from ground level; about four years harvest. In areas with ongoing harvesting they move to another suitable cutover area.

As part of threatened species management procedures, HFM encourages staff and contractors to report sightings of any threatened species. Falcon sighting reports have now been collected back to 2004 and since then there have been over 500 falcon sightings in HFM's forests.

This information is reported through to the Wingspan Birds of Prey Trust and NZ Raptor Association, to build up a picture of falcon numbers and distribution across New Zealand. Falcon are present in all HFM regions except Northland.



Falcon surveying a harvest operation in Moutere Forest, Nelson



Juvenile falcon fledged in Kinleith forest in the summer of 2012-13

Falcon are commonly seen sitting on slash or stumps and do not appear to be afraid of forestry machinery. They are often seen flying over the cutover during adjacent forestry operations. HFM has even had one report where a falcon flew through the open cab of a bulldozer while chasing prey!

HFM, along with a number of other forestry companies, has sponsored two PhD studies to help improve understanding of how falcon use the plantation forest. The first was a PhD study of falcon in Kaingaroa Forest by Dr Richard Seaton between 2003-2006. This was the first intensive study that identified the extent of use of plantation forest cutovers by falcon, in particular for nesting and breeding.

A second study, by Massey University research student, Chifuyu Hawksby, is looking at the impact of Mono fluoroacetate (1080) on falcon. Because falcon only catch live prey the negative impact of aerial 1080 application is not thought to be an issue, but the study will help understanding of this.

Forestry companies have recently worked with Wingspan Birds of Prey Trust to develop a Best Practice Guideline for falcon management in plantation forests. Wingspan has advised that the key aspect to help falcon survive in plantations is protection of nesting sites from disturbance during the nesting periods, typically from October through to January. Any aggressive (dive bombing) behaviour during that time indicates a nest nearby. The guideline gives practical guidance as to how to minimise impacts on nesting falcon when undertaking operations, through minimum setbacks.

Falcon are a great advertisement for the biodiversity benefits of plantation forests, making use of the niche habitat created by the harvesting and replanting of a production tree crop.