

Report to Forest Biosecurity Consultative Committee

Update on current MAF Biosecurity New Zealand forestry-related Post Border Surveillance, Pest Management and Incursion Response Activities For the meeting on Wednesday 26 November 2008

NATIONAL INTEREST PESTS RESPONSES

Megan Sarty

- The national interest pest primarily associated with forestry is *Erharta villosa* (pyp grass). The primary operational goal is eradication from New Zealand.
- There are now three known occurrences of pyp grass in the North Island. The following is a summary of response activity at the sites:
 - Blackhead
 - A delimiting survey of the immediate area around the known infestation resulted in a new site being located in a paddock close to the original areas. Four repeat treatments throughout the season have resulted in a good kill rate with no live plants found at the end of the season.
 - Santoft Forest/Koitiata
 - Delimiting surveys have defined the extent of the infestation. A number of new plants were located on the margins of the known infestations. Four repeat treatments throughout the season reduced the overall spread of pyp grass at this site. However, there are still considerable areas of live pyp grass. These areas are now subject to control measures.
 - MAF BNZ is working with the forestry operator to minimise the risk of spread of the weed through forestry operations.
 - Waitarere Forest
 - At the end of January 2008, DOC staff located a third North Island pyp grass site at Waitarere Forest. It is apparent that this site has been planted in conjunction with silver poplar for bank stabilization purposes. In partnership with Horizons Regional Council, this site was treated and the wider area was delimited throughout March.
- Further information on all the National Interest Pest responses can be found at <http://www.biosecurity.govt.nz/pests/surv-mgmt/mgmt/prog/nipr>

SUBTERRANEAN TERMITES – NELSON AND AUCKLAND

Sheree Christian

- A colony of Australian subterranean termites was found at one property in Nelson in January 2006 and one neighbouring property following a survey in March 2006. A termite infestation was also detected at a property north of Auckland in January 2007.
- The likely sources of both infestations are imported Australian railway sleepers used in landscaping. Import health standards for timber have been set to mitigate the risk of new

introductions, but historically introduced colonies are still being discovered in New Zealand. An eradication programme is underway at both locations.

- In Nelson, bait station inspections were completed in May and June 2007. There were no signs of termite activity, indicating that the colony is eliminated. A regular three monthly monitoring programme commenced in September/October 2007, and will continue for up to five years before the infestation can officially be declared eradicated. The last monitoring event in September 2008 showed no signs of live termite activity.
- Like the Nelson response, a regular three monthly monitoring programme commenced in July 2008 at the north Auckland property and will continue for up to five years before the infestation can officially be declared eradicated. The last monitoring event took place on 31 October 2008 with no signs of termite activity.
- The application for the full release registration of hexaflumuron (as Sentricon Termite Bait) was approved by ERMA for use as a termiticide against subterranean termites on 8 August 2008. Previous responses against subterranean termites have relied on the temporary registration of hexaflumuron for each case. This termiticide will now be immediately available for use in any future subterranean termite incursion.

DAMPWOOD TERMITES – LYTTTELTON, KAIPARA AND AUCKLAND

Bruce Philip

- Colonies of the Australian dampwood termite *Porotermes adamsoni* are known at three locations in New Zealand: Lyttelton (Canterbury), Kaipara (Northland) and Auckland. The source of the infestations is likely to be historically-imported timber such as railway sleepers and utility poles.
- *P. adamsoni* attacks dead wood and living trees (principally eucalypts, but also other species including *Pinus radiata*). It is considered a forest pest in southern New South Wales and Victoria. It is not a serious pest of houses in Australia, but may attack house timbers where decay allows access.
- Lyttelton infestation: This is a long-standing infestation at Lyttelton wharf, detected in 1963. The wharf was constructed of Australian hardwood timber imported in the 1950s. Because of inaccessibility of the wharf timbers, eradication has not been considered feasible. However, the termites are considered contained within the wharf area, and are managed by visual inspections when wharf maintenance is carried out and the removal and destruction of infested timber as it is found.
- Kaipara infestation: Detected February 2007 when an alate (winged reproductive) was found in a spider web at a private residence in Kaipara Flats. Surveillance at the time did not locate the colony.
- Auckland infestation: Detected February 2008 when several alates were caught in a private residence in Remuera.
- At both Kaipara and Auckland the alates were caught close to railway lines where sleepers and other structures made from imported Australian timber are present.
- Surveillance undertaken at the Kaipara and Auckland sites during February and March 2008 detected alates but failed to locate the colonies.
- MAF Biosecurity New Zealand has contracted:
 - a risk analysis of the introduction pathway for Australian termites,
 - an impact assessment for *P. adamsoni* in New Zealand and

- an assessment of surveillance and organism management options for *P. adamsoni* to provide information to assist the development of an overarching strategy to deal with the currently known and any future incursions of this termite.

RED IMPORTED FIRE ANT – WHIRINAKI

Sheree Christian

- On June 7th 2006 *Solenopsis invicta* (Red Imported Fire Ant) was identified from Pan Pac Forest Products Ltd, Whirinaki. The nest was thoroughly treated with an insecticide drench and insecticidal ant bait on June 9th.
- No further fire ants have been found to date.
- The nest is estimated to be two to three years old and dispersal may have occurred.
- The final round of surveillance and treatment activities out to 2 km from the next site commenced in October 2008 and will continue until March 2009. Areas that cannot be effectively surveyed have been treated with insecticidal ant baits. If no further fire ants are found during this time, then eradication will be declared in approximately April/May 2009.
- Movement controls out to 2 km radius from the nest site have been in place since June 2006, and will remain in place until eradication is declared.
- This is the third incursion of red imported fire ants in New Zealand, both previous finds were eradicated. Genetic analysis has confirmed that the Whirinaki colony is unrelated to the previous incursion at Port of Napier in 2004.

BIOLOGICAL CONTROL OF GUMLEAF SKELETONISER

John Sanson

- Gumleaf skeletoniser is an Australian moth that continues to create problems in the greater Auckland region on eucalypts and a range of amenity tree species. GLS has now been found in Huntly, Hamilton and Cambridge, so appears to be becoming established in the Waikato region.
- Work on biological control of gumleaf skeletoniser has been underway for some time, funded largely by MAF. A Sustainable Farming Fund grant has been secured by the Gumleaf Skeletoniser Stakeholder Group to support Scion in continuing the project until 2010. This project is co-funded by FRST, FIDA (Forest Industry Development Agenda), FBRC and Farm Forestry Association, along with industry and Regional Council support.
- Scion entomologists have narrowed the potential agents down to two parasitic wasps: *Cotesia urabae* and *Dolichogenidea eucalypti* (Hymenoptera: Braconidae). Both wasps are believed to attack only gumleaf skeletoniser caterpillars. They lay their eggs inside the host caterpillar and the parasitic larva eventually emerges, killing the host.
- Host range testing is underway in quarantine in Rotorua on *Cotesia urabaeto* to determine the safety of this species against native and beneficial Lepidoptera in New Zealand. A range of choice and no-choice experiments are underway against five non-target species. Preliminary observations have shown that the parasitoid is willing to attack four of these species when confined together in a small dish. However it is too soon to determine if this attack will have any significant effect on the wellbeing of the caterpillars, or if they would

pose any threat to the caterpillars in the wild. The answers to these questions will become clearer once the results of the experiments are obtained. Further experimentation will be done on the other parasitoid species, *Dolichogenidea eucalypti*, when it becomes available.

- Once the most suitable parasitoid has been identified, and host range testing and community consultation are complete, an application will be submitted to the Environmental Risk Management Authority (ERMA) to gain approval to release the insects in New Zealand. If the application is successful, releases of the biological control agent will then be made with the help of councils and forest owners in regions affected by gumleaf skeletoniser.
- There are no further updates on Gumleaf skeletoniser as at 24 July 2008.

SIRWG PROJECT

- In July 2008, Ministers directed MAF to develop with willing primary industries a draft government-industry agreement for readiness and response. It will cover those aspects of decision making and cost sharing applicable to all parties. It will be submitted to Ministers and industries' governing bodies for consideration in early 2009.
- Over the next several months a sub committee of the Surveillance and Incursion Response Working Group will develop the draft agreement and work with the full working group to finalise it. Glen Mackie from New Zealand Forest Owners' Association (NZFOA) is a member of the sub committee.
- At NZFOA's invitation, MAF will be giving a workshop on Government industry agreements to the NZFOA board in Feb 09. MAF has given a similar workshops to the red meat industry and is preparing one for the dairy industry in Dec 08.

KAURI DIEBACK (*PHYTOPHTHORA TAXON AGATHIS*)

Fiona Bancroft

- Dieback of kauri trees associated with *Phytophthora* fungus has been observed since the 1960's. A new *Phytophthora* first found on Great Barrier Island in the 1970's has subsequently been identified in mainland Kauri forests as the likely cause of more severe damage and deaths of trees. In addition to Great Barrier Island, the new *Phytophthora* has been found at several sites from Warkworth to Albany and the Waitakere Ranges as well as Northland. Kauri are naturally found in Northland and Auckland regions, as well as Waikato and Bay of Plenty.
- A Joint Agency Response Group comprising MAF Biosecurity New Zealand, Department of Conservation, Auckland Regional Council, Northland Regional Council, Environment Waikato and Environment Bay of Plenty has been convened using the New Response Policy and Model. Stakeholder and Maori liaison plans are being developed, and may include a series of hui.
- Feral pigs, soil disturbance and humans may transfer the organism, and factors such as

climate may exacerbate disease. Pest control and modifying human behaviour are methods of limiting spread, but there is no cure for the disease and *Phytophthora* has never been eradicated from forestry ecosystems anywhere. The organism *Phytophthora* taxon *agathis* has been declared Unwanted, but no movement controls have been instituted.

- A Technical Advisory Group meeting is being held to inform the development of interim measures and longer term response options.
- An economic impact assessment has not been completed, however the taonga status of Kauri contributes to a significant threat to cultural and environmental values.